



THE CONSERVATION RESERVE

A Survey of Research and Interest Groups

CAST

July 1995

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The Conservation Reserve: A Survey of Research and Interest Groups

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X : no. 19) Front cover photographs: Conservation Reserve estore-land can be restored as prairie similar to this restored tall grass prairie at Prairie Creek Wildlife Refuge, Marshall County, Central Iowa, which contains tall blazing-stars (*Liatris pycnostachya*), gray-headed coneflowers (*Ratibida pinnata*), black-eyed susans (*Rudbeckia hirta*), white sage (*Artemisia ludoviciana*), purple prairie clover (*Dalea purpurea*), compass plant (*Silphium laciniatum*), and a variety of prairie grasses. Photograph by Carl Kurtz, St. Anthony, Iowa. The butterfly photograph is a prairie skipper, the Hobomok skipper (*Poanes hobomok*), by Tom Rosburg, Colo, Iowa.

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Foreword

The CAST Executive Committee has authorized publication of a report for use by Congress in drafting the 1995 Farm Bill legislation language regarding the Conservation Reserve Program. This report has been submitted to the CAST Editorial Review Committee and to the credited reviewers.

Jennie S. Hughes and Dr. Dana L. Hoag, Department of Agricultural and Resource Economics, Colorado State University, Fort Collins, and Dr. Terry E. Nipp, AESOP Enterprises, Ltd., Washington, D.C., authored the report. A highly qualified group of scientists including those with expertise in agricultural and resource economics, rural sociology, and agricultural and weed sciences was chosen to serve as reviewers.

The authors prepared an initial draft of the report. The authors and the reviewers revised all drafts and reviewed the proofs. The CAST Executive and Editorial Review committees reviewed the final draft. The CAST staff provided editorial and structural suggestions and published the report. The authors and the reviewers are responsible for the report's scientific content.

The authors thank the many interviewees and others who assisted in providing information. They especially thank the members of AESOP Enterprises, Ltd. and the reviewers for their contributions to the quality of the report.

On behalf of CAST, we thank the authors and reviewers who gave of their time and expertise to prepare this report as a contribution by the scientific community to public understanding of the issue. We

also thank the employers of the authors and reviewers, who made the time of these individuals available at no cost to CAST. The members of CAST deserve special recognition because the unrestricted contributions that they have made in support of CAST have financed the preparation and publication of this report.

This report is being distributed to members of Congress, the Department of Agriculture, the Food Safety Inspection Service, the Centers for Disease Control and Prevention, the Congressional Research Service, the Food and Drug Administration, the Environmental Protection Agency, the Agency for International Development, the Office of Technology Assessment, and the Office of Management and Budget, and to media personnel and institutional members of CAST. Individual members of CAST may receive a complimentary copy upon request for a \$3.00 postage and handling fee. The report may be republished or reproduced in its entirety without permission. If copied in any manner, credit to the authors and to CAST would be appreciated.

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Interpretive Summary

The Conservation Reserve Program (CRP) was created in 1985 to encourage farmers to retire highly erodible cropland in return for annual rental payments and a one-time conservation practice cost share payment. In 1995, CRP contracts began to expire. Given the size, scope, and importance of the program, Congress likely will consider its continuation in the upcoming 1995 Farm Bill debate.

This CAST report summarizes CRP policy literature and a survey of key special interest groups regarding their preferences for a future CRP. The purpose of this report is to make CRP evaluation easier by placing literature and preference information in a single document.

Literature Survey Findings

- Participants are pleased with the program because it provides income stability, decreases the need for credit, and in some instances allows for early retirement.
- The CRP has decreased cropland erosion, improved water quality, and increased land values and wildlife benefits.
- Negative effects include some noxious weed problems and business fluctuations in some agriculturally dependent communities.
- The cost of the program is estimated at \$1.8 billion a year, or close to \$19 billion over the life of the program.
- Studies found that the program could have been more cost-effective if the bid process had been more competitive and if more environmentally sensitive lands had been enrolled.
- The USDA states that CRP benefits have exceeded its costs. Other studies show benefits ranging only from \$6 billion to \$13.4 billion, far short of its \$19 billion cost.
- Cost-efficiency criteria such as the estimated \$8.4 billion savings in commodity program outlays are likely to be considered in the complete CRP analysis.

Interest Group Survey Results

Sixteen of the 18 surveyed interest groups listed six aspects of the CRP that could be modified:

- enrollment size,
- targeting options,
- targeting tools,
- easement and contract usage,
- economic land use options, and
- delegation of control.

The positions of the 16 representatives are as follows:

- All support a CRP renewal.
- Groups recommend different levels of acreage enrollment.
- All favor multiple targeting.
- All favor use of contracts while some support a mixture of short- and long-term retirement options.
- A majority favors economic land use options, of which haying and grazing is the most controversial.
- All support more localized control of the program.

Three Options for the Future

The current program will be renewed, terminated, or modified.

CRP Renewal

- Over 65% of the CRP acres would remain under contract.
- Erosion control, water quality, and wildlife benefits would increase.
- The need for corn- and soybean-supply controls would be eliminated.
- Wheat and corn prices would be higher than if all contracts expired.
- Annual program expenditure would range from \$2.25 billion to \$2.6 billion.

CRP Termination

- Over 60% of the acreage would return to production.
- The government would save nearly \$2 billion a year.
- Some agriculturally dependent communities would rebound from economic hardship.
- Large increases in cropped acreage over a brief period would increase production and lower prices and income.
- Environmental benefits of the CRP would be decreased or eliminated.

CRP Modifications

The literature review, surveys of interest groups, and political posturing indicate that a modified program will be likely.

Literature and Survey Conclusions

- If a modified program is developed during the 1995 Farm Bill proceedings, it will be less costly

due to decreased acreage enrollment, will contain more effective eligibility criteria, and will decrease rental rates when there are allowable economic uses.

- The program will address a number of environmental issues and will target program lands according to specific productivity and environmental benefit criteria.
- The CRP will be most likely to succeed if design, implementation, and control are shared at national and local levels.
- Supporters of a modified CRP will be recipients of environmental benefits, participants whose land qualifies for the program, and policymakers with constituents capturing CRP benefits.
- Opponents of a leaner, more cost-effective CRP are producers who no longer qualify for the program, individuals who want to decrease government involvement in agriculture, and taxpayers who are forced to continue to pay the cost of the CRP when they do not think that the program is worthwhile.

Executive Summary

The Conservation Reserve Program (CRP) was created in 1985 to encourage farmers to retire highly erodible cropland in return for annual rental payments and one-time conservation practice cost share payment. The primary purpose of the program is to decrease erosion from wind and water. Secondary benefits include income support, improved water quality, and improved wildlife habitat. In 1995, CRP contracts began to expire. Given the size, scope, and importance of the program, Congress likely will consider its continuation in the upcoming 1995 Farm Bill debate.

The purpose of this report is to make CRP evaluation easier by gathering in one place pertinent information and opinions. The report summarizes policy literature about the CRP and a 1994 survey of key special interest groups regarding their preferences for a future CRP. The literature review includes hundreds of published and unpublished documents on the development, implementation, impact, and future of the CRP on national, regional, and local levels. The survey was conducted over the summer of 1994 in Washington, D.C. with key CRP interest groups.

The literature review includes a discussion of the CRP's evolution, details of its effects on agriculture and the environment, its costs and benefits to society, options for eliminating or continuing it, and statements indicating the level of political support for its continuation.

There are currently 36,422,772 acres (a.) in 375,202 CRP contracts. More than two dozen survey studies showed that participants are pleased with the program. The CRP is appealing because it provides income stability, decreases the need for credit, and in some instances allows for early retirement. The U.S. Department of Agriculture (USDA) estimates that the CRP has decreased cropland erosion by 700 million tons (t)/year (yr). Several studies concluded that the CRP will improve water quality and increase land values and wildlife populations. Estimates of off-site water quality benefits range from \$41.20 to \$321.10/a. over the life of the program. Consumptive and nonconsumptive recreational benefits from small and nongame wildlife species have been estimated at

between \$82 and \$247/a. With the exception of wildlife benefits, most environmental benefits have been estimated through computer simulations. More on-site research is needed to validate their authenticity.

Not all CRP effects have been positive. In some instances, CRP enrollment resulted in noxious weed problems. In addition, some communities experienced business fluctuations that hurt their economies. Perhaps the most serious downside of the program is its cost, which is estimated at \$1.8 billion/yr, or close to \$19 billion over the life of the program. Additionally, many studies found that the program was not particularly cost-effective. More benefits could have been achieved per dollar spent if funds had been targeted at highly erodible land or at land on which significant environmental benefits could have been achieved. One study concluded that \$300 million annually could have been saved with a more effective bidding process.

One USDA study found that the CRP has produced social welfare benefits in excess of its costs (U.S. Department of Agriculture, 1994b). There are, however, very few if any studies supporting this claim. Summing the social welfare benefits from the cited literature yields benefits in the range of \$6 billion to \$13.4 billion. But because the costs of the program were nearly \$20 billion, benefits fall short of costs by \$6.6 billion to \$14 billion dollars. The government may look at the CRP a little differently, however. The program has saved an estimated \$8.4 billion over the life of the program in decreased commodity program outlays. When these savings are considered with the high range of social welfare benefits, it could be argued that with the highest estimate of benefits the CRP was a cost-effective program.

Given what is known about costs, impacts, perceptions, and current budgetary constraints of the CRP, the government has three options. It can elect to renew the current program, to terminate it completely, or to renew it with some modifications. United States Department of Agriculture research, coupled with a recent national survey of participants, has found that if Congress renews the current program,

nearly 68% of CRP acres will remain under contract. An expanded future program of 36 million to 38 million a. could decrease erosion by an additional 23 million t/yr. The need for corn- and soybean-supply controls would be eliminated. Wheat and corn prices would increase beyond the levels already attained. Other environmental benefits such as water quality and wildlife rejuvenation would increase as well. Annual program expenditure forecasts for 36 million to 38 million a. range from \$2.25 billion to \$2.6 billion under this option.

If Congress terminates the CRP, nearly 63% of the acreage will return to production. With increased production, some agriculturally dependent communities could rebound from economic hardship. But great increases in cropped acreage over a brief period could diminish prices and income. One study showed that elimination of the CRP could lead to wheat and feed grain prices that range from a negative 15% to a slight increase, depending on the relative change in demand for these crops. Erosion levels could increase by 126 million t/yr compared with predicted 1995 levels. Increases in cropped acreage likely would have negative impacts on water quality and wildlife as well, but conservation compliance regulations where appropriate would prohibit the introduction of new lands to return erosion levels to pre-CRP levels. The government would save nearly \$2 billion/yr.

A great deal of support was found in the literature for continuing the CRP at some level. Letters from legislators and actions of the USDA also indicated support. Interviews with environmental and agricultural groups concerned about the CRP also indicated remarkably consistent support for continuing the program. The interviews and literature studies uncovered six aspects of the program for modification: enrollment size, targeting options, targeting tools, easements versus contracts, economic land use options, and control delegation. Of the 41 parties ini-

tially contacted for the survey, 22 were asked to represent the various positions on the six major issues surrounding the CRP debate. Of those 22, four chose not to be included in this report.

The information collected from these parties show that preferences fall heavily on the side of program renewal. In fact, all organizations with an official position on the CRP support renewal. All favor multiple targeting. All favor continued use of contracts; some support a mixture of short- and long-term retirement options. The majority favors some of the economic land use options. Haying and grazing is controversial. All support provisions for more localized control of the program. A side-by-side comparison of these groups suggests that a restructured conservation program has the potential to meet the needs of many diverse organizations.

In summary, the information collected suggests that if a modified program is developed during the 1995 Farm Bill proceedings, it will be less costly due to a lower cap on the total amount of land enrolled, will contain more effective eligibility criteria, and will decrease rental rates when there are alternative economic uses. The program also will address a number of environmental issues and will target program lands according to specific productivity and environmental benefit criteria. These changes will gain the approval of policymakers and some participants but will be resisted by those shut out of the program. The big losers of a leaner, more cost-effective CRP are producers no longer qualifying for the program and taxpayers who may or may not feel that the program is worthwhile but still are forced to pay for a renewed, albeit smaller, program.

The program has its greatest chance of success if design, implementation, and control are shared at national and local levels. A substantial amount of local control may befuddle national objectives. With local input, however, the program may be better able to meet local and national conservation objectives and may garner the support needed to continue.

1 Introduction

The Conservation Reserve Program (CRP) was ushered in on a wave of new conservation programs established by the Food Security Act of 1985. The program encourages farmers to retire highly erodible cropland in return for annual rental payments and a one-time conservation practice cost share payment. The primary purpose of the program was to decrease erosion due to water and wind.¹ Secondary benefits such as income support to farmers, improved quality of water, and improved habitat for wildlife also were expected. Legislators hoped that the program would provide an opportunity to address budgetary and environmental concerns. And, by many accounts, the program has been highly successful. Cropland erosion levels have been decreased greatly, water quality improved, and land value and wildlife populations increased.

Policymakers evaluate the feasibility of programs such as the Conservation Reserve through both technical analyses, e.g., cost-benefit analyses, and interactions with political interest groups. In the beginning, the program was characterized as much by uncertainty and euphoria as by facts and figures. But as more was learned by Congress and its implementing agency, the U.S. Department of Agriculture (USDA), adjustments were made to the CRP (primarily through revisions in the Food, Agriculture, Conservation and Trade [FACT] Act of 1990). Presumably, the CRP was improved as a result of these adjustments. One notable change was that benefits such as improved water quality and wildlife habitat, which initially were considered coincidental, became anticipated primary benefits by many familiar with the program. Indeed, the FACT legislation recognized these benefits by expanding eligibility criteria to include environmental benefits in addition to soil conservation.

In 1995, CRP contracts began to expire. Over 50% will have run their course by 1997, leaving landowners to return CRP land to production if they wish.

¹Some believe that the primary motivation for the CRP was supply control although this objective never was stated officially.

Given the size, scope, and importance of the program, Congress is likely to consider its continuation in one form or another in the upcoming 1995 Farm Bill debate. Indeed, in October 1994, the secretary of agriculture announced his support for renewing the CRP. In December 1994, the Office of Management and Budget (OMB) announced further support for the CRP by incorporating into its baseline budget protection: (1) an allowance for early termination of contracts on lands that pose little risk to the environment, (2) additional sign-ups to reach the 38 million a. target, and (3) permission to extend contracts for up to 10 yr. The CBO also incorporated CRP back into its baseline budget once the secretary announced his support. However, their baseline figures are based on a smaller CRP than the OMB projections. Congress and the groups that lobby it have much better information on which to base decisions this time around, information that will be needed in the current climate of fiscal austerity and public accountability.

This report pulls much of the CRP information together into one place through a two-pronged research effort to collect policy literature about the CRP and to interview key special interest groups about policy preferences for the program's future. The extensive review of existing CRP literature uncovered hundreds of published and unpublished documents pertaining to the development, implementation, impact, and future of the CRP on the national, regional, and local levels (Hughes et al., 1995). The interviews were conducted with key CRP interest groups in Washington, D.C. during the summer of 1994. AESOP Enterprises, Ltd., an organization active in agricultural policy issues in Washington, D.C., provided an initial list of 15 contacts including agricultural business groups, commodity groups, environmental organizations, farmers' organizations, House and Senate agricultural committee and staff members, national and state conservation districts, and USDA agencies. These meetings led to further contacts, resulting in a total of 41 interviews. The statements of 18 representative groups are presented here.

Research regarding the CRP may be abundant but is not necessarily easily accessible. Study results are

separated by organizational, disciplinary, political, and geographic barriers that complicate the sharing of information. This report therefore merges information contained in technical and political evaluations, uncovers and organizes issues relevant to current program evaluation, and outlines the views of special interest groups for the purpose of aiding policy formulation.

This report has three main parts. First, the review of literature is summarized in Chapters 2-6 and in-

cludes a brief description of the evolution of the CRP, a summary of the program's costs and benefits to agriculture and the environment, a discussion of future options for changing the program, and examples of how some would modify the program in the next farm bill. Second, results of the interest group survey are summarized and discussed in Chapter 7. And third, alternatives to the CRP are identified and considered in Chapter 8. The positions of those organizations interviewed are provided in Appendix B.

2 Evolution of the Conservation Reserve Program

Background

The story of events leading up to the CRP has been told by many (Berg, 1994; Chapman, 1988; Dicks, 1994a; Laycock, 1991; Rasnake, 1988; Zinn, 1993a). Simply put, the program evolved out of decades of concern for adverse agricultural and environmental conditions.

Because of a falling dollar and a strong world demand for U.S. grain, the 1970s have been called the “golden age of trade” for the U.S. farmer (Abel, Daft, and Earley, 1994). But by the early 1980s, world demand for exports had tapered off, and production was slow to adjust to this change. In an attempt to control supply, acreage reduction requirements were in effect for eight out of the ten years (yr) between 1975 and 1984 (Berg, 1994). These programs proved both costly and ineffective. Conditions worsened for farmers when depressed commodity prices, land values, and incomes made it increasingly difficult to meet financial obligations. As a result, the farm sector found itself in the worst financial crisis in nearly 50 yr.

Another result of intensive production during the

1970s was high erosion rates that prevailed on U.S. cropland during the 1980s (Figures 2.1 and 2.2). The 1982 National Resource Inventory showed that 41.2 million acres (a.) (about 10% of total cropland) was eroding at rates exceeding 10 tons (t)/a./yr (Lugar, 1994b). At that time, on-farm erosion damage such as productivity loss and increased structure and machinery maintenance costs were fairly well-known. Research conducted in the 1980s revealed an array of off-farm damages affecting households, businesses, and governments. These types of off-farm erosion damage were far more serious than those on-farm (Clark et al., 1985; Davis and Condra, 1989; Huszar and Piper, 1986).

In the 30 yr preceding the CRP, many wildlife species evidenced continuous and dangerous declines in population level. Populations of dickcissel, grasshopper sparrow, eastern meadowlark, lark bunting, and bobolink declined by as much as 4%/yr, or by 25 to 65% in those three decades (Johnson and Schwartz, 1993a; Schenck, 1994b). During cropland expansion periods, habitat fragmentation, degradation, and destruction caused by drained wetlands, plowed prairie grasses, and crop monocultures, i.e., a single spe-

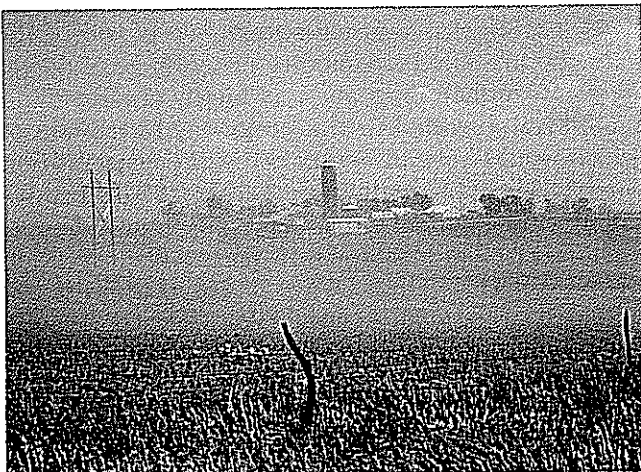


Figure 2.1. Farmland wind erosion in North Carolina. Photograph courtesy of Dana L. Hoag, Department of Agricultural and Resource Economics, Colorado State University, Fort Collins.



Figure 2.2. Farmland water erosion in North Carolina. Photograph courtesy of Dana L. Hoag, Department of Agricultural and Resource Economics, Colorado State University, Fort Collins.

cies, in these areas are thought largely responsible for these declines in wildlife populations (Berner, 1994; Riley, 1994b; Schenck, 1994b; U.S. Department of the Interior, 1986).

This discussion has touched on a few of the many concerns that evolved during the three decades preceding the CRP. Generally, the weaknesses of past supply-control policies, the prevailing farm financial crisis, and a fairly new awareness of the potentially detrimental environmental effects of intensive production on marginal croplands provided the inspiration for the CRP. Program enactment followed from the belief that this policy could ease environmental and supply problems efficiently and effectively, as well as support land values. Postprogram evaluations will serve to substantiate or to negate these early expectations.

Evolution in the Farm Bills

When the CRP first passed, it contained multiple objectives:¹ to decrease water and wind erosion, to protect the land's long-term capacity to produce food and fiber, to decrease sedimentation in streams and along roads, to improve water quality, to create better habitat for fish and wildlife through improved food and cover, to curb production of surplus commodities, and to provide income support to farmers. The final rules, however, stated that "the primary purpose of the CRP is to reduce erosion" and that "any other objectives are secondary benefits that may ultimately result from the CRP" (American Agricultural Economics Association Soil Conservation Policy Task Force, 1986). The USDA developed a process whereby land could be bid and accepted into the program (Hoag, 1988). Because erosion control was the primary concern, it is not surprising that in the early sign-up periods, the criterion for acceptance was limited to erosion control (Berg, 1994).

Criteria changed from sign-up to sign-up. After the process had been in operation for several years, concern developed about the program's performance with regard to enrollment, targeting to off-site problems, bid competitiveness, and program cost-effectiveness. Although both applicants and administrators struggled to keep abreast of changing specifications, they were not always successful. Frequent changes weak-

ened the potential environmental effects of the program. Furthermore, studies began to show that other targeting means could have been more effective (Frohberg et al., 1989; Reichelderfer and Boggess, 1988).

Revisions of the CRP passed in the 1990 FACT Act went into effect with the tenth sign-up. Their purpose was to minimize rental rate distortion and to maximize potential environmental benefits attainable per dollar spent. The USDA developed a new bid process using an environmental benefit index (EBI) to select acres that would fulfill this objective.

The EBI is comprised of seven criteria: surface water quality improvement, ground water quality improvement, soil productivity preservation, assistance to farmers affected by conservation compliance, tree planting, Hydrologic Unit Area enrollment, and established conservation priority-area enrollment. Because four of these criteria relate to water quality improvements, lands enrolled in the tenth through the twelfth sign-ups were selected in large part for their potential to alleviate water-quality problems. Regional enrollment distribution shifted from the primarily wind eroded lands of the Plains to the water-quality control areas in the coastal regions.

Enrollment

There currently are 36,422,772 a. in 375,202 CRP contracts (U.S. Department of Agriculture, 1993). Although 78% of all U.S. counties contain CRP acreage, over 80% of this enrollment occurs in only 18% of counties nationwide (Diemer et al., 1991). The majority of these counties are in the Mountain, Northern Plains, and Southern Plains regions.² Nearly 23.3 million a. (approximately 64% of total CRP acreage) are idled commodity program base acres. About 27 million program a. of highly erodible land have been enrolled in the program, 13 million of which would have difficulty achieving conservation compliance if in production (Clark, 1994). The remaining nine million a. are non-highly erodible lands. Just over 87% of this land is in grasses (conservation practice [CP]1,³ CP2, CP10), 6.4% in trees (CP3, CP11), 5.4% in wildlife uses (CP4, CP9, CP12), and the remainder is in other uses such as wetlands and filterstrips (U.S. Department of Agriculture, 1993).

¹Berg (1994) recounts the legislative process culminating in the passage of the CRP. Dicks (1994a) points out problems inherent in this process that were to lead to program inadequacies and inefficiencies.

²Mountain region: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming. Northern Plains region: Kansas, Nebraska, North Dakota, and South Dakota. Southern Plains region: Oklahoma and Texas.

Program Costs

The Agricultural Stabilization and Conservation Service estimates CRP rental costs at \$1.8 billion/yr, or close to \$19 billion, over the life of the program (U.S. Department of Agriculture, 1993). Cost share expenditures have accounted for an additional \$1.3 billion. Although actual administrative expenditures incurred have not been calculated, an early study predicted that administrative expenditures would total \$100 million over the life of the program (Young and Osborn, 1990b). On the national level, the average rental payment is \$49.67/a./yr, and the average one-time cost share payment is \$37.76/a. (U.S. Department of Agriculture, 1993). Table 2.1 shows the regional breakdown of CRP enrollment by acre and by average per acre rental payment.

Table 2.1. Regional Conservation Reserve Program enrollment by acreage and by average per acre rental rate^a (U.S. Department of Agriculture, 1993)

Region ^b	Acreage	Average/a. rental rate
Appalachia	1,158,104	\$53.96
Corn Belt	5,603,317	\$74.26
Delta	1,248,403	\$44.28
Lake States	3,008,371	\$58.66
Mountain	6,687,318	\$39.66
Northeast	226,411	\$59.27
Northern Plains	9,664,094	\$45.99
Pacific	1,765,294	\$49.73
Southeast	1,692,580	\$42.69
Southern Plains	5,342,989	\$40.86
Noncontinental	25,888	\$37.18
Totals	36,422,772	\$49.67

^aData compiled from U.S. Department of Agriculture (1993). Errors are due to rounding.

^bRegional breakdowns are as follows: Appalachia = KY, NC, TN, VA, WV; Corn Belt = IL, IN, IA, MO, OH; Delta = AR, LA, MS; Lake States = MI, MN, WI; Mountain = CO, ID, MT, NV, NM, UT, WY; Northeast = CT, DE, ME, MD, MA, NJ, NY, PA, VT; Northern Plains = KS, NE, ND, SD; Pacific = CA, OR, WA; Southeast = AL, FL, GA, SC; Southern Plains = OK, TX; Noncontinental = AL, HI, PR.

³These are practices allowed on program land. The USDA approved 19 practices that included grass cover, tree cover, shelterbelts, filterstrips, wetland trees, and wildlife ponds.

3 Effects of the Conservation Reserve Program: Benefits and Costs

The USDA evaluates the effects of the CRP under two broad categories—social benefits and costs, and transfer payments (U.S. Department of Agriculture, 1994b). Social benefits and costs include changes in the quantity or quality of real goods and services valued by society; environmental quality and higher food costs are examples. Transfer payments do not produce effects in real goods and services but instead produce effects between sectors and regions of the economy; decreased expenditures on commodity programs are the most frequently cited examples. Because of differences in the types of effects, two accounting frameworks are necessary: one focusing on the CRP's effects on social welfare, and the other its effects on government spending (U.S. Department of Agriculture, 1994b). The USDA states that because of the differences between types of accounting techniques, the overall impact of the CRP cannot be found through simple aggregation of individual impacts.

Ervin and Dicks (1988) offer a comprehensive theoretical description of the relevant costs and benefits establishing the net social welfare for crop retirement programs. This framework provides the foundation used here to consider the various impacts of the CRP. But because measurements are unavailable for some of the benefits and costs identified by Ervin and Dicks, certain elements suggested for evaluation are excluded from this summary. In particular, a literature search revealed very little about changes in consumer surplus or foreign trade gains or losses. Because of the importance of accountability for taxpayer dollars, we include studies about the CRP's cost-effectiveness in addition to studies about the program's contribution to social welfare.

Agricultural Sector

Producer Perceptions

The USDA estimates that 19% of all U.S. farm and ranch operations receive CRP rental payments (Collins, 1994). Over the years, many surveys have attempted to capture the attitudes of these producers.

A total of 25 landowner surveys provide a background for this publication. Twelve surveys had been cited by Dicks (1994a). Other sources include Atkinson and Dicks (1994), Clark et al. (1994), Diebel et al. (1994), Ervin et al. (1994), Goodman and Hughes (1994), Gustafson and Hill (1994), Janssen and Ghebremicael (1994), Lant et al. (1994), Monson and Lenkner (1994), Osborn et al. (1994), Riddel et al. (1994), Salandia et al. (1993) and Saltiel (1994).

Landowner surveys generally found that producers are pleased with the CRP and would like to see it continued. They find the program appealing because enrollment provides income stability, decreases the need for additional farm credit, and in certain instances allows for early, full, or semiretirement. Additionally, producers perceive that the CRP has decreased erosion and rejuvenated wildlife even though it has caused fluctuations in the agribusiness sector and noxious weed problems in areas. These perceptions are discussed in detail in the following sections.

Effects on Producers

Producers may have been affected by the CRP in at least four ways. First, smaller stocks of commodities can lead to increased prices and thereby to increased returns on the remaining acres in production (Figure 3.1). Barbarika and Langley (1992) report that aggregate commodity prices would be 1 to 6% lower without a CRP. Others argue, however, that unilateral U.S. acreage idling does not increase prices received by farmers in the long run (Abel, Daft, and Earley, 1994). In either case, price effects seem small or nonexistent.

Second, decreases in the number of acres cropped have led to decreases in *variable* production costs for participating farmers. Researchers also point out, however, that producers are harmed because idling programs undermine individual farm efficiency by forcing an increase in per-unit *fixed* costs (Abel, Daft, and Earley, 1994). This relation could reduce benefits from decreased variable costs.

Third, rental payments have provided producers with a steady, stable income. Last, Gustafson (1994)



Figure 3.1. Strip crop wheat harvesting. Photograph courtesy of Dana L. Hoag, Department of Agricultural and Resource Economics, Colorado State University, Fort Collins.

reported that guaranteed returns and high prices offered by CRP rentals played a major role in stabilizing and strengthening land values for landowners in the late 1980s. Shoemaker (1989) found land value increases of \$62 to \$132/a. in areas of high CRP enrollment.

Effects on Supply Control

Supply-control cost savings often are cited as a benefit of the CRP. For example, the Partners for Wildlife Partnershare have estimated that in 1991 alone, federal farm-program payments in six states totalled \$16.4 million less than what would have been paid to farmers without a CRP (Dornfeld and Kruse, 1994). Others estimate that the CRP can be credited with saving \$8.4 billion in commodity program outlays over the life of the program (Peterson, 1994; Young and Osborn, 1990a).

Although important to those considering government expenditures, these figures are not necessarily true measures of social welfare, for "supply control cost savings occur only when the CRP substitutes for the more expensive land retirement programs" (Dicks, 1994b). Additional benefits do not occur when a transfer payment from the government simply is moved from a commodity program to the CRP; cost savings in commodity programs should, however, be deducted from CRP cost.

Ervin and Dicks (1988) suggested two welfare benefits of decreased commodity surpluses. The first is decreased storage costs. The second is resource reallocation from surplus commodity production to eco-

nomic areas in which resources might be used better. No cumulative estimates of these benefits were found in the literature, however.

Effects on the Local Economy

Local communities have been affected both positively (Broomhall and Johnson, 1990; Martin and Hughes, 1990; Riley, 1994a; Siegel and Johnson, 1992) and negatively (Diemer et al., 1991; Mortensen et al., 1989; Reichenberger, 1987) by the CRP. Gustafson (1994) concluded that rising land values coupled with increasing rental rates improves the equity position of landowners and subsequently increases farmland owner wealth and stimulates economic activity in local communities. This conclusion assumed no migration of labor to other communities.

Communities heavily dependent on agricultural activity have experienced losses in economic and employment levels. Agricultural input firms suffer from decreased demand. Greatly decreased demand will move labor from the input sector. Likewise, when an entire farm is enrolled, labor becomes more uncertain and can migrate to other areas. Gustafson (1994) notes that this relation can have a negative effect on economies facing emigration and a positive effect on those accepting immigration of new labor.

On a national level, the overall impact of the CRP on local economies is modest—between 0 and 1% (Collins, 1994; Hines et al., 1991; Hyberg et al., 1991; Johnson, Ekstrand, McKean, and John, 1994)—and small enough to fall within the bounds of routine annual and multiyear cyclical fluctuations. In many instances, losses in one economic sector may be recuperated by expansion of other sectors such as recreational activities.

Environment/Ecology and Agronomy

Ribaudo et al. (1990) estimated that a 45-million-a. program could produce between \$6 billion and \$14 billion in natural-resource user benefits over the life of the CRP. These benefits would include improved soil productivity, air quality, wildlife habitat, and surface and ground water quality. In the baseline scenario, benefits total \$10 billion in present-value terms, with the greatest share of benefits going to wildlife (40%) and to improved surface water (37%). Although CRP enrollment has fallen short of this goal by nearly 9 million a., estimated actual benefits remain substantial.

Effects on Soil and Water Quality

Margheim (1994) reported that, on average, erosion from lands enrolled in the CRP decreased from 20.9 t/a./yr to 1.6/t/a./yr. As a result, annual soil loss due to wind and water erosion has been decreased by 700 million t (Dicks, 1994a). These estimates, however, are based on USDA estimates of soil savings. New research indicates that soil savings from the CRP may have been overestimated by as much as 50%. All estimates of benefits cited here rely on the USDA estimates.

Soil can be carried off the field by wind or by water. Soil conservation practices can improve the quality of the soil and minimize contamination of nearby surface water. Decreased wind erosion has led to on-farm benefits of increased soil productivity and decreased maintenance expenditures. Soil quality improvements translate into savings in production costs, a savings that, in the form of lower prices for farm products, may be passed on to the consumer. The off-farm benefits of decreased wind erosion include decreased airborne particulate matter. Ribaudo et al. (1990) estimated the benefits of decreasing wind erosion in the range of \$0.4 billion to \$1.1 billion over the life of the program. These benefits included both decreased household damage in the form of interior and exterior cleaning and maintenance, and decreased maintenance and repair of nonfarm machinery.

Although the off-farm benefits of decreased wind erosion have been difficult to quantify fully, other studies support the existence of these and other benefits to households, businesses, and governments. Benefits include decreased roadway blockage, restabilized land, diminished landscape damage, decreased automobile and airline travel delays, cleared irrigation ditches, improved respiratory health, and improved and expanded recreational opportunities (Ervin and Lee, 1994; Hughes, 1994; Piper, 1985; Sperow, 1994).

Decreased water erosion may contribute to on-farm benefits such as improved soil productivity, but the majority of benefits accrue off the farm. Weitman (1994) states that nitrate loadings may have decreased by as much as 90%, sediment and herbicide loadings by 50%, and phosphorus loadings by as much as 30%. Other studies support these findings. Blackburn et al. (1991) found that the amount and magnitude of surface water runoff decreased substantially. Estimates show that the CRP could be responsible for decreases in sediment deposition of between 90 million and 200 million t (Clark et al., 1985; Mar-

gheim, 1994; Ribaudo, 1986). Alexander et al. (1989) found that in the South, after the first six sign-ups, the CRP decreased sediment deposition by 194 million t and associated damage by nearly \$600 million. Heimlich et al. (1994) suggested that the CRP could be responsible for an annual reduction of 61 million t of pesticide runoff. Ribaudo et al. (1990) estimated the value of water quality benefits due to decreased erosion and chemical run-off and improved recreational activities to be between \$1.9 billion and \$5.3 billion. Estimates of off-site water quality benefits of the CRP range from \$41.20 to \$321.10/a. (Ribaudo, 1989). Many of these estimates have been generated through computer modeling and simulation techniques. More on-site research is necessary to validate these claims.

Effects on Weeds and Insects

Effects of the CRP on weed and insect control have differed by region. Although weed control is mandated under current program regulation, serious weed problems have been reported in areas of high CRP enrollment (Clark and Johnson, 1990; Saltiel, 1994). These weeds may provide alternative hosts for pests and disease vectors (Council for Agricultural Science and Technology, 1990). Certain weed problems may be attributed to the time required to establish cover, but other factors such as poor weather can contribute to weed occurrence. Furthermore, once permanent cover is in place, it can provide an ideal habitat for beneficial insect or pathogen populations affecting perennial or biennial weed development, thereby decreasing both the instance of insecticide resistance and the number of soilborne pathogens causing injury to economically important plant species (Council for Agricultural Science and Technology, 1990).

Effects on Wildlife

The general finding is that the Conservation Reserve has been quite successful in regard to preserving wildlife habitat inasmuch as the program led to substantial improvements in the abundance and distribution of wildlife habitat within the western, Plains, midwestern, and northeastern agricultural ecosystems (Allen 1993b; Berner, 1994; Collins, 1994; Johnson, Ekstrand, McKean, and John, 1994; Kantrud, 1993; Riley, 1994b) (Figures 3.2 and 3.3). Great benefits are found in these areas for two reasons. First, CRP lands help to spread out small areas of wildlife habitat and thereby diminish losses to predators (Kantrud, 1993). Second, areas with high per-

centages of row crops (70 to 80%) need only a small amount of CRP land to bring back grassland bird benefits (Riley, 1994b).

Big game such as deer and elk (Allen, 1993b; Newton and Beck, 1993) and many grassland birds and waterfowl populations have been rejuvenated throughout the nation as a result of the CRP (Allen 1993a, 1993b; Berner, 1994; Collins, 1994; Johnson and Schwartz, 1993a; Riley, 1994b; Schenck, 1994b; Schenck and Williamson, 1991). Over the life of the program, consumptive and nonconsumptive recreational benefits from small and nongame species have been estimated at between \$3 billion and \$9 billion (Johnson, Ekstrand, McKean, and John, 1994; Ribaud et al., 1990; Langner, 1989; Riley, 1994a; Young and Osborn, 1990b). Although total big-game benefits have not been estimated, these also are expected to be great (U.S. Department of the Interior and U.S. Department of Statistics, 1993). Benefits to many species come from improved water quality, not from vegetative cover (Allen, 1993b; Kantrud, 1993).

Economic benefits derived from consumptive uses of wildlife, e.g., hunting, generally can be estimated using wildlife related expenditure data collected by various government and private organizations in high consumptive-use areas. Because markets for nonconsumptive wildlife use do not exist, however, many of these economic benefits such as the value of a species' existence are estimated through nonmarket valuation techniques. Although these techniques provide the best-known means of estimating the social benefits derived from these uses, they may suffer from over- or undervaluation. Because many studies have provided consumptive and nonconsumptive



Figure 3.2. Canvasback ducks (*Aythya valisineria*) at Goose Lake, Greene County, Iowa. Photograph courtesy of Ty Smedes, Nature Photography, Urbandale, Iowa.

benefit estimates in a lump sum, caution must be used in evaluations of their magnitude.

Not all CRP effects are positive. The establishment of pine plantations in the Southeast eliminated thousands of acres of high-quality nesting, brood rearing, and foraging habitat. Shelterbelts (CP5) and windbreaks (CP16) can harm grassland dependent species by increasing the rates of predation and nest parasitism (Allen, 1993a). Allen (1993a) suggests, however, that monocultures be managed on long rotations, thinned frequently, and subjected to controlled burnings to maintain vegetative cover, which provides habitat for many species. These measures could reverse the CRP's negative effects in the Southeast, making the program beneficial to wildlife in all regions of the nation.

Cost-Effectiveness

Although limitations in measurement tools and the resulting deficiencies in many analyses are recognized readily, program analysts concur that CRP benefits are abundant and substantial. Many analysts conclude, however, that these benefits could have been achieved in a more cost-effective manner (U.S. Congress, 1989, 1993; Young et al., 1990). For example, more benefits might have been achieved per dollar spent if funds had been targeted to highly erodible land or to land from which there could be substantial environmental benefits.

Because the bid process was not competitive in the



Figure 3.3. An upland sandpiper (*Bartramia longicauda*) returning to a nest containing four eggs in Ringgold County, Iowa. Upland sandpipers prefer to nest in mid- to tall-grasslands that are undisturbed, such as CRP acres. Photograph courtesy of Thomas R. Rosburg, Colo., Iowa.

first nine sign-ups, rental rates were 200 to 300% higher than the local cash rental rates in some parts of the country; consequently, the program cost approximately \$300 million more annually than was necessary (U.S. Congress, 1989). As mentioned, the CRP enrolled 9 million a. of non-highly erodible land. The CRP therefore either could have increased the level of benefits it has achieved at current costs or could have attained current benefit levels at a greatly decreased cost.

Summary: Benefits and Costs

As mentioned, because of differences in types of effects, social welfare impacts and transfer payments cannot be aggregated to find total CRP effects. Furthermore, the tools and techniques used in the many social welfare analyses differ nearly as greatly as the studies themselves do. Thus, even aggregation of the results from many social welfare studies—while it may be a useful indicator—will not yield one accurate measurement of social welfare benefits.

The official position of the USDA is that the CRP has produced social welfare benefits in excess of its

costs (U.S. Department of Agriculture, 1994b). There are, however, almost no other studies supporting this claim. In general, a rough aggregation of social welfare benefits from the cited literature yields benefits in the range of \$6 billion to more than \$13.4 billion (Johnson, Ekstrand, McKean, and John, 1994; Ribaud et al., 1990; Young and Osborn, 1990b). Because costs of the program are estimated at nearly \$20 billion, it is unlikely from a social welfare standpoint that the CRP produced benefits sufficient to cover its costs.

When evaluating the CRP, the government also may want to include cost-efficiency criteria such as savings in commodity program outlays. Savings in outlays has been estimated at nearly \$8.4 billion over the life of the program. This estimate is not without criticism, for it depends on the level of set-aside programs that would exist in absence of the CRP. Nevertheless, the value that the government places on this information—as demonstrating whether the CRP is efficient or inefficient from the government expenditure perspective—likely will play an important role in the discussion of future CRP options.

4 Options for the Future

Given the data regarding CRP costs, effects, perceptions, and current budgetary constraints, Congress has three options. It can elect to renew the current program, to terminate it, or to renew it with modifications. Each option has a potential effect on the attitudes and positions of concerned parties. The individual positions of the 18 organizations interviewed appear in Appendix B.

Continuation of the Current Program

A recent survey indicates that if rental payments continue at 100% of the current rental rate, 68% of CRP acres will remain under contract (Osborn et al., 1994). Congress could elect to allow current contracts to expire and subsequently could create sign-up periods as needed to replace the exiting acreage. Table 4.1 shows the potential effects of maintaining a program with at least 36 million a., along with those groups likely to support or to oppose each effect.

The USDA has estimated the potential effects of continuing a 36-million- to 38-million-a. program (Collins, 1994). Productive land on which conservation compliance could address environmental concerns effectively could be replaced with environmentally sensitive land to increase the level of benefits attainable. Erosion could decrease by an additional 23 million t/yr beyond estimated 1995 levels. Environmental benefits currently realized likely would increase.

Additional wheat, corn, and soybean acreage enrolled would surpass that required to be idled under a 5% Acreage Reduction Program (ARP); the need for such a program therefore would be eliminated. By 1999/2000, the increase in idled acreage as well as the expected increase in exports under the Uruguay Round Agreement likely would increase wheat prices by \$0.25–\$0.30/bushel (bu) and corn prices by \$0.15–\$0.20/bu over prices expected if contracts expired. Agriculturally dependent communities would continue to endure economic losses unless they could transfer growth to other sectors such as those pro-

moting recreational activity on CRP lands.

The effects of continuing the current program are largely positive, and supporters of this option outnumber opponents. But the benefits of continuation are overshadowed by the substantial cost associated with a 36-million- to 38-million-a. program. A recent report by the Sparks Company (1994) concluded that land idling policies to protect soil will become increasingly expensive in the 1990s, and USDA calculations support this claim. For example, savings through decreased deficiency payments (\$800 million) between 1996–1999 would be negated by increased cost of technical assistance (to \$3.8 billion) (Collins, 1994).

The annual CRP expenditure forecast ranges from \$2.25 billion (Sparks Company, 1994) to \$2.6 billion (Collins, 1994). Mounting pressures on the CBO and on the Office of Management and Budget to decrease spending likely will cap allowable expenditures below this level. Thus, there is a need to explore measures in addition to current program continuation.

Termination of the Current Program

According to the Sparks Company (1994), the original reasons for the CRP have faded. Today, commodity carryover stocks are diminishing, the farm debt crisis has abated, and conservation compliance is in full force. Given this situation, Congress could terminate the CRP. The potential effects of such a decision are presented in Table 4.2.

Many studies have estimated the effects of program termination. Survey results suggest that under this scenario 63% of CRP acreage would be returned to production (Osborn et al., 1994). With increased agricultural production, agriculturally dependent communities could rebound from years of economic hardship. Agricultural input firms could face increased demand for their products and in turn could demand more labor.

The Sparks Company (1994) suggests that CRP termination would result in increased production and carryover stocks. Great increases in cropped acreage

Table 4.1. Potential effects of renewing the current Conservation Reserve Program

Category	Effect ^a	Supporters	Opponents
Agricultural sector	Less productive land enrolled	Agricultural business, Congressional Budget Office, farmers, farm bill legislators	
	Same or greater total enrolled acreage	Conservationists, environmentalists, farmers	Congressional Budget Office
	Increased idled base by 18 million acres	Farmers, farm program legislators	
	Decrease in Acreage Reduction Program levels	Commodity groups	
	Increased prices of wheat and corn	Commodity groups	Consumers
	Continued depressed economies		Local communities, agricultural business
Environmental	Same or greater benefits for water quality, erosion, wildlife habitat	Conservationists, environmentalists, farmers, commodity groups, farm bill legislators	
Budgetary	Increased expenditures from \$2.2 billion to \$2.6 billion in FY 1989 ^b	Conservationists, environmentalists, farmers	Congressional Budget Office
	Decreased deficiency payments by \$800 million in FY 1996-1999	Congressional Budget Office	Farmers
	Increased expenditure for technical assistance, \$3.8 billion	Conservationists, environmentalists, farmers	Congressional Budget Office

^aBase acreage and budgetary figures taken from Collins (1994).

^bLow-range expenditure estimate taken from Sparks Companies, Inc. (1994).

over a short period (1996-1998) could decrease agricultural income levels below the relatively high base-line levels.

The USDA estimates that program termination could result in an expiration of contracts such that only 8.2 million a. would remain in the CRP by 1999 (Collins, 1994). This decrease in CRP acreage would decrease annual rental payments to \$0.7 billion in FY 1999. Wheat and corn acreage would expand by 4.1 million and 2 million a., and prices would be \$0.05 and \$0.15/bu higher, respectively, but prices would not increase to the level expected if the CRP was continued (+\$0.25-\$0.30/bu for wheat and +\$0.15-\$0.30/bu for corn).¹

Another study using economic modeling techniques predicts that wheat and feed grain price changes could range from a negative 15% to a slight

increase in prices, depending on the relative changes in demand for these crops and the corresponding increases of acreage in production (Heimlich and Osborn, 1994).

As much as 23% of CRP acreage could remain in grass for commercial hay production or livestock grazing (Osborn et al., 1994; U.S. Department of Agriculture, 1994a). Dodson (1994) notes, however, three factors that might suppress expansion of livestock forage production. First, returns could not cover the increased operating expenses associated with new

¹These estimates assume no benefits from the Uruguay Round Agreement and do not take into account implementation of the General Agreement on Tariffs and Trade. Acreage expansion is assumed under a 5% ARP.

Table 4.2. Potential effects of terminating the Conservation Reserve Program

Category	Effect ^a	Supporters	Opponents
Agricultural Sector	Decreased enrolled acreage to 8.2 million by 1999	Agricultural business	Conservationists, environmentalist
	Increased commodity base acreage in production	Agricultural business	Conservationists, environmentalists, farm program legislators
	Increased haying and grazing operations	New operators	Established ranchers
	Increased farm output Increased input expenditures Increased full-time jobs	Agricultural business, local communities	
Environmental	Increased erosion 124 million t/a./yr by 1995		Congressional representatives, conservationists, environmentalists, farmers, recreators
	Decreased water quality		
	Decreased wildlife habitat		
	Decreased recreation opportunities		
Budgetary	Decreased CRP expenditures to \$0.7 billion in FY 1999	Congressional Budget Office	

^aBase acreage and budgetary figures taken from Collins (1994).

support structures such as fencing. Second, many land parcels in the CRP are too small for haying and grazing operations. Last, many producers lack the managerial expertise to transform land previously devoted to row crops into successful haying and grazing operations. If there is an expansion of such operations, it probably would be in the northern and the southern Plains.

Although the budgetary and employment aspects of program termination are appealing, the environmental consequences are not. Conservation compliance requirements should prevent erosion from returning to its preprogram levels. But, by 1999, erosion levels still could increase 126 million t/yr more than are projected for 1995 (Collins, 1994). Increased erosion would have a negative effect on water quality. Likewise, wildlife benefits would be greatly decreased on lands returned to crop production, for even with conservation compliance much of the wildlife habitat established on conservation acreage would be lost.

Although termination of the CRP has gained support from highly influential entities such as agribusiness operations, the majority of affected parties—e.g., environmentalists and conservationists who have worked to enhance habitat, water quality, and con-

servation benefits; farmers who have enjoyed income security as a result of rental payments; commodity groups that are concerned about excess supply and depressed prices; livestock operators who are concerned about the cost advantages (provided by cost sharing in the CRP) to new hay producers; and Congressional representatives whose constituents favor the CRP—oppose this option. Moreover, policymakers themselves are reluctant to see the CRP exhibit the weaknesses associated with the Soil Bank Program of the 1960s, in which benefits were sustained on a short-term basis and then nullified when land returned to production. The possibility that long-term positive effects may be lost implies that substantial effort will be made to find common ground, perhaps in the shape of a modified program.

Modification of the Current Program

In theory, a modified program could, in a cost-effective manner, maximize benefits and minimize undesirable market distortions. To accomplish this, Congress could consider four strategy tools: target-

ing, farm owner-operator cooperation, farm-USDA agency level cooperation, and minimal conflicts in farm programs (Jeffords, 1982). Because modification of the current program is a more likely outcome than

either continuation or termination of it, strategies for modification are discussed in detail in the next two sections.

5 Signs of Support for Continuing the Conservation Reserve Program

During 1994, interest in the CRP debate grew. Consequently, support for a renewed program spread, as evidenced by the following activities:

1. **January 7.** The Soil and Water Conservation Society (SWCS) released a statement calling on Congress and the Clinton Administration to “extend the CRP beyond the 10-yr period covered by most contracts” (Berg and Schnepf, 1994). According to the statement, CRP focus should be conservation and not supply control.
2. **February 10.** Senator Richard Lugar (R-IN) recommended seven steps to modify the CRP. These included offering extensions on up to 25% of land currently enrolled, while considering (a) acreage devoted to trees, filter strips, and wetlands, or to other sensitive environmental acres and (b) improvements in water quality (Lugar, 1994a).
3. **February 24.** Representative Douglas Bereuter (R-NE) introduced H.R. 3894. Among its provisions were (a) extension of the CRP for 10 yr; (b) permission for the secretary of agriculture to negotiate decreased annual payments in exchange for granting farmers increased flexibility to withdraw, enroll, or re-enroll parts of land parcels; and (c) limited economic use on enrolled land (U.S. House of Representatives, February 1994).
4. **May 12.** Representative Collin Peterson (D-MN) introduced H.R. 4416 cosponsored by himself and Representative Pat Roberts (R-KS). The bill would renew the CRP for 10 yr and extend many of the provisions of the 1985 version of the CRP (U.S. House of Representatives, May 1994).
5. **May 18.** A letter from the National Association of Wheat Growers (NAWG) to Representative Richard Durbin, Chairman, Subcommittee on Agriculture House Appropriations, expressed a hope that Congress would consider cost containment and cost offset options to enable continuation of the CRP, rather than downsizing or altering the program’s current structure significantly (Olson, 1994).
6. **May 19.** Citing the 1990 FACT Act, which provides the secretary of agriculture broad authority to modify and to extend CRP contracts by as long as 10 yr, a letter from 14 of the 18 Senate Agricultural Committee members to the secretary urged him to renew contracts. The fourteen urged him to use his authority to protect and to preserve the CRP as an important tool in addressing the environmental agenda faced by producers as well as their viability and productivity (Leahy, 1994a).
7. **June 28.** A letter from 22 members of the Senate to the secretary of agriculture urged him to modify and to extend CRP contracts to help farmers protect water quality in coastal zone states (Leahy, 1994b).
8. **June 30.** A letter from four commodity associations to the secretary of agriculture urged him to offer producers the opportunity to extend current Conservation Reserve contracts to ensure that the program’s resource conservation gains are not lost. The letter also encouraged the secretary to offer producers a wide range of options in meeting conservation objectives (American Soybean Association et al., 1994).
9. **August 8.** A follow-up to the letter of June 28 to the secretary of agriculture included an additional five senators who wished to voice their support for extension and modification of the CRP to protect water quality in coastal zone states (Leahy, 1994c).
10. Most recently, former Secretary Espy sent a letter to the Agriculture Committee to voice his support for renewal of the CRP. This support has been reflected in the baseline of the CBO.

6 Modified Program: An Example

Should a form of the CRP be reauthorized in 1995, the Economic Research Service (ERS) predicts that an expanded program is unlikely. The overall size of a 1995 Farm Bill CRP is likely to be based on budgetary limitations at the time of debate. Acres chosen for renewal probably will be those that pose an off-farm environmental threat. Moreover, producers may be required to rebid their acreage or the USDA may make offers based on the productivity of land enrolled. Because experience with the Soil Bank has shown that nearly 85% of acreage enrolled in trees will remain in that form indefinitely, tree acreage may not be eligible for renewal. In the short run, contracts are less costly than easements; but in the long run, easements on carefully selected acres may be more cost-effective because the contract only postpones the time at which land again will be available for planting. Economic land uses would decrease the cost of extending contracts or offering easements. Certain organizations, however, will oppose a haying and grazing use option.

The ERS has estimated the benefits and costs of a future five-million-a. program under three selection criteria:¹ (1) minimization of rental costs, (2) maxi-

mization of erosion reduction benefits per dollar spent, and (3) maximization of benefits chosen under a revised EBI per government dollar spent. This revised EBI includes criteria pertaining to improvement of surface water quality, protection of ground water quality, assistance to farmers most affected by conservation compliance, enrollment in water-quality priority areas, decreases in off-site costs of wind erosion, improvement of wildlife habitat for farm related species, and savings in deficiency payments. Estimates are provided in Table 6.1.

As seen from the table, the minimum-cost criteria provide the greatest savings over current rental costs yet provides the least erosion and environmental benefits of the three targeting criteria. Tradeoffs between benefits and costs of the three criteria likely will be weighted to determine the most appropriate strategy.

The regional distribution of these retained acres depends greatly on the strategy chosen (See Table 6.2.). For example, the simulation shows that the Great Plains probably will receive the largest portion of enrolled land should any one of these strategies be chosen; actual enrollment in the Plains may differ greatly, however, between the choice of minimum cost and maximum revised EBI benefits criteria targeting. Due to the low rental rates and low potential for EBI benefits, the Great Plains has a relative cost advantage but a relative disadvantage in the EBI.

¹Only three targeting criteria and six economic and environmental categories are mentioned here. Other criteria and categories used in the analysis may be found in Johnson, Taylor, Clark, Amosson, and Smith (1994) and in U.S. Department of Agriculture (1994).

Table 6.1. Performance of five-million-acre selection strategies^a

Economic and environmental estimates	Minimum cost	Maximum erosion benefits	Maximum revised EBI ^b benefits
Total rental costs (million \$/yr)	107	142	187
Average rental cost (\$/a./yr)	21	29	38
Current rental savings over current rental costs (million \$/yr)	87	62	54
Average erosion reduction (t/a./yr.)	24	53	32
Sheet/rill erosion reduced (% of total)	18	23	32
Environmental benefits index per dollar (EBI/\$)	140	146	172
Water quality priority enrollment areas (millions of acres)	0.1	0.04	1.2

^aData taken from Table 2, Heimlich and Osborn (1993).

^bEBI = environmental benefits index.

Modified Program: An Example

Table 6.2. Simulated regional distribution percentages of enrolled land in a five-million-acre Conservation Reserve Program^a

Region ^b	Minimum-cost criteria	Maximum erosion benefits	Maximum revised EBI ^c benefits
East	0	4	26
Corn Belt/ Great Plains	94	93	62
South	0	2	4
West	6	1	8
Total	100	100	100

^aData taken from Figure 5, Heimlich and Osborn (1993).

^bRegional breakdowns are as follows: East = ME, PA, NH, CT, NJ, NY, MD, MA, RI, DE, VT, WV, NC, VA, MN, WI, MI; South = AR, LA, MS, KY, TN, AL, GA, SC, FL; Corn Belt/Great Plains = OK, TX, IA, IN, MO, OH, IL, ND, SD, NE, KS, MT, CO, WY, NM; West = CA, OR, WA, ID, AZ, UT, NV.

^cEBI = environmental benefits index.

7 A Survey of Interest Groups

Interviews and literature studies have uncovered six aspects of the CRP that could be modified: enrollment size, targeting options, targeting tools, easement/contractual bindings usage, economic land use options, and control delegation. Each aspect is explained in this chapter. Of the 41 parties contacted in the summer of 1994, 22 were asked to state their own positions on the six major issues surrounding the CRP debate. Of those 22, four elected not to be included in this report. Table 7.1 summarizes the statements of the 18 groups that agreed to be included.

Several observations can be made about the 16 groups that hold an *official* position on the six major CRP issues:

1. All support CRP renewal.
2. All favor multiple targeting.
3. All favor continued use of contracts; some support a mix of short- and long-term land retirement options.
4. A majority favors alternative economic use options.

Table 7.1. Organization positions on the Conservation Reserve Program^a

Organization	Enrollment			Targeting options ^b				
	Current size	Smaller size	Larger size	Highly erodible land	Water quality	Wildlife	Wind erosion	Multiple targets
American Farm Bureau Federation	X			X	X		X	X
American Farmland Trust		X						X
American Soybean Association		X		1	1	2		X
Ducks Unlimited	X		X					X
The Fertilizer Institute	Keep the CRP as a soil conservation program only; not for supply control							
National Assoc. of Conservation Districts	X			1	2	4	3	X
National Assoc. of Wheat Growers	X			1	2	1	1	X
National Audubon Society	NP	NP	NP					X
National Cattlemens' Association	NP	NP	NP					X
National Corn Growers Association	X	X		2	1	2		X
National Cotton Council	X		X					X
National Farmers Union	X							X
National Grain and Feed Association	No official position; use caution when exercising idling options							
National Grain Sorghum Producers	X			1			1	X
National Pork Producers Council	X	X			1			X
The Nature Conservancy	NP	NP	NP					X
Soil and Water Conservation Society	X	X						X
Wildlife Management Institute	X		X		1	1		X

^aX indicates support.

^bSubobjectives are ranked from 1 to 4 in order of priority.

^cEBI = environmental benefits index.

^dFNS = flexible, not specific.

^eNP = no position.

^fNU = no economic land use at this time.

5. All support increased local control.

Size

Because this survey neither is inclusive of all interest groups nor takes into account the weight placed on each group's view, the modifications discussed represent only some of many that might develop in the 1995 Farm Bill debate. Survey results do reveal, however, that although the motivations behind organizations may differ, their positions may be similar. Thus, a restructured conservation program may be able to meet the various needs of many diverse organizations.

Although a side-by-side comparison of statements made by these organizations reveals numerous differences in terms of motivation, the positions held by many groups are consistent. Thus, a restructured conservation program may have the potential to meet the various needs of many diverse organizations.

The Farm Bill committee is faced with three enrollment alternatives: maintain, decrease, or increase CRP acreage. Large enrollments generate a multitude of environmental benefits and may be an effective component of supply-control strategies. Should non-highly eroded land currently enrolled expire, highly eroded land could replace the exiting acreage and increase the level of environmental benefits attained with 36.5 million a. of program land, but effects on crop surpluses would be reduced.

Conversely, decreases in enrollment are advocated for budgetary, efficiency, market, and cost-effectiveness reasons. Two supporting lines of reasoning exist. First, studies have found that extensive idling produces negative effects including loss of trade opportunities, rural jobs, and rural development (Abel, Daft, and Earley, 1994). Producers of agricultural inputs face smaller markets for their products and

Targeting tool		Economic Land Use ^b							Control	
Current EBI ^c	Revised EBI	Easement	Contract	Haying and grazing	Biomass production	Recreation	Tree production	Rotations	National level	Local level
	X		X	No	FNS ^d	FNS	FNS	FNS		X
	X	X	X	X	X	X	X	X	X	X
NP ^e	NP		X	NU ^f	NU	NU	NU	NU	X	X
	X	X	X	X		X	X		X	X
Keep the CRP as a soil conservation program only; not for supply control										
	X		X	1	3	2	3	3	X	X
	X		X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X		X	X
NP	NP		X		X	X	X	X	X	X
	X		X	X		X	X	X	X	X
NP	NP		X	NP	NP	NP	NP	NP	X	X
	X		X	2	1	2	2	2	X	X
No official position; use caution when exercising idling options										
NP	NP		X			X		X	X	X
NP	NP		X	NP	NP	NP	NP	NP	X	X
	X	X	X	NP	NP	NP	NP	NP	X	X
	X	X	X	X	X	X	X	X	X	X
	X	X	X	X		X		X	X	X

the likelihood of decreased profits. In an attempt to maintain profits, suppliers of agricultural inputs may raise prices, thus transferring losses in terms of increased costs to farmers. Second, with the exception of large blocked regions needed to sustain and to improve grassland habitat populations, the desired environmental and conservation benefits may be achieved through enrollment of relatively small land units such as filter strips and buffer zones instead of whole-field units. Most affected parties agree that the CRP should be reserved for lands deemed environmentally sensitive. The size of the land units enrolled should depend on the environmental concern generated by that land if crop protection effects are ignored.

Targeting Options

Zinn (1993b) stated that three concepts—total resource management, watershed management, and ecosystem management—downplay the importance of soil erosion control alone and integrate it with a wide range of other environmental issues at the farm level. This change reflects the diverse environmental and economic concerns whose presumed importance differs across sectors, disciplines, and national regions.

For example, farmers are concerned with production sustainability and erosion control. Conservationists and environmentalists also address wildlife and water quality issues. Inhabitants of the coast face water erosion problems whereas those of the Plains face more wind erosion problems. A program designed to gain national appeal would incorporate these concerns. In other words, it would target multiple natural resource conservation goals such as erosion reduction, air quality, water quality, and wildlife.

Targeting Tools

The current EBI is an innovative attempt to identify lands with the potential to achieve environmental benefits. As noted, however, this index is partial to land affecting water quality and fails to take into account other environmental concerns such as wildlife habitat and endangered species. If multiple environmental objectives are to be targeted, the EBI would have to be revised. Surveyed groups support a revised version.

The ERS has used a revised version of the EBI to examine various postcontract policy options (Barbarika et al., 1994; Heimlich and Osborn, 1993; U.S. Department of Agriculture, 1994a). This version incorporates six goals: protecting surface and ground

water quality, assisting producers most affected by conservation compliance, retaining water-quality priority acre enrollment, decreasing off-site costs of wind erosion, and retaining wildlife habitat and deficiency payment savings. To date there has been no indication of whether the USDA will incorporate this revised EBI into a modified program.

Easements and Contracts

For the purposes of the survey, *contracts* were defined as follows: *contracted land* is to be idled for 10 yr in return for an annual rental payment on all contracted land and a one-time cost-share payment on lands newly enrolled in a modified program.

At the time of the survey, the USDA had not specified terms for easements. *Long-term easements* were defined as land idled for 20 to 30 yr in return for a payment to be disbursed in one lump sum or in a small number of allotments. That is, payments would not be made annually over the life of the easement, as was done with the contracts. Under a permanent easement, producers would forfeit the right to produce on the land permanently and also would be compensated with a one-time (or allotment scheduled) payment for the agreed-upon value of production rights.

Neither definition takes into account the possibility of alternative economic land-use options. This topic will be addressed separately.

All groups with an official position support the use of contracts and/or easements. Long-term and permanent easements in lieu of contracts are appealing because they provide a more cost-effective means of maintaining long-term benefits. Easements can eliminate the need for repeated payments on the same lands from multiple programs with similar objectives. State-level conservation easement programs in Pennsylvania, Maryland, and Massachusetts already have proved successful in this regard (Warman, 1994).

For a nationwide conservation program, however, contracts are more likely to play the larger role, for five reasons. First, farmers prefer to contract because they retain the right eventually to return the land to production. Second, short-term contracts can be effective in achieving many resource restoration and supply management goals. Third, research indicates that conservation-friendly production technology may be available in coming years, and thus the need for easements will disappear in many instances (Richards, 1994). Fourth, budgetary limitations may preclude the short-term allocation of sufficient funding for easement expenditures. Fifth, mandated controls,

e.g., wetland regulations, eventually may replace the need to reimburse landholders for conservation practices. It is predicted that the majority of acreage will remain in contracts whereas easements will be reserved for the most environmentally sensitive lands. The decision to implement a contract or an easement should be made on a case-by-case basis.

Economic Land Use

Land use options allowing producers to engage in limited alternative economic activities in return for decreased rental rates have been received with enthusiasm by commodity groups, environmentalists, farmers' unions, and budget controllers. Each option, however, has potential direct or indirect effects undesirable to some parties.

Haying and Grazing

An SWCS survey has shown that producers are willing to reduce the rental rate received under the CRP by 11% in return for grazing and haying opportunities (U.S. Department of Agriculture, 1994a). But under the emergency haying and grazing conditions of the early 1990s, CRP landholders accepted payment cuts of 25 to 50% in return for temporary haying and grazing rights (Gay, 1994). Haying and controlled grazing, which thin dense vegetative cover, can improve wildlife habitat for many species of non-game birds and produce economic benefits as well (Allen 1993a).

Concerns arise over two probable side effects of increased haying and grazing. First, a heavy influx of haying and grazing enterprises could increase cattle production and depress beef prices. Second, because of the CRP's rental and cost share provisions, program participants initiating new haying/grazing operations will have a cost advantage over established ranchers. The purpose of allowing haying and grazing opportunities is to decrease the participant's rental and cost share assistance to a level at which incentives to produce hay or to graze the land are from the market and not from distorted advantages stemming from the CRP program.

Biomass Production

Biomass production such as poplar trees and gamma grass is being considered as an alternative to coal in energy producing facilities. Participants in the CRP could provide new energy inputs to these experimental facilities.

Two concerns about biomass production have surfaced. First, as has been noted, limited wildlife species can thrive in monoculturally defined environments. Second, because existing biomass facilities are only experimental and because the high cost of facility conversion decreases the probability of many more biomass generator facilities in the near future, the decision to plant biomass inputs is risky for program participants.

Economic and ecological risk may be minimized by limiting biomass production to lands meeting two criteria: those lying (1) within a given radius of a biomass power plant as specified by the USDA and (2) where existing wildlife populations can be sustained with monoculture production. Further research is needed to determine whether these two criteria can be met simultaneously.

Recreational Use

Recreational and educational opportunities abound on CRP lands. Economic returns from these activities can have far-reaching effects on many sectors of the local community. Although the least controversial among alternative land-use options, recreation options are not above criticism. Excessive human activity on lands can counteract the CRP's environmental goals, e.g., wildlife rejuvenation and erosion control. In addition, free access to CRP lands by recreators may infringe on the rights of landowners. These drawbacks could be minimized by limiting the number of people on the lands (through the use of admittance fees and permits) and by limiting the accessibility to lands (by restricting users to specific areas or paths and by fining for trespass beyond those areas).

Commercial Tree Production

Producers can choose between quick-growth or slow-growth tree production. Fast growing varieties such as Christmas trees permit producers to secure economic returns within 6 to 8 yr of initial planting. The delay in economic returns for slow growth is compensated for partly by tax incentives such as credit and amortization, which are provided for in Public Law 96-451 (Hoover et al., 1989).

Tree production may be discouraged for a number of reasons. Current tax provisions provide no incentive for trees planted for conservation purposes such as those planted in shelterbelts or windbreaks. Additionally, the incentives that do exist may provide compensation inadequate to sustain an operation

until harvest. This use option also is subject to the same monoculture concerns as biomass production is. Once an acre is in trees, the flexibility to change to another land use option is lost. Finally, current conservation debate suggests that acreage planted in trees is precluded from future conservation program enrollment possibilities; thus, because they fear missing out on benefits from future programs, producers might avoid planting trees.

Sweeping measures may be needed to correct such problems. Thorough wildlife assessment studies could be administered in potential tree areas to ensure that native species are sustained. The tax structure could be modified to provide incentives for conservation crops. Producers could stabilize income flow by planting a variety of species with staggered harvesting rates. Developing and enacting these adjustments, however, require extended periods, and no widely accepted solution has been approved yet.

Rotations

Proposals have suggested that rotation schedules be used within the management plans of CRP acreage. Rotations may allow budgetary and environmental concerns to be reconciled concurrently. But information about viable plans is scarce, and many parties remain skeptical. Even sound ecological rotation schedules are subject to uncontrollable weather conditions that can delay cover establishment and necessitate rotation before wildlife benefits are secured.

Additionally, conflicts may arise between the environmental goals of rotation and the current targets for commodity support programs.

To achieve both the environmental and the economic goals of rotation, schedules may need to be flexible. For example, producers who under normal conditions would plant a supported program crop may hold the land in cover for an extended period if given adequate financial incentives and the flexibility to alter plans when unforeseen events such as drought occur. To date, no feasible plan resolving environmental and economic conflicts has been proposed.

National and Local Controls

Program control remains a delicate issue. Under current provisions, most control lies within the USDA and is exercised at the national level. But because concerns and conditions differ throughout the nation, a program developed under national guidelines and implemented on a flexible basis, with input from other state and local entities where appropriate, would have an enhanced chance of success.

The composition of state and local committees in itself occasions debate. Suggestions for local committees include state technical committees and farmers' committees elected by farmers. Another suggestion is that committee members represent different sexes, ages, ethnic origins, and disciplines, so as to keep objectives from being biased.

8 Alternatives to a Conservation Reserve Program

Conservation policy can take many forms. Although many individuals believe that conservation goals are worth striving for, some feel that other tools may be more appropriate for the challenge. Numerous alternatives have been proposed, the details of which are beyond the scope of this paper. Nonetheless, because policymakers likely will explore options in addition to the CRP, four likely alternatives are introduced below. Details of these programs as well as comparisons of some with the CRP can be found in many of the references cited.

Green Programs

Green payments and green ticket certification provide farmers with an incentive for using environmentally friendly practices. These programs offer direct payments, higher commodity price supports, or other financial incentives to adopt environmentally benign (green) practices. Proponents state that a green payment support program holds the promise of providing income support without creating the distortions in price and commodity supplies resulting from current farm programs (Benbrook, 1994; Lynch and Smith, 1994).

Revenue Assurance

The 1995 Iowa Farm Bill Study Team (1994) promotes *revenue assurance*, or a guaranteed gross revenue, whereas Harrington and Doering (1993) suggest a revenue insurance plan dealing with price and yield risk separately. Both programs promise to decrease current farm bill costs by at least \$2 billion and offer farmers potentially higher market based in-

comes, protection, and greater flexibility in meeting conservation and environmental goals by changing crop mixes and farming systems. A recent Food and Agricultural Policy Research Institute (1995) report found that returns to farmers under Revenue Assurance actually may be less than those under the CRP.

Environmental Reserve/Rural Lands Trust Program

This program aims to improve the cost effectiveness of federal farm policy by maximizing net environmental benefits of cropland set-asides and retirement programs, managing supplies of commodities, protecting farm income, increasing commodity program flexibility, and removing the most highly sensitive land from intensive production. The advantage of this combined program is that it allows more efficient land use planning, allowing simultaneous consideration of short- and long-run goals (Mansager, 1994).

Conservation Credit

Conservation credit programs (CCPs) use partial property tax credits to encourage voluntary soil erosion control. Within 2 yr, a partial property tax credit in two Wisconsin pilot programs resulted in a doubling of the number of farms with conservation plans. As a result, erosion decreased by 72%, use of CPs increased, and administrative costs decreased compared with those associated with other means of conservation (American Farm Bureau Federation, 1994).

9 Conclusions

The overwhelming popularity of the CRP will press Congress to renew the program in the 1995 Farm Bill. The authors of this paper have observed and analyzed the CRP's costs, benefits, and overall significance. This document incorporates the literature and positions held by political interest groups and establishes a comprehensive evaluation of the current program, which can be used to formulate the next phase of conservation policy.

The information collected suggests that if a modified program is developed during the 1995 Farm Bill proceedings, it will be less costly due to a lower cap on the total amount of land enrolled, will contain more effective eligibility criteria, and will decrease rental rates when there are alternative economic uses. The program also will address a number of en-

vironmental issues and will target program lands based on specific productivity and environmental benefit criteria. These changes will gain the approval of policymakers and some participants but will be resisted by those shut out of the program. The big losers of a leaner, more cost-effective CRP are producers no longer qualifying for the program and taxpayers who may not feel that a CRP is worthwhile, but are forced to pay for a smaller program.

The program has its greatest chance for success if design, implementation, and control are shared at national and local levels. Substantial local control may befuddle national objectives. But, with local input, the program may be able to meet local as well as national conservation objectives and garner the support needed to continue.

Appendix A: Abbreviations and Acronyms

a.	acres	NCA	National Cattlemen's Association
AFBF	American Farm Bureau Federation	NCC	National Cotton Council
AFT	American Farmland Trust	NCGA	National Corn Growers Association
ARP	Acreage Reduction Program	NFU	National Farmers Union
ASA	American Soybean Association	NGFA	National Grain and Feed Association
bu	bushel	NGSP	National Grain Sorghum Producers
CBO	Congressional Budget Office	NPPC	National Pork Producers Council
CCP	Conservation Credit Program	NRCS	National Resource Conservation Service
CP	conservation practice	OMB	Office of Management and Budget
CRP	Conservation Reserve Program	PIK	Payment-in-Kind
DU	Ducks Unlimited	SWCS	Soil and Water Conservation Society
EBI	environmental benefit index	t	metric ton
ERS	Economic Research Service	TFI	The Fertilizer Institute
FACT Act	Food, Agriculture, Conservation and Trade Act	TNC	The Nature Conservancy
GNP	Gross National Product	USDA	U.S. Department of Agriculture
NACD	National Association of Conservation Districts	WMI	Wildlife Management Institute
NAS	National Audubon Society	WRP	Wetlands Reserve Program
NAWG	National Association of Wheat Growers	yr	year

Appendix B: Position Statements

American Farm Bureau Federation

In addition to favoring continuation of funding for the CRP at the current USDA baseline, the American Farm Bureau Federation (AFBF) also favors tax credits as one of the ways of achieving environmental goals. The AFBF has explored the option for a Conservation Credit Program (CCP) as a tool in conservation policy. They studied two programs in Wisconsin that have used property tax credits to encourage participation in voluntary soil erosion control practices. Within 2 yr, Pepin County, Wisconsin, the partial property tax credit resulted in the doubling of the number of farmers with conservation plans. Impacts of this participation include a reduction in erosion by 72%, increased participation in conservation practices (CPs) and reduction in administrative costs compared to other means of conservation.

In an interview in the summer of 1994 with Jim Porterfield (pers. com., 1994), the role of the CRP in a potential CCP was further explained. Based on the results of the pilot CCPs, the AFBF surveyed ranchers and farmers who were members of their Commodity and Natural Resource Advisory Committees in 1993–1994 concerning their attitudes towards a CCP and its relations to the CRP. The survey showed that the responding farmers and ranchers (77 in 30 states) favored “. . . by more than a 3 to 1 margin, combining a CCP with a CRP focused on truly erodible and environmentally sensitive land as opposed to extending existing CRP contracts at their current funding levels” (AFBF). While this is not official AFBF policy, it is an indication that farmers are interested in more effective, flexible incentives for voluntary conservation programs.

Enrollment. The AFBF holds no official position concerning the number of acres enrolled in the CRP. They do however, believe that enrollment should be limited to 25% of the county’s cropland in order to protect the economic stability of the local region. This 25% should be further limited to only highly erodible land which, if enrolled, could reduce soil erosion or would be retired for water quality programs or to enhance air quality.

Tools. The AFBF believes an EBI applied to CRP enrollments and re-enrollment should include criteria for wind erosion, water erosion, and water quality enhancement.

Targeting Options. The AFBF’s top priority for CRP land is to continue enrollment of land already under contract that is highly erodible.

Easements and Contracts. The AFBF supports the use of contracts. Under a contract, the farmer maintains the right to return the land to production upon program expiration.

Economic Land Use. The AFBF believes haying and grazing

should not be allowed on CRP acres. Although no specific options were suggested during the interview, the survey results showed that farmers were interested in an option to convert CRP land to perennial crops that could be used as a renewable energy source.

Control. Program guidelines and objectives should be established under local control with direction by farmer committees elected by farmers.

For further information contact: American Farm Bureau Federation, Public Policy Division, 225 Touhy Avenue, Park Ridge, IL 60068

American Farmland Trust

The American Farmland Trust (AFT) is a leader in the movement that promotes the transition of American farm practices to sustainable agriculture. This movement includes the attempt to slow the loss of strategic farmland while maintaining production and to protect social values such as open space and water quality. In general, the AFT strives to protect our natural resources. To do so, the AFT has been involved in the development and implementation of federal farm policy. A large part of this endeavor has been devoted to the pursuit of enlarged and focused conservation efforts. In an interview with Tim Warman (pers. com., 1994), director of federal policy, he explained how a revised CRP could help fulfill the needs of a sustainable agriculture.

Enrollment. The AFT believes that the environmental benefits can be achieved with a program that is smaller than the current CRP. Mr. Warman stated that 25 to 30% of the land currently enrolled in the CRP isn’t highly erodible. Half of the remaining land that is highly erodible could remain in production with good management practices, which minimize erosion. An environmental reserve program is only needed for the land which is left and similar land that was not enrolled the first time.

Targeting Tools. The AFT supports the use of an EBI to evaluate all lands that are bid into the program. However, it believes that the EBI established after the 1990 Farm Bill is not sufficient to address all major environmental concerns. The index should be revised to include wildlife habitat and endangered species criteria, as well as specific state or regional concerns.

Targeting Options. The AFT favors a program that includes multiple natural resource conservation objectives.

Easements and Contracts. Programs to protect natural resources by retiring land should be managed through the use of easements and other short- and medium-term agreements. Easements provide

a more cost-efficient means of maintaining long-term benefits than contracts. Conservation programs such as the Soil Bank and the CRP result in repeated payments on the same parcels of land without the assurance of permanent benefits. Farmland easement programs in such states as Pennsylvania, Maryland, and Massachusetts already have proven successful. Short-term contractual agreements may be preferable for resource restoration or supply management goals.

Economic Land Use Options. As long as the land use is deemed acceptable for the site, i.e., it does not violate any of the conservation objectives of the program, the AFT is in favor of the five options offered here. In particular, it favors options for alternative energy crops and suggests that there should be more cooperation between national energy and conservation programs.

Control. The AFT suggest that cooperation by coordinators at the national and local levels will lead to a successful conservation program.

For further information contact: American Farmland Trust, 1920 N St. NW, Suite 400, Washington, DC 20008

American Soybean Association

Soybean farmers and extension workers founded the American Soybean Association (ASA) in an effort to promote the crop and increase profit opportunities. After 75 yr, the organization continues these important efforts.

Krysta Harden (pers. com., 1995), Washington representative, explains the ASA's position towards the future of the CRP.

Enrollment. The ASA supports continuation and reentry into the CRP. The ASA believes that due to budgetary considerations, the enrollment level will be smaller and more targeted than in the current program.

Targeting Tools. The ASA holds no official policy towards targeting tools at this time.

Targeting Options. The CRP enrollment should be prioritized based on highly erodible land and water quality criteria. Wildlife benefits could provide added significance to the bid.

Easements and Contracts. The ASA prefers the use of contracts for participation in the program. The ASA does not favor use of permanent easements at this time.

Economic Land Use. Given the information currently available on economic land use options, the ASA would prefer to see no economic uses on CRP lands at this time. However, this position may be adjusted for certain activities in the future.

Control. The ASA favors a program developed under national guidelines but allowing for local level input to enhance the program's ability to achieve a set of desired goals.

For further information contact: American Soybean Association, 1000 Connecticut Ave. NW, Suite 1106, Washington DC 20036

Ducks Unlimited

The mission of Ducks Unlimited (DU) is to fulfill the annual life cycle needs of North American waterfowl by protecting, enhancing, restoring, and managing important wetlands and associated uplands. Continental waterfowl populations have declined by 30 to 60% since the 1970s. Loss of wetlands and nesting cover within the traditional breeding grounds of the prairie potholes has been the primary limiting factor of waterfowl populations. The CRP has established more than 8 million a. of grassland nesting cover in the three prairie pothole states of North and South Dakota and Montana. Nesting success has tripled on CRP lands, and an estimated 3 million ducks were produced on the CRP in these three states in 1994.

Ducks Unlimited has worked with other wildlife conservation organizations to document wildlife benefits of the CRP. The results of their efforts have been published in a report (Wildlife Legacy Partners, 1994) entitled *The Conservation Reserve Program: A Wildlife Conservation Legacy*. It identifies a broad range of grassland birds, including waterfowl that are rebuilding their populations as a result of the CRP. According to Eric W. Schenck (pers. com., 1994), manager of agricultural policy, reauthorization and extension of the CRP is DU's highest priority for the 1995 Farm Bill.

Enrollment. Conservation programs must exist on a large scale to produce measurable wildlife results. The CRP has benefitted wildlife populations largely because of its immense size, particularly within the Great Plains. Ducks Unlimited would like to see large acreage of the CRP in the northern Great Plains remain in grass cover suitable for nesting waterfowl and other wildlife.

Target Tools. Evaluation criteria should be set for all land bid into a new CRP or re-enrolled in the existing CRP. The EBI used in previous CRP enrollments did not adequately address wildlife. A revised Wildlife Benefits Index should be developed. Previously cropped wetlands and other unique habitats should be included in future CRP sign-ups along with highly erodible lands.

Targeting Options. Targeting priorities for soil and water conservation are not necessarily synonymous with those for wildlife. Ideally, CRP targeting should address multiple resource values. However, DU believes that in some cases wildlife may need to have separate and equal priority to other resource concerns.

Easements and Contracts. A balanced conservation program should include a mixture of easements and contracts. Permanent easements should be used in cases of high valued resources where landowners willingly agree to conserve land in perpetuity. Landowner acceptance and the relatively high upfront investment cost of easements limit their scope. Long-term contracts have proven to be acceptable to landowners and a cost-effective alternative for concerning large acreage of habitat such as the CRP has created.

Economic Land Use. A broad range of options could be offered to reduce the cost of the CRP provided they do not interfere with the objectives of the program. Waterfowl and other wildlife benefit the most from habitat that is relatively undisturbed. Allowance of economic activities that disturb permanent vegetation, e.g., grazing, once every 4 to 6 yr can benefit wildlife.

Control. Ducks Unlimited envisions a program designed on the national level to ensure that a broad range of environmental goals is addressed. However, input on the state level is needed to deter-

mine the most environmentally and economically efficient means of attaining these goals. Cooperation between national and local officials, and between the public and private sector is the key to the success of the program.

For further information contact: Ducks Unlimited, Inc., 1155 Connecticut Avenue NW, Suite 800, Washington, DC 20036

The Fertilizer Institute

The Fertilizer Institute (TFI) suggests that all supply control programs that idle cropland have detrimental effects regarding loss of world markets, trade opportunities, rural business, rural jobs, rural development, and rural infrastructure. In an interview with Everett Zillinger (pers. com., 1994), some specific examples of these negative impacts were highlighted.

On average, land idling programs have reduced the amount of cropland in production by about 30 million a./yr. As a consequence, agricultural receipts have fallen by \$23 billion.

Furthermore, rural communities have suffered higher levels of unemployment. In the 1980s, the declining farm sector (farm jobs) lost 337,000 jobs, or 13% of that sector. The rural manufacturing sector (which was a principle provider of new high paying agribusiness jobs) lost nearly 400,000 jobs between 1979 and 1986. Fertilizer alone has lost approximately one-third of its domestic industry, which was a partial reason for tight supplies and higher farm input prices in 1994. The TFI attributes these impacts directly to programs such as the Payment-in-Kind (PIK), the ARP, the 0-92, and the CRP.

Most farm economists realize that agriculture accounts for 18% of the U.S. Gross National Product (GNP). But what is rarely pointed out is that only 2% of that 18% is directly related to production farming activities. And only 1% of that 2% are farmers enrolled in federal farm programs. The other 17% are nonprogram producers and agribusinesses both upstream and downstream from the farm.

"So while billions of federal taxpayer dollars subsidize the 1% who are in supply control farms, it comes at the expense of the other 17% of farmers, livestock producers, rural agribusiness, food processors, and exporters who suffer proportionately from the lack of production," Zillinger said.

The TFI believes that the CRP as a soil conservation program is necessary. "There is highly erodible land in the CRP, which should not be in production and probably should never have been farmed in the first place," said Zillinger. "However, the USDA estimates that approximately 40% of the land currently enrolled in the CRP could return to production using minimum tillage and no till farming methods that would result in little or no environmental impact. This 40% should return to agricultural production."

Current supply control farm policies are viewed by many in the agricultural community as a production tax on farmers, ranchers, and rural areas. Gradually returning 38 million a. to production (from the CRP, the ARP, and the 0/92 programs) would create 225,000 jobs and add \$29 billion to GNP. This would translate into more jobs in rural America as farmers buy \$4 billion worth of inputs, (seed, fuel, machinery, etc.) to increase grain and soybean production by nearly 3 billion bu, or over 20%.

A CRP should be reserved for lands that are deemed environmentally sensitive. This evaluation should be made by the USDA, using an appropriate tool such as an EBI based on criteria relevant to highly erodible land, water quality, wildlife, and other prioritized environmental concerns. Farmers enrolled in the program should be given the option to participate in other economic land uses that

do not undermine the conservation efforts of the program. A program that meets these requirements would likely be small and therefore lead to little negative impact on the agricultural sector and the agriculturally dependent communities.

For further information contact: The Fertilizer Institute, 501 2nd Street NE, Washington, DC 20002

National Association of Conservation Districts

The National Association of Conservation Districts (NACD) represents 3,000 conservation districts nationwide that work on local, state, and federal programs. The NACD supports plans to consolidate conservation programs into a total resource management program, created and monitored by the USDA and the NACD. In an interview with Eugene Lamb (pers. com., 1994), associate director of programs and special projects, a CRP plan that fits into the total resource management plan was discussed.

Enrollment. The NACD would like to see the CRP maintained at its current acreage level. The composition of these acres may be changed. Truly highly erodible land should remain enrolled. Non-highly erodible land currently enrolled in the CRP should expire. When returning to production, this land should be subject to conservation compliance. Additional highly erodible acres could be enrolled to maintain a program of 36 million a.

Targeting Tools. The NACD suggests that a revised EBI may be the tool to target the lands for enrollment. However, the NACD did not contribute specific criteria to the EBI reformulation except that it must be compatible with the idea of total resource management.

Targeting Options. The CRP was created to control erosion and this goal should remain its priority. Targeting options should be ranked as follows: highly erodible land, water quality, wind, and wildlife. To keep the CRP focused on cropland erosion control, the wetlands issue may be better moved to the Wetlands Reserve Program (WRP).

Easements and Contracts. A survey conducted by the NACD found that farmers favor contracts over easements. The NACD supports this position. Although easements have fared well in the WRP, the same result is not guaranteed with the CRP. In many cases, land enrolled in the WRP is not suitable for any crop production. Ignoring environmental effects, most of the CRP land is still cultivatable.

Economic Land Use. To make the program more cost effective, the contracts may be extended at a lower rental rate. Farmers can be compensated for this loss in rental income through the allowance of limited alternative economic land use options on enrolled acres. Haying and grazing is a viable option, although there is potential for conflict with those who raise cattle. Recreational opportunities would most likely cause the least amount of conflict. The remaining options must be evaluated on a case by case basis.

Control. The NACD firmly believes that state leadership is important in the realization of any conservation goals. It recognizes the strife that may arise between environmentalists who set goals on a national level and state executioners who prefer to address local concerns.

For further information contact: National Association of Conservation Districts, 509 Capitol Court NE, Washington, DC 20002

National Association of Wheat Growers

The NAWG believes that the CRP has provided many environmental and economic benefits to the public and also has been important to wheat growers. A NAWG survey found that 95% of wheat growers enrolled in the CRP would re-enroll in the program should the option become available. Under certain conditions, the Wheat Growers favor an extension of the program.

In a letter to Representative Richard Durbin, Judy Olson, NAWG President, expressed a hope that Congress would consider "... cost containment and cost off-set options to enable continuation of the CRP. . . ." In an interview conducted in June 1994 with Margie Carriger (pers. com., 1994), vice president for public affairs, these conditions were further explained.

Enrollment. The program should be extended at its current size or larger in order to maintain benefits. Large enrollment of environmentally sensitive lands would provide many environmental benefits already enjoyed, such as improved wildlife habitat and reduced erosion. Large enrollment of wheat acres (12 to 15% of all wheat acres) greatly reduces surplus wheat production and helps to stabilize prices received by wheat farmers.

Targeting Tools. Targeting is key to an effective program. Tools such as an EBI could help identify the most appropriate acreage. However, the current EBI is not sufficient. This index places too great an emphasis on water quality and not enough on other environmental concerns such as wildlife and erodibility.

Targeting Options. Eligibility should emphasize highly erodible land and wildlife enhancement, while not excluding other objectives. These are the most important concerns of wheat growers.

Easements and Contracts. Wheat growers favor continuation of the program under contract form. Long-term easements, rather than permanent, may be offered as an option, especially when the land in question is environmentally sensitive land (such as wetlands) on which conservation compliance can be difficult or impossible to attain.

Economic Land Use Options. The NAWG believes that alternative economic incentives are necessary to keep wheat growers from returning to production. These options should be expanded under contract extension. Under appropriate conditions, all five options could be considered. For example, haying and grazing could be an option for farmers in certain regions. Other economic land uses could be explored in other regions.

Control. To address regional conservation objectives, program responsibilities should be shared by local and national administrators. Only through cooperation can the program be run effectively.

For further information contact: National Association for Wheat Growers, 415 2nd Street NE, Suite 300, Washington, DC 20002

National Audubon Society

The National Audubon Society (NAS) is aligned with other environmental groups who share a concern for conservation funding in the upcoming Farm Bill. The NAS currently is conducting a Grasslands Nesting Birds and Waterfowl study in the Great Plains Mississippi Watershed region. Preliminary results have shown that conservation efforts such as the CRP are very beneficial to wildlife.

In an interview, Maureen Hinkle (pers. com., 1994), director of the agricultural program, explained the NAS's position on the role of the CRP in conservation policy for the future.

Enrollment. The NAS believes that conservation base is important. The \$1.8 billion/yr funding for the CRP must be maintained for future conservation efforts. The NAS does not hold a position on the number of acres that should be placed in a conservation program. They state that all acres participating in the bid process should be evaluated in terms of effectiveness and public benefit.

Targeting Tools. As already suggested, the NAS believes that all bids should be evaluated for proximity to premium wildlife habitat as well as against a productivity and environmental benefits index. The current EBI established in the 1990 Farm Bill needs to include wildlife habitat and endangered species issues. Revisions of the EBI, which include wildlife criteria, would create a more balanced evaluation tool.

Targeting Options. The NAS believes that the conservation program should include multiple objectives of erosion control, water quality improvement, and wildlife concerns. The ranking of these issues should place wildlife and nonpoint source pollution objectives as the primary focus of the program.

Easements and Contracts. The NAS believes that a mixture of policy instruments is appropriate in a conservation program. Individual circumstances will dictate whether easements or contracts are appropriate. Evaluation of the options will be based upon a cost-benefit analysis that determines the cost- efficiency or "benefits for the bucks" of the submitted land.

Economic Land Use. The NAS does not object to economic land use options provided that they occur under good management practices. Rotations in particular must be examined with care in order to ensure that rotation periods are sufficient to capture all potential benefits.

Control. The NAS would like to see control shared at the national and local levels. In the past, decision making at the local level has been dominated by county committees. Without diversity in the occupation, sex, ethnic origin, and age of decision makers, the program tends to remain biased.

For further information, contact: National Audubon Society, National Capitol Office, 645 Pennsylvania Ave. SE, Washington, DC 20003

National Cattlemen's Association

The National Cattlemen's Association (NCA) is the national spokesperson and issues manager for all segments of the U.S. beef cattle industry—including cattle breeders, producers, and feeders. It is the grassroots policy development organization for the beef

business. The NCA represents the beef cattle industry to the legislative and administrative branches of the federal government. It interprets beef production, including the safety of the product, and the use of natural resources and care of animals and beef economic to the public and opinion influencers. It also interprets economic, social, and political developments to the industry and its members, to aid them in their own planning and management (adapted from National Cattlemen's Association, 1994a).

The NCA has policy that dovetails into many of the proposed objectives to deal with the CRP land once the contracts expire. The NCA's major concern regarding the future of the CRP revolves around the use of incentives to encourage cattle production on former CRP land (National Cattlemen's Association, 1994b).

In an interview with Chandler Keys (pers. com., 1994), some of the aspects of that policy were discussed.

Enrollment. The NCA holds no position regarding the number of acres enrolled in the CRP.

Targeting Options. The NCA believes that the CRP may be used to address a wide array of environmental concerns including erosion reduction, water quality, and wildlife habitat improvements.

Targeting Tools. To date, the NCA holds no official position regarding the tools used to target land for enrollment.

Easements and Contracts. The NCA is in favor of the contract option. Under contract, the farmer retains the right to return land to production once the program has expired.

Economic Land Use. The NCA voices concern over the use of incentives to encourage cattle production on CRP lands while a payment is being made. However, those who raise cattle do not object if farmers decide to enter into haying and grazing operations once the contracts have expired. The cattle producers have no objections to other economic land use options such as biomass production, tree production, rotations, and recreational uses as long as they do not interfere with the conservation objectives of the program. The NCA also will approve government payments that would provide for fencing, water improvement, or other livestock.

Control. A program [is recommended] that is developed under national guidelines and implemented on a flexible basis through the Natural Resource Conservation Service (NRCS) with input from other state and local entities where appropriate.

For further information contact: National Cattlemen's Association, 1301 Penn Ave NW, Suite 300, Washington, DC 20004

National Cotton Council

The National Cotton Council (NCC) believes that the CRP has provided many environmental and economic benefits to the public and should be continued.

In a letter to Secretary Espy, the NCC joined voices with four other associations to request a continuation of the CRP. Paulette Zukresky (pers. com., 1994), government relations representative for the NCC, states that the NCC would favor a renewal of the CRP under the following conditions.

Enrollment. The program should be extended at its current size or larger to maintain benefits. Large enrollment of environmen-

tally sensitive lands would provide many environmental benefits already enjoyed, such as improved wildlife habitat and reduced erosion.

Targeting Tools. The NCC acknowledges that targeting is key to an effective program. However, to date the NCC has not released an official position concerning the choice or implementation of a particular targeting tool.

Targeting Options. The NCC believes that it is important for the CRP to strive for a number of important objectives such as soil erosion reduction, wildlife habitat enhancement, improved water quality, and soil productivity. Although the NCC has offered no preference ordering for these options, they suggest that all of these criteria should be taken into account in designing the CRP for the 1995 Farm Bill.

Easements and Contracts. The NCC favors continuation of the program under contract form. Easements may be offered as an option, especially when the land in question is environmentally sensitive land (such as wetlands) on which conservation compliance can be difficult or impossible to attain.

Economic Land Use Options. The NCC has offered no official position concerning economic land use options on program lands.

Control. Program responsibilities should be shared by local and national administrators. Only through cooperation can the program be run effectively.

For further information contact: National Cotton Council, 1110 Vermont Avenue NW, Suite 430, Washington, DC 20005

National Corn Growers Association

The National Corn Growers Association (NCGA) supports farm legislation that sustains the long-term economic viability of agricultural production. These initiatives include opportunities to improve profitability of production, provide income support, and enhance demand for commodities and value added products.

The NCGA also supports farm legislation incentives that conserve our natural resource base through research, education, and voluntary incentive based environmental and conservation programs.

As with each farm bill, the agriculture committees face the difficult task of addressing the many needs of the agricultural sector. The 1995 Farm Bill debate will be further complicated by mandatory budget cuts. In a letter to Secretary Espy, the NCGA along with four grain and oilseed associations proposed a revision of the CRP that could meet the environmental and economic concerns of the agricultural sector in a manner perceived to be cost effective. Dave Staywick (pers. com., 1994), assistant vice president of the NCGA, explains this position in greater detail.

Enrollment. The CRP enrollment should concentrate on the most environmentally sensitive land such as field borders, water ways, and other areas needed for conservation compliance. The land returned to crop production should be made subject to compliance.

Targeting Tool. If there is an increased dependence on water quality, the EBI would have to be revised and reweighted to reflect that.

Targeting Options. The NCGA believes that the CRP should target the most sensitive lands for eligibility. While the CRP may address multiple environmental concerns, the priority should be placed on water quality improvements.

Economic Land Use. The NCGA supports study of options for other economic land uses on enrolled acres, provided they are compatible with the conservation objectives of the program.

Easements and Contracts. The program should continue in contract form. Contracts should be binding for 10 yr with an option for renewal.

Control. The NCGA supports participation by national and local directors in the development and implementation of conservation programs. Moreover, they urge the USDA secretary to allow individual states to start on conservation measures prior to CRP contract expiration.

For further information contact: National Corn Growers Association, 201 Massachusetts Ave. NE, Suite C-4, Washington, DC 20002

National Farmers Union

The National Farmers Union (NFU) has organized an internal working group on the CRP. They believe that the CRP is the most widely accepted farm program. It has stimulated economic activity in many areas due to increased hunting and other recreational activities. It also has provided a wide range of environmental benefits such as a large reduction in erosion. Although not the primary purpose of the program, the CRP also has provided stable income for those farmers who would have otherwise faced bankruptcy. These are benefits that the NFU believes should be sustained. In an interview with Allen Richard (pers. com., 1994), NFU legislative representative, the official NFU position concerning the future of the CRP was explained in detail.

Enrollment. Given federal budgetary constraints, the NFU would like to see as large a CRP as possible. Ideally, the 40 million a. enrollment goal created in the 1985 version of the program should be repeated in 1995.

Targeting Tools. An environmental benefits index that accounts for water quality, erodibility, wildlife, and air quality is needed. The current EBI does not account for all those factors.

Targeting Options. Although the pursuit of water quality improvements, highly erodible land enrollment, and wildlife habitat improvements are worthwhile, air quality improvements also are important. Specifically, improvements due to grass cover in areas susceptible to wind erosion should be considered.

Easements and Contracts. Contracts, renewed for 10 to 15 yr, are preferred to easements for two reasons. First, increasing populations may necessitate a proportion of CRP land to come back into production under good management practices and conservation compliance. Research suggests that production technology that is

conservation friendly should be available in the future. This would eliminate the need to retire cropland for conservation purposes. Second, the NFU states that insect and weed problems often increase on lands under easement. These problems may spread to neighboring lands, creating a negative impact on local production and farm income levels. Third, land in easements may result in a loss of a tax base.

Economic Land Use. Biomass production is the most favored option. Individual situations may deem other options appropriate. Other options must be reviewed on a case-by-case basis. Haying and grazing must be designed to minimize distortions in the market, such as excess production. Recreation activities, such as hunting, are acceptable given a certain level of protection to the farmer, e.g., the right to post his area off limits to the hunters. Sufficient information pertaining to plausible rotation options was unavailable at the time of this interview; therefore no official position was offered.

Control. National level regulations coupled with local level input will create a program that allows flexibility in the methods and tools used to achieve a set of desired goals.

For further information contact: National Farmers Union, 202 West 600 Maryland Avenue, SW, Washington, DC 20024

National Grain and Feed Association

The National Grain and Feed Association (NGFA) reports that world production, consumption, and trade in grains and oilseeds have displayed an upward trend for more than 20 yr. While the United States participated in this growth during the early 1970s, its relative share in the world market has been declining since the early 1980s. This loss in market share has been linked to policymakers' preferences for land idling programs for more than a decade. By 1991, 65.5 million a. had been idled under programs such as the PIK, the Acreage Reduction, and the Conservation Reserve. In most cases, this policy tool has been applied in an effort to raise prices. As a result, not only have prices maintained their downward trend, but U.S. exports and world market shares have dropped sharply.

The NGFA therefore is wary of the use of land idling programs in U.S. agricultural policy. They believe the post-1980 U.S. grains and oilseed market trends provide ample evidence of the potential failure of such policy tools.

They do acknowledge, however, that in certain cases land idling may be appropriate. For example, situations may exist where the benefits of retiring environmentally sensitive land would outweigh the cost. But before the decision to idle land is made, a broad spectrum of benefits and costs must be analyzed.

Kendell Keith (pers. com., 1994), president of NGFA, has stated that the organization holds no official position on the CRP. He does emphasize the need for caution when exercising idling options. More information regarding the economic impacts of land idling can be found in the recent publication *Large Scale Land Idling Has Retarded Growth of U.S. Agriculture* (Abel et al., 1994). This report is available from the national headquarters in Washington.

For further information contact: National Grain and Feed Association, 1201 New York Ave. NW., Suite 830, Washington, DC 20005-3917

National Grain Sorghum Producers

The National Grain Sorghum Producers (NGSP) was established in 1955 by grain sorghum farmers. The objective of this association is to increase the profitability of grain sorghum production. This objective requires three types of activities. First, the NGSP is involved in legislative representation including farm bill legislation, environmental issues and grain quality standards. Second, they conduct research and education through producer meetings, a yield and management contest, leadership programs, and organizational publications. Third, they participate in market development through grain export policy, foreign team visits, foreign and domestic utilization seminars, and work with the U.S. Feed Grains Council.

Mr. Jack Eberspacher (pers. com., 1995), chief executive officer of the NGSP, explains the NGSP's position on the future of the CRP.

Enrollment. The NGSP would like to see the current enrollment levels in the CRP continued.

Targeting Tools. The NGSP holds no official position on the targeting tools at this time.

Targeting Options. The NGSP believes that the CRP can be used to achieve multiple objectives. Specifically, they believe wind and water erosion reduction should be the priorities.

Easements and Contracts. The CRP enrollment should be continued on a contract basis where participants may receive annual rental payments.

Economic Land Use. The NGSP believes that recreational activities and rotations may provide means to make the CRP more cost-effective while maintaining a minimum level of income to participants. The appropriateness of these two economic land uses must be determined on a contract-by-contract basis.

Control. The NGSP believes that the inclusion of local input may provide the flexibility to address a desired set of state and local goals that do not conflict with national objectives. A National Appeals Division is important to maintain objectivity over personal agenda.

For further information contact: National Grain Sorghum Producers, P.O. Box 530, Abernathy, TX 79311

National Pork Producers Council

The National Pork Producers Council (NPPC) is interested in a program whose design is broad based, encompassing all relevant functions, but primarily oriented towards water quality improvements for crops and livestock production. The Clean Water Act already has affected pork producers and has promoted best management practices. In an interview in June 1994, Richard Pasco (pers. com., 1994) explained NPPC's position on the future of the CRP.

Enrollment. Pork producers believe the focus of a modified CRP rests on water quality issues in addition to soil erosion and wildlife considerations. Studies have shown that significant water quality benefits can be achieved through enrollment of relatively small land

units, such as filter strips and buffer zones, instead of full field units. If acres in the current CRP are bid at fair market value, the number of acres enrolled in the CRP would not have to be substantially reduced, while at the same time, freeing up payments for filter strips and other environmental measures.

Targeting Tools. To date, the Pork Producers have released no position regarding targeting tools.

Targeting Options. Water quality is the primary focus. Other objectives are more secondary but should be addressed in the program.

Easements and Contracts. Pork producers have no preference. Various options should be made available to individual producers to make their own determinations on what obligation best fits their unique situation.

Economic Land Use. Pork producers believe that application of manure should be allowed on CRP acres under conditions approved by the local NRCS.

Control. Pork producers recommend a program that is developed under national guidelines and implemented on a flexible basis through the NRCS, with input from other state and local entities where appropriate.

For further information contact: National Pork Producers Council, 122 C St. NW, Suite 875, Washington, DC 20001

The Nature Conservancy

For over 40 yr, The Nature Conservancy (TNC) has worked to preserve plants, animals, and natural communities, which represent the diversity of life on earth. It has done so by protecting the land and water that these natural communities need to survive. Consequently, TNC supports voluntary agricultural programs whose objective is the conservation of our natural resources.

In June 1994, the Minnesota Chapter of TNC joined with representatives from Minnesota environmental and agricultural associations to express their support for the renewal of the CRP. Nelson French, Minnesota state director of The Nature Conservancy stated, "We commend our federal representatives who already support reauthorization of the CRP and encourage the rest to join us in this important effort."

The support for the CRP extends from the state offices to TNC headquarters in Arlington, Virginia. In an interview, Diane Vosick (pers. com., 1994), policy representative for agriculture, suggested improvements for a renewed CRP.

Enrollment. The Nature Conservancy holds no official position concerning the size of the CRP.

Targeting Tools. The Nature Conservancy is in favor of a tool that evaluates potential program land against environmental criteria. While the EBI implemented after the 1990 Farm Bill represents a good "first attempt," revisions are needed to account for habitat for rare plants and wildlife.

Targeting Options. Due to the nature of their mission, TNC supports targeting enrollments for the enhancement of habitat for rare plants and animals.

Easements and Contracts. Conservation programs should utilize a mixture of policy tools including both 15-yr contracts and permanent easements. Highly environmentally sensitive lands may be targeted for easements. Lands on which environmental improvements may be made in the short run are likely better suited for contracts. The decision to use easements or contracts should be evaluated on a case-by-case basis.

Economic Land Use. The Nature Conservancy holds no official position on economic land uses.

Control. Minimum criteria for enrollment should be established nationally. However, states should be authorized to target the program to state resource problems. This can be accomplished through the state technical committees (authorized in the 1990 Farm Bill). The states should work in cooperation with local entities to implement and target locally.

For further information contact: The Nature Conservancy, 1815 North Lynn Street, Arlington, VA 22209

The Soil and Water Conservation Society

The SWCS believes that sound conservation policy must be focused on the health of the total ecosystem. Soil, water, air, human, plant, and animal resources all are included with the concern for the needs of people balanced with the sustainability of the ecosystem. This conservation policy should emphasize wise utilization, maintenance, and enhancement of natural resources. The goal should be development of a civilization that does not destroy nature. Conservation rather than preservation should be the central theme. Douglas Kleine (pers. com., 1995), executive vice president, incorporates these principles in the following position towards the future of the CRP.

Enrollment. Permanent vegetative cover should be maintained on most erodible land now in the program. Selected cropland acres that perform critical environmental functions should be given high priority for continued enrollment.

Targeting Tools. The SWCS would prefer to see a revised version of the EBI used to evaluate land for enrollment in the CRP. Criteria for air quality and wildlife habitat would improve the EBI's ability to address the multiple conservation goals of the CRP.

Targeting Options. The SWCS would like to see the CRP become first and foremost a conservation program and not an agricultural commodity supply management program. The CRP, however, may maintain a number of conservation goals. Lands chosen for enrollment may be selected based on highly erodible land, water quality, wildlife, and wind erosion reduction goals.

Easements and Contracts. The SWCS perceives a mixture of short-term and long-term tools to provide conservation protection. Some land may be maintained under contract. However, given the declining need for additional cropland beyond what is now available, it appears reasonable to consider using long-term or permanent easements to protect specific parcels of land identified as critical to solving major environmental problems.

Economic Land Use. To make the program more cost-effective, the SWCS suggests basing acreage and payment adjustments on a more accurate assessment of the land's productive capability and environmental values. Some economic use of less environmentally sensitive land now enrolled in the CRP should be allowed in return for reduced rental payments. These land uses include limited haying and grazing, biomass production, and rotations as long as they do not interfere with habitat rejuvenation objectives. Trees and recreational opportunities also offer means to create economic value and lower the cost of the program.

Control. Long-term protection of and extension of the CRP's environmental benefits are not the responsibility of the federal government alone. State and local governments and private organizations may actively participate in protecting and extending these benefits.

For more information, contact: Soil and Water Conservation Society, 7515 Northeast Ankeny Road, Ankeny, IA 50021-9764.

Wildlife Management Institute

The Wildlife Management Institute (WMI), in cooperation with 18 state, federal, and nongovernmental agencies, conducted a study known as the Legacy Project. This project examined many types of wildlife benefits attributable to the CRP. Results of this study have found that the CRP is the best program for wildlife since the Soil Bank. The WMI believes that the focus of the CRP needs to be clearly stated in the 1995 Farm Bill. In a June 1994 interview with Don McKenzie (pers. com., 1994), the attention to wildlife concerns in a revised version of the CRP was emphasized.

Enrollment. To maintain wildlife benefits, large numbers of acres must be retired. The WMI would like to see the CRP maintained at a 30 to 40 million a. minimum, maintaining the current gross geographical distribution of the acres. Within regions (such as the Prairie Potholes), the microdistribution could be vastly improved. Should budget constraints greatly reduce the number of allowable program acres, the WMI would like to see at least several million a. retained in the northern Great Plains for wildlife enhancement purposes.

Targeting Tools. It is important that specific environmental criteria be applied to all acres submitted for enrollment. The current EBI lacks the criteria relevant to wildlife enhancement. Revisions of the EBI which include wildlife concerns may provide an appropriate tool for targeting the most environmentally sensitive land.

Options. The fulfillment of water quality and wildlife benefits should be the main conservation goals of the CRP. Much of the wildlife enhancement efforts should be targeted toward the Great Plains for two reasons. First, the magnitude of threat to the ecosystem and species there is larger than in other regions of the nation. Second, there are more grassland species in the Great Plains than in other regions. Therefore, targeting the Great Plains could result in a large level of benefits affecting a wide range of species if large blocks of grassland (rather than small patches or strips) were restored.

Easements and Contracts. The WMI believes that multiyear set-asides would provide large areas of undisturbed vegetation in both blocks and strips that could be of suitable quality for wildlife. The designated set-aside acres would be the most marginal cropland on

each participating farm and would include such environmentally valuable land as cropped wetlands and very erodible sites. However, sole reliance on multiyear set-asides has two fundamental shortcomings. First the amount of set-aside required by the USDA changes every year, occasionally dropping to zero. Such fluctuations in acreage requirements create a disincentive for producers wishing to invest in long-term protective vegetative cover. Second, acres included in a multiyear set-aside would be distributed more evenly across the country, and wildlife population gains in the Great Plains would be lost (adapted from Wildlife Legacy Partnershare, 1994).

Economic Land Use. The WMI stresses that management of CRP lands is critical. Under good management conditions, as well as other option specific restrictions, many options may be compatible. For example, biomass and tree production generally promote monocultures that are not conducive to wildlife diversity. Should tree pro-

duction include a variety of species, it may be acceptable in certain areas. Rotation options may be possible in eastern areas. However, because grass is slower to root and cover in arid areas, the time between rotations may not be sufficient to capture the possible benefits of cover.

Control. Program control should be shared by both national and local directors. Broad program design and goals at the national level may be necessary. However, local resource experts, in addition to being held accountable to the national guidelines, should be given more freedom to address the issues in their area. They should be responsible for the lesser level of targeting, which should include criteria such as erodibility of land and wetlands existence.

Further information contact: Wildlife Management Institute, 1101 14th Street NW, Suite 801, Washington, DC 20005

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