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## LOCAL SOCIOECONOMIC IMPACTS OF THE CONSERVATION RESERVE PROGRAM

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### INTRODUCTION

Long-term retirement of cropland has been used as a policy tool for nearly 50 years in the United States to achieve both agricultural supply control and conservation objectives. The Conservation Reserve Program created in the 1985 Food Security Act (Public Law 99-198) was designed to protect highly erodible lands, as well as to augment supply control efforts. By early 1989, the program had enrolled about 30.8 million acres nationwide, and North Dakota ranked second among the states in number of acres enrolled, with 2.5 million acres, or 8.9 percent of the state's total cropland (Mortensen et al. 1990). In 1996 the Federal Government revised the program (Federal Agricultural Improvement and Reform Act of 1996) modifying the enrollment criteria to place more emphasis on environmental sensitivity and less on erodibility (Batie et al. 1997). Even with the changes, program participation in North Dakota remains strong. By 1997, North Dakota landowners had 3.4 million acres enrolled in the CRP. Since then the state's CRP acreage has fluctuated between 3.1 and 3.3 million acres as some contracts expire and other land is enrolled (Farm Service Agency, 1996 - 2000).

While long-term land retirement programs are popular with participating landowners and offer a combination of supply control and environmental benefits, their economic impacts in areas with high participation levels have long been a concern. Reductions in production agriculture inputs such as fuel, fertilizer, chemicals, farm labor, and machinery, coupled with volume reductions in crops marketed, can have negative effects on farm supply and service sector businesses. In addition, literature dealing with the effects of the Soil Bank

program suggest that participation in these programs could be associated with more farm operators securing off-farm employment as well as speeding farm consolidation and rural-to-urban migration (Taylor et al. 1961).

In contrast to potential negative effects from initial reductions in agricultural activities, the program provides a number of apparent benefits in the Northern Great Plains region. Most notably, enhanced wildlife habitat has contributed to substantial growth in upland game bird and waterfowl populations. Rejuvenated wildlife populations have led to growth in both resident and nonresident hunting and to substantial subsequent recreation-related expenditures in rural areas (Lewis et al. 1998). In addition to recreation benefits, the program has helped to stabilize the revenue stream of participating landowners during a period when the region's farmers and landowners have experienced both adverse weather and market conditions.

### OBJECTIVE

The purpose of this report is to assess the economic, demographic, and public service effects of the Conservation Reserve Program in North Dakota. Both the effects of cropland retirement and the effects of expanded recreational and related activities that may result from alternative uses of this land are examined.

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## METHODS/PROCEDURES

Sixteen counties, representative of various agricultural and natural resource characteristics, with relatively high CRP participation were selected and grouped into six study areas (Figure 1). The project was further divided into three distinct components: (1) personal interviews with community leaders, (2) a CRP contract holder survey, and (3) a community leader survey. The interviews were an attempt to gain an understanding of recent socioeconomic changes in the area (population trends, economic shifts), the effects of the CRP on various aspects of the community, and the leaders' overall evaluation of those effects. Individuals interviewed were identified based on their roles as elected or appointed governmental officials (e.g., mayor, county commissioner, economic development director), their roles in business (elevator and implement managers, bankers, small business operators), and their roles in the community (county weed board members, newspaper editors, clergy, county extension agents, school administrators).

In addition to the personal interviews, the leaders were also asked to fill out a written questionnaire. Ninety-two individuals participated in the leadership interviews, and a questionnaire was left with each individual. Fifty-seven local leaders completed and returned their questionnaire. Because the survey was not based on a random sample of local leaders, the results are used for relative comparisons only.

The survey of CRP contract holders consisted of a questionnaire mailed to a random sample of 3,150 program participants in February of 2001. One follow-up mailing resulted in 1,018 usable questionnaires for a response rate of 32.3 percent. The questionnaire addressed a number of topics, including (1) CRP land characteristics, (2) effects of the CRP on area agriculture, agribusiness, and the respondent's farming operation (if applicable), (3) CRP effects on recreation, (4) respondent's attitudes toward CRP, and (5) respondent characteristics. Because most of the contract holders surveyed were also landowners, the terms contract holder and landowner will be used interchangeably.

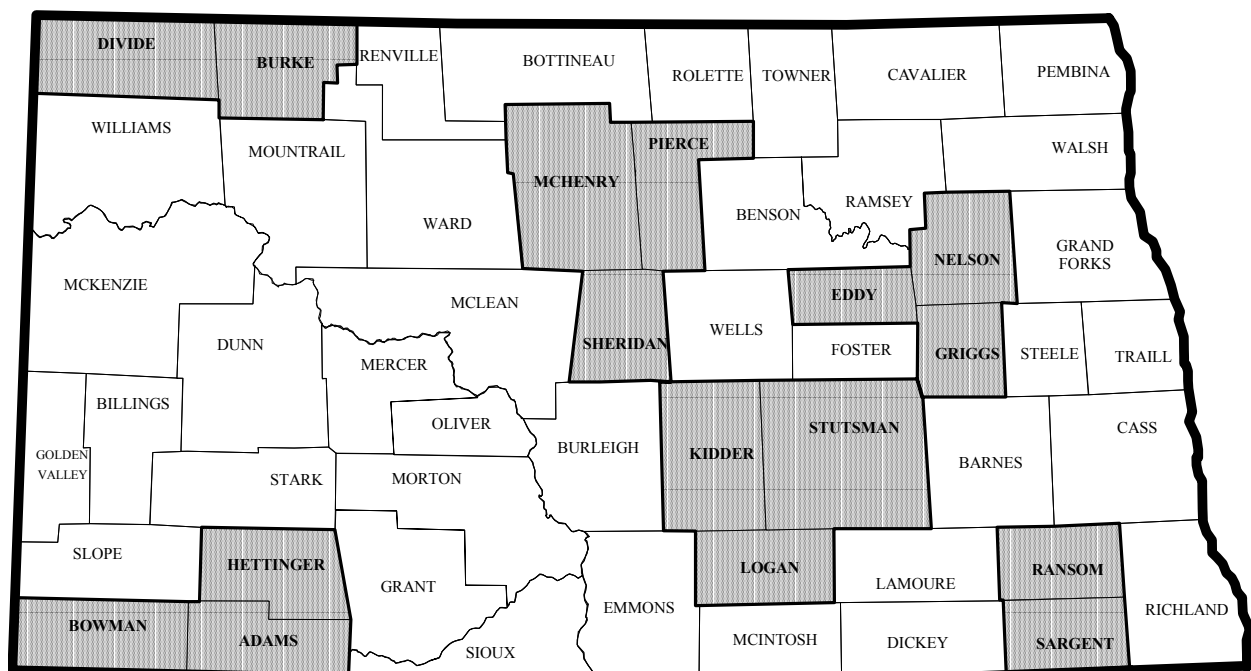


Figure 1. Six Study Areas

## RESULTS

### Summary of Interviews with Agricultural and Community Leaders

#### *Recent Socioeconomic Trends*

Leaders in all study groups identified the long-term trend toward farm consolidation, declining populations, and depressed commodity markets as major issues affecting their community. The pattern of fewer and larger farms was prominent in each area and has led to a substantially greater proportion of farmland being controlled by a relatively small number of operators. Farm consolidation was viewed as a catalyst for out-migration and depopulation, further exerting negative pressure on Main Street businesses already subject to growing competition from larger communities. In addition to very large operations, some leaders felt that a second distinct group of farms is emerging: smaller, part-time operations supported by at least one off-farm job (i.e., either the operator or spouse, or both, work off the farm).

Leaders from all study areas also voiced concerns about the current market conditions for most commodities. Depressed prices for most major farm commodities, coupled with unfavorable weather in some areas, have made farmers more reliant on government programs and crop insurance. Leaders further stated the unfavorable economic situation has deterred many young people from starting farming operations in recent years. The general pattern of farm consolidation coupled with depressed commodity prices and unfavorable weather conditions has impacted not only producers but also the local farm supply and service sector. As a result, the farm supply and service sector has been forced to reorganize.

On a positive note, some leaders reported increased recreational activity, especially hunting, in their areas. In recent years, wildlife populations have increased, attracting both residents and non-residents in pursuit of hunting opportunities. Leaders perceived this to be very positive for certain local businesses, specifically motels, cafes, gas stations, and grocery stores. In some areas, leaders reported that guide services, outfitters, and bed and breakfast operations are a recent and growing sector of the local economy.

### *Major Effects of the Conservation Reserve Program*

Most leaders identified both positive and negative effects of the CRP. The positive aspects that were most frequently mentioned were:

- ❖ *Income stability for participating landowners.* The guaranteed income in some cases improved farm viability and in other cases was used as a transition to retirement for older farmers.
- ❖ *Environmental benefits.* Thriving wildlife populations have in turn facilitated expanded recreation opportunities, particularly hunting. The influx of individuals from outside the area pursuing hunting opportunities had been very positive for select local businesses, particularly motels, restaurants, gas stations, and hunting related services. While increased hunting activity has helped some sectors of the local economy, some leaders reported that same hunting activity has raised complaints that it is more difficult for residents to gain access to land for hunting.
- ❖ *Emergency haying and/or grazing.* While leaders agreed that emergency haying and/or grazing was very helpful to livestock producers, possibly enabling some to retain their herds during periods of drought or flooding, some leaders felt that opening CRP land for haying depresses prices, putting individuals that sell hay at a disadvantage.

Negative aspects most often identified by leaders included:

- ❖ *Contraction of the farm supply and service sector.* Contractions in the farm supply and service sector were attributed to reduced demand for farm inputs (seed, fuel, fertilizer, chemicals, crop insurance) as a result of land retirement. Further, a smaller crop to market was reported to strain local elevators. The effects were in some cases exacerbated by concentrations of CRP acreage in certain localities (i.e., areas with high percentage of highly erodible land within a single county or service area). Impacts were reported to be particularly severe in smaller towns where few other businesses remain and farm supply firms

and elevators are typically among the communities' major employers, making losses especially apparent.

- ❖ *CRP contributed to the decline of rural populations.* Local leaders reported that some program participants have used the program to transition to retirement or to another career, after which they would leave the area and take their CRP income with them. Further, many leaders felt that the program has made it more difficult for young people to assemble enough land for an economic farming unit, or for an established operator to find land to augment an existing unit, further exacerbating depopulation trends.
- ❖ *CRP tracts pose noxious weed problems.* Leaders indicated that absentee CRP landowners were often criticized for not being aware of developing weed problems until complaints were registered with the County Weed Board. Leaders reported many local landowners are concerned that infested CRP tracts will serve as a seedbed infesting adjacent land.

### ***Other Effects of the CRP***

- ❖ *Public access to land for hunting.* Two distinct philosophies regarding hunting access emerged. Because the federal government is renting the land enrolled in the CRP, some leaders believe CRP land should be available to the public for recreational activities. Other leaders point out that the standard CRP contract has no provisions regarding public access.
- ❖ *Enrollment criteria.* Several leaders expressed concern that wildlife and some environmental benefits were given too much consideration in setting program priorities and enrollment criteria. These respondents generally believed that the CRP's initial priority of retiring highly erodible land should have been maintained and that the new enrollment criteria with greater emphasis on some environmental issues (water quality, wildlife habitat, etc.) were permitting too much productive farmland to be enrolled.

### ***Leaders' Overall Evaluation of CRP***

Across the six study areas, about 34 percent of the respondents indicated that the overall effect of the CRP was positive, while 43 percent believed the effect was negative. The remainder (23%) felt that the effects were quite mixed and did not wish to rate them as either positive or negative. In four of the six study areas, positive evaluations outnumbered negative ones.

The leaders who felt the effect of the CRP had been negative generally cited the program's impact on the farm supply and service sector and its role in farm consolidation and out-migration. These leaders often stated that the program was enrolling too much productive farmland and bidding up rental rates. They felt that the change in enrollment criteria that placed more emphasis on environmental benefits (e.g., water quality) rather than focusing only highly erodible land for enrollment was a mistake.

Leaders who viewed the program positively, believe that the changes in farm numbers and the local population decline would have occurred regardless of the program and that the CRP was simply part of the transition. These leaders often stated that the CRP helped many farmers by giving them a return on their less productive land, some of which should never have been cultivated in the first place. For others, it offered a graceful transition to retirement or another occupation. They also believe the CRP has helped make farming in their area more sustainable, both economically and environmentally. Leaders who view the CRP positively almost universally cited the program's environmental and wildlife/recreational benefits. They also believe that hunting and other wildlife associated recreation provides a basis for local economic growth.

### ***Suggested Changes to Improve the CRP***

Suggestions for program improvement generally fell into the following categories:

- ❖ *Measures to target marginal (erodible) land to avoid enrolling productive land.* Many leaders felt that the program's major shortcomings at present stem from the departure from the program's initial focus on highly erodible

lands. A related recommendation to prevent productive land from being enrolled was to ensure that the CRP contract rates do not exceed local cash rents (although it was generally conceded that current rates are more in line with local cash rents than was the case with the initial contracts).

- ❖ *Steps to foster wildlife and recreational benefits and to increase recreational access.* Several leaders suggested that landowners be offered incentives (which could take the form of additional payments or additional points for measuring program eligibility) to allow public access and/or incorporate tree plantings and/or food plots on their CRP tracts.
- ❖ *Allow haying/grazing on regular intervals.* Some leaders suggested that periodic haying (or grazing) every third, fourth, or fifth year would invigorate the stand and help to control fire hazards.
- ❖ *Improved weed control.* CRP contracts include an annual payment to cover the costs of maintaining cover, but some leaders reported that some landowners seem to regard this merely as an addition to their rental payment. Putting the maintenance payment in escrow for weed control and removing the legumes from the cover mixture to expand weed control options were suggested to improve weed control on CRP land.
- ❖ *Changes in enrollment procedures.* Some leaders felt it should be easier to enroll land in the CRP and land already enrolled should automatically qualify for re-enrollment. Others felt that all landowners should be entitled to enroll a portion of their land into the CRP. Some suggested a special contract for permanent retirement of especially fragile cropland, while others, albeit a small minority, would like to see the number of acres of land enrolled in the CRP in their area reduced or even eliminated.

## Summary of Landowner Survey

### *Conservation Reserve Program Acreage*

Average CRP enrollment by survey respondents in North Dakota was 283 acres. Non-resident landowners enrolled fewer acres on average than residents (235 acres); however, most respondents enrolled relatively small quantities of land (less than 300 acres). Overall, 42 percent of respondents enrolled less than 151 acres with only 21 percent enrolling more than 450 acres.

Landowners indicated a wide range of factors motivated them to enroll land in the CRP. No single reason for enrolling land in the CRP was predominant; however, the most frequent response was financial in nature (Table 1). Forty-six percent of the respondents indicated that the main reason for enrolling land in the CRP was because it was 'economically attractive' or 'to stabilize income and reduce risk.' Only 2 percent of the respondents said the main reason for enrolling land was 'to increase hunting opportunities.'

Table 1. Reasons for Enrolling in the Conservation Reserve Program

Reasons for Enrolling	Percentage of Respondents
Improve soil fertility and reduce soil erosion	24.3
Stabilize income and reduce income risk	23.5
Economically attractive	22.2
Provide transition to retirement	10.8
Other reasons	10.1
Reduce labor and other farm inputs	4.9
Increase hunting opportunities	2.2
Provide transition to a career change	2.0
(n)	(966)

### *Agriculture Issues*

Many local leaders believe that the CRP was a major factor driving farm consolidation. This section of the survey will examine landowners

Table 2. Importance of Various Aspects of the Conservation Reserve Program in Keeping Farm Operations Viable

CRP Benefit	Average Score <sup>a</sup>	Degree of Importance				
		Very Important	Somewhat Important	Neither	Somewhat Unimportant	Not Important
		----- % of respondents -----				
Help pay short-term debt (n=330)	3.2	17.0	14.6	26.7	16.9	24.8
Help pay long-term debt (n=331)	3.1	20.9	16.0	23.3	14.2	25.6
Provide income for family living expenses (n=332)	3.2	15.1	16.6	27.1	16.5	24.7
Offset income loss from other crop land (n=334)	3.2	13.2	20.4	24.8	15.0	26.6
Remove marginal crop land from production (n=342)	2.4	35.1	24.3	18.7	13.1	8.8
Supplement income with hunting revenue (n=324)	4.7	3.4	0.9	3.4	9.9	82.4
Provide more stable income than crop production (n=324)	2.4	31.8	27.7	20.0	7.9	12.6

<sup>a</sup> Based on a scale of 1 for very important to 5 for not important. Lower average numbers indicate a greater importance than higher average numbers.

perceptions of role of the CRP in farm viability and other related agricultural issues, such as the program's effects on cash rents and the agriculture supply and service sector.

### ***Cropping History***

For a majority of contract holders, input costs on land now enrolled in the CRP were largely the same as other crop land in the area with crop yields the same or lower than other crop land in the area. Respondents indicated that land now enrolled in the CRP yielded on average 5.3 percent less than other crop land in the area not enrolled in the CRP. Most of the respondents land now enrolled in the program was reported to have the same yields (93,558 acres) or lower yields (92,941 acres) than other land in the area with far fewer acres enrolled with yields higher (23,121 acres) than other land in the area. 137,777 acres were reported to have the same input costs as other land in the area with approximately equal numbers of acres with higher

(29,300 acres) and lower (34,500 acres) input costs.

### ***Effects on Farming Operation***

When asked to rate the importance of certain CRP benefits in keeping their farming operation viable, 59 percent of the respondents felt that 'removing marginal/uneconomical crop land from production' and 'providing a more stable income source' were 'very important' or 'somewhat important' to the viability of their farm. Ninety-two percent indicated that supplementing income with hunting revenue was unimportant.

Respondents were fairly evenly split regarding the relative importance of the other CRP benefits. About 30 percent indicated that 'help pay short and long-term debts,' 'provide income for family living expenses,' and 'offset income loss on other crop land' were important. Roughly 25 percent responded the benefits were neither important or

unimportant and 40 percent indicated those benefits were unimportant (Table 2).

Respondents indicated that the CRP has not affected the level of basic farm inputs, specifically the amount of labor (hired or family members) or machinery. Further, most farmers have not substantively changed management practices since enrolling their land in the CRP. The adoption of minimum till practices and retention of grass/sod in drainage areas were the only practices adopted by a majority of the respondents since enrolling land in the CRP (59 and 55 percent respectively). Some

respondents (less than 50 percent) have taken measures to support wildlife populations; however, those practices do not appear to be widespread. Further, cropping and tillage practices largely were not influenced. Although 40 percent of the respondents indicated CRP 'helped the transition to retirement,' and 35 percent indicated the CRP 'helped transfer the farm to the next generation,' on only one strategic/planning issue, ('reduced my income risk'), did a majority (72 percent) respond positively (Table 3).

Table 3. Influence of the Conservation Reserve Program on Farm Operations			
Farm Activities	Increase	No Effect	Decrease
	----- % of respondents -----		
<u>Level of Farm Inputs</u>			
Change the amount of hired labor	0.8	76.4	22.8
Change the amount of family or operator labor	1.4	57.6	41.0
Change the amount of machinery/equipment	2.0	65.0	33.0
 <u>Conservation and Wildlife Practices Adopted Since Enrolling in CRP</u>			
	Yes	No	
Crops sensitive to wildlife depredation not planted/stored near CRP tracts	17.0	83.0	
Retain grass in drainage areas prone to erosion	55.2	44.8	
Use no-till practices	26.0	74.0	
Use minimum tillage practices	58.7	41.3	
Plant food plots next to CRP tracts	21.3	78.7	
Feed wildlife during winter	45.2	53.8	
Delay first cutting of hay until after nesting	35.1	64.9	
Delay/cancel tillage on fields next to CRP to allow for feeding by wildlife	15.5	84.5	
Plant trees/create other habitat with own resources	32.0	68.0	
 <u>Strategic and Planning Issues</u>			
Help transfer farm operation to the next generation	34.7	65.3	
Help the transition to retirement	39.8	60.2	
Reduced my income risk	71.7	28.3	
Made land easier to sell/increased value of land	21.7	78.3	
Help to expand farm operation	17.8	82.2	

Fifty-four percent of the respondents indicated that cash rents and their average CRP payment were nearly the same; 28 percent indicated cash rents were higher than their CRP payments and 18 percent said cash rents were lower than their average CRP payments. When all responses were averaged, (including those that responded 'no change'), landowners indicated that cash rents were \$1.02/acre more than their average CRP payment. Those that thought cash rents were higher said cash rents averaged \$9.11/acre higher than their average CRP payment; those that thought cash rents were lower said rents averaged \$8.82/acre lower, a range of nearly \$18 per acre (Table 4).

Respondents were also asked if the CRP had affected the availability of crop land for rent, as well as if the CRP had affected cash rents for crop land in the area. Forty-two percent of landowners felt that the CRP had reduced the amount of land available for rent, 28 percent felt there had been no change, 28 percent did not know, and only 1 percent said the amount of land available for rent had increased as a result of the CRP. Landowners apparently did not perceive that the reduction in land available for rent had impacted cash rents as 69 percent said the CRP had not affected cash rents. When the change in cash rents was averaged (increase, decrease, and no change), landowners felt that cash rents for crop land had increased 4.4 percent as a result of the CRP. However, landowners that indicated cash rents for cropland had increased (32 percent) as a result of CRP felt that rents had increased by 16.7 percent. In contrast, landowners that indicated cash rents for cropland had decreased (3 percent) because of the CRP felt that rents had decreased by 14.5 percent, a range of 31 percent.

Survey participants were also asked how the CRP has affected farm service businesses. A majority of landowners indicated that the CRP had negatively impacted 'machinery and equipment dealers' (65.2 percent), 'elevator and grain handling facilities' (65.4 percent) and 'general farm supply stores' (65.4 percent). Fewer respondents felt the other sectors, 'custom operators' (52.5 percent) and 'agriculture lenders' (39.3 percent) were negatively impacted.

Table 4. Effects of the Conservation Reserve Program on Availability of Land to Rent, Level of Cash Rents and Comparison of Cash Rents to Average Conservation Reserve Program Payments

Cash rents higher than CRP payment	
Number of responses	200
Percent of respondents	28
Average response (\$/acre higher)	9.11
Cash rents lower than CRP payment	
Number of responses	125
Percent of respondents	18
Average response (\$/acre lower)	(8.82)
Cash rents equal to CRP payment	
Number of responses	382
Percent of respondents	54
Overall (average of lower, higher, and equal)	
Total responses	707
Average of responses (\$/acre)	1.02
CRP has increased cash rents	
Number of responses	190
Percent of respondents	33
Average response (% increase)	16.7
CRP has decreased cash rents	
Number of responses	15
Percent of respondents	3
Average response (% decrease)	-14.5
CRP has had no effect on cash rents	
Number of responses	395
Percent of respondents	69
Overall (average of decrease, increase, no effect)	
Total responses	574
Average of responses (% change)	4.4
Effects of CRP on availability of land to rent	
No effect	28.1
Increase	1.4
Decrease	42.5
Do not know	28.0

## ***Issues and Attitudes Toward the CRP***

Respondents were asked if they agreed or disagreed with 13 general statements regarding program principles, economic impacts, environmental impacts, and wildlife and recreation impacts. With an average score of 4.0 (based on a score of 1 to 5, where 1 is strongly disagree and 5 is strongly agree), most landowners, (76.6 percent) agreed that the CRP is a cost effective way to idle crop land (Table 5). Respondents were also in general agreement with statements regarding environmental benefits. They agreed that the CRP has ‘helped stop soil erosion on marginal crop land’ (average score 4.5), ‘helped reduce flooding’ (3.9), and ‘improved water quality in adjacent waters’ (3.9). Very few respondents (less than 10 percent) disagreed with those statements.

Nearly 48 percent of landowners agreed ‘more land should be enrolled in the program,’ but 31 percent were neutral and 22 percent disagreed. Opinions were similarly split when landowners were asked if the CRP should ‘focus on marginal farmland characteristics, not wildlife habitat values’; 54 percent agreed, 22 percent were neutral and 24 percent disagreed.

On only one wildlife and recreation issue was there a clear consensus among landowners. Eighty-two percent agreed that the CRP benefits both farmers and sportsmen, while only 8 percent disagreed. Landowners were more evenly split regarding landowners’ right to use land enrolled in the CRP for fee and lease hunting. One half (54 percent) of the respondents felt landowners should have the right to use CRP land for fee and lease hunting, 21 percent were neutral, and 23 percent disagreed. Further, there was no clear consensus regarding the CRP’s role in facilitating the spread of fee and lease hunting, 15 percent of the landowners disagreed with the statement, while 42 percent were neutral and 43 percent agreed.

Respondents were also fairly evenly split when they were asked if ‘CRP was instrumental in keeping them on the farm.’ Forty-seven percent agreed, 40 percent of the respondents were neutral and 32 percent disagreed. Opinions were also fairly evenly split regarding the overall impact of the program on the local and state economy, 30 percent were neutral, just under 40 percent agreed

with the statement, and roughly 30 percent disagreed. A majority of the respondents (58 percent) felt that crop prices would be lower without the CRP (Table 4).

## ***Recreation Issues***

A salient effect of increased CRP acreage has been growing wildlife populations, which can lead to increased recreational activity, particularly hunting, in some areas. However, as was discussed during the local leader interviews, increased hunting pressure has been reported to motivate landowners to post land enrolled in the CRP and other privately owned lands ‘no hunting,’ thus raising concerns about land access for local residents for hunting.

## ***Effect on Wildlife Populations, Recreational Activities, and Local Business***

There was widespread agreement among landowners that the CRP had positively impacted wildlife populations. Eighty-two percent of the respondents believed that the CRP contributed to growth in big game (e.g., deer) populations and 78 percent of the respondents believe the same about upland game populations. About two-thirds of respondents indicated that the CRP had contributed to growth in waterfowl populations, while more than 60 percent believed that furbearer populations had increased. Other species (e.g., doves, hawks) were similarly rated as being positively affected. Further, 58 percent of landowners indicated hunting and trapping had increased and 27 percent felt the increase had been substantial. More than one-third of the respondents indicated wildlife viewing/bird watching had increased, but roughly the same number believed there was no effect.

Landowners also indicated that the CRP has had a positive impact on both the number of hunters and time spent hunting. For upland hunting, 74 percent of respondents that had an opinion felt that the CRP had a positive impact on both the number of hunters and the amount of time spent hunting. Results were similar for other types of hunting. Sixty-nine percent of respondents felt

Table 5. Responses Regarding Issues/Attitudes Related to the Conservation Reserve Program, Landowners and Average Score Regarding Issues/Attitudes, Landowners and Local Leaders

Issue/Attitude	Study Group		Distribution of Responses, Landowner				
	Land -owners	Local Leaders	Strongly Disagree	Somewhat Disagree	Neither	Somewhat Agree	Strongly Agree
	-Average Score <sup>1</sup> -		-----percent of respondents-----				
CRP is a cost-effective program to idle crop land	4.0	3.3	3.2	6.7	13.5	42.2	34.4
(n)	(932)	(56)					
Crop prices would be lower without the CRP	3.6	3.0	9.4	10.3	21.4	33.3	25.6
(n)	(938)	(57)					
Enrollment criteria should focus on farmland characteristics, not wildlife habitat	3.5	3.7	9.1	14.7	22.2	26.9	27.1
(n)	(933)	(57)					
More land should be put into the CRP	3.4	2.3	9.0	12.9	30.5	25.5	22.1
(n)	(949)	(55)					
CRP has been instrumental in keeping me on the farm	2.9	n/a	21.8	10.3	39.5	14.7	13.7
(n)	(886)						
CRP benefits farmers and sportsmen	4.1	3.9	3.8	4.7	9.4	40.7	41.4
(n)	(952)	(57)					
CRP has had an overall positive effect on local economies	3.0	2.5	14.2	19.8	30.0	20.9	15.1
(n)	(944)	(56)					
CRP has had an overall positive effect on the state economy	3.2	2.7	11.0	16.1	30.2	27.0	15.7
(n)	(939)	(57)					
CRP has helped stop soil erosion on marginal crop land	4.5	4.5	2.6	1.2	5.0	28.6	62.6
(n)	(958)	(57)					
CRP has helped reduce flooding by controlling water runoff	3.9	3.7	3.4	6.3	19.6	35.5	35.2
(n)	(948)	(57)					
CRP contract holders should have the right to use that land for fee and lease hunting	3.5	2.7	16.1	7.6	21.4	22.3	32.6
(n)	(951)	(57)					
CRP is facilitating the spread of fee and lease hunting	3.4	3.6	37.5	7.7	42.2	27.0	15.6
(n)	(932)	(56)					
CRP has improved water quality in adjacent wetland, lakes, and streams	3.9	3.8	2.3	4.2	24.1	35.9	33.5
(n)	(951)	(57)					

<sup>1</sup> Bases on a score of 1 to 5, where 1 is strongly disagree and 5 is strongly agree.

that big game hunting had been positively impacted and 62 percent felt waterfowl hunting had been positively impacted. Almost all of the landowners that did not rate the impact of the CRP on the number of hunters or time spent hunting positively, indicated there was no effect.

### ***Effects of Recreational Activities on Local Businesses***

Changes in recreational activities were generally perceived to have a positive effect on local businesses. About 55 percent of landowners believed that convenience stores had experienced positive effects, while almost 49 percent believed that restaurants and sporting goods stores had experienced positive effects. Respondents also perceived that ‘taxidermy/game processing businesses’ and ‘guides and outfitters’ were positively affected, 40 percent and 32 percent respectively.

### ***Hunting Activities and Access***

Hunting access was identified during the leadership interviews as a critical issue that often provoked strong differences in opinion. Landowners’ opinions and practices regarding hunting activities and land access are examined in this section of the survey.

A majority of landowners (67 percent) indicated that the amount of land in their area posted “no hunting” had increased since the CRP began, however; 42 percent said hunting access to CRP land was no different than hunting access to other land. A fairly large number of landowners (21 percent) said they did not know if the amount of land posted had changed since the CRP began and 11 percent said there was no change. Less than 1 percent of the respondents said the amount of land posted had decreased. Thirty percent of the landowners reported that access to CRP land was more restrictive than other hunting land, 25 percent did not know, and only 4 percent indicated that access to CRP land was less restrictive than other hunting land.

Landowners were asked about their current posting practices and if those practices had changed since enrolling in the CRP. Eighty percent of the respondents said their land was

either ‘not posted’ (41 percent) or ‘posted, but grant permission to hunt’ (39 percent). Less than 2 percent indicated they lease their CRP land (either to an outfitter/guide or individuals) or charge a fee for hunting. Most respondents indicated their posting practices (all land, not just CRP) have not changed since enrolling in the CRP. Of those that indicated their posting practices had changed, 51 percent said they now post more of their land than before the CRP.

To address recreational access issues, the North Dakota Game and Fish Department (ND G&F) initiated a Private Land Open To Sportsmen (PLOTS) program in 1998. In this program, if the landowner agrees to allow unlimited walk-in hunting access, the ND G&F will assist with the cost of establishing the CRP cover. Overall, 18 percent of survey respondents indicated that they were participating in the PLOTS program. When non-participating landowners were queried about why they were not participating in the PLOTS program, respondents most often indicated that they were not aware of the program (41 percent). Other reasons for not participating were that their CRP cover was already established when the program began (18 percent) and that the economic incentive was not sufficient to compensate for relinquishing control over access (17.7 percent).

### ***Future Decisions Regarding the Use of CRP Land***

Assuming enrollment criteria and contract payments remain the same, a large majority (88 percent) of landowners said they would re-enroll at least some of the land currently enrolled in the program and a slightly smaller majority (83 percent) would re-enroll all of their land currently enrolled in the program. Contract rates seem to have little bearing on the decision to re-enroll land. Of those respondents that felt cash rents were more than CRP payments, 83 percent would still re-enroll at least some land, and 72 percent would re-enroll at least 75 percent of their land. Results were similar for respondents that felt that cash rents were less than CRP payments. However, when respondents were asked about land use if land currently enrolled in the CRP were not re-enrolled in the program or if the program were eliminated, landowners indicated that 57 percent of the acres currently enrolled would be returned to crop

production. The remaining 43 percent of acres currently enrolled in the program would be converted to some other land use, primarily hayland, pasture, or permanent cover.

## **Summary and Comparison of Leadership Surveys**

### ***Agriculture Issues***

Eighty-four percent of local leaders indicated that the CRP had reduced the availability of land to rent, while only 43 percent of landowners indicated the same. Local leaders that indicated CRP had increased cash rents said cash rents were on average 17 percent higher, exactly the same percentage increase expressed by landowners. None of the local decision makers thought that the CRP had decreased cash rents. Local leaders also felt that ‘machinery and equipment dealers’ and ‘elevators and grain handling facilities,’ ‘custom operators,’ and ‘agricultural lenders’ had all been negatively impacted. Like contract holders, local leaders felt that the program’s impact on ‘machinery and equipment dealers’ and ‘elevators and grain handling facilities’ had been more substantial than the program’s impact on the other sectors.

### ***Issues and Attitudes Toward the CRP***

Local leaders’ opinions on program principles, economic impacts, environmental impacts, and wildlife and recreation impacts mirrored landowners. Local decision makers felt somewhat less strongly than landowners that the CRP is a cost-effect program to idle crop land. (Again, because of the nature of the leadership survey, it is not possible to make definitive statements about the two groups’ differences or similarities.) Further, the two groups of respondents had differing opinions on whether more land should be enrolled in the CRP. Landowners on average somewhat agreed that more land should be enrolled in the program (average score 3.4); while local leaders somewhat disagree that more land should be enrolled in the program (average score 2.3). The two groups also disagreed when asked to rate the overall effect of the program on the local and state economy. Landowners were neutral to slightly positive (3.0 on local economies, 3.2 on

state economy); however, local leaders somewhat disagreed that the CRP had an overall positive impact on local economies (average score 2.5) and the state economy (average score 2.7). Leaders and landowners views also differed on whether CRP contract holders should have the right to use land enrolled in the CRP for fee and lease hunting. Landowners generally agreed with the statement (average score 3.5), while the local leaders generally disagreed with the statement (average score 2.7). Leaders and landowners were in general agreement on the remaining issues.

### ***Recreation Issues***

Like landowners, local leaders also believe that the CRP has had a positive effect on recreational activities in North Dakota. Nearly 77 percent of the local leaders believed that hunting and trapping had increased as a result of the CRP, and 29 percent believed the increase was substantial. Local leaders’ opinions were also very similar to landowners’ opinions on the effect of the CRP on other recreational activities. Leaders believed that bird/wildlife viewing had increased, although they viewed the increase as slight (44 percent) and nearly the same number of leader respondents (46 percent) believe there has been neither an increase or decrease. Most local leaders, like landowners, felt that the CRP had no effect on camping and horseback riding. Local leader opinions on the effects of the CRP on wildlife populations also mirror those of landowners. While respondents felt that ‘upland game’ and ‘big game’ had the greatest population growth, all wildlife species populations were thought to have grown as a result of the CRP. Local leaders also agreed with landowners that the CRP had positively impacted both the number of hunters and the amount of time people spent hunting. Leaders responses were consistent with those of landowners within a few percentage points.

There was also widespread agreement among local leaders that non-agriculture business sectors had been positively impacted by recreational activities on CRP land in the area. At least 50 percent of the respondents felt there was at least a slightly positive impact on all the specified business sectors. Nearly 75 percent of the leaders felt that convenience stores had been positively impacted with 25 percent of the leaders indicating

the effect was substantial. Sixty-six percent felt that ‘restaurants and motels’ and ‘sporting goods/supplies’ had been positively impacted. Only slightly fewer leaders felt that ‘taxidermy/game processing’ (60 percent) and ‘guide service/outfitters’ (54 percent) had been positively impacted. The local leaders responses were consistent with land owner responses.

## CONCLUSIONS

### *Leadership Interviews*

Leaders in all groups identified farm consolidation and declining populations (and the resulting impacts on the local economy) as the most significant socioeconomic changes in their communities in recent years. Both positive and negative impacts were attributed to the CRP in all county groups. Positive impacts that were most frequently mentioned fell into three basic categories: (1) landowner benefits/income stability, (2) environmental benefits and subsequent wildlife and recreation benefits, and (3) providing a reserve feed source for livestock operators (emergency haying and grazing). Negative impacts generally focused on the impact of the program on the farm supply and service sector. The CRP was also cited as a contributing factor in rural depopulation, either in terms of facilitating retirement and/or career change and/or reducing the availability of land for young farmers. Problems with noxious weeds were also mentioned in all study groups.

Leaders’ overall evaluation of the CRP was mixed. Leaders that generally felt that the CRP has benefitted their area commented that many of the recent trends, specifically farm consolidation, depopulation, and the general decline of the local economy were not solely a function of the CRP and believe that those changes would have occurred with or without the CRP. They believe that the program in fact helped some producers keep their farm and helped others ease the transition out of farming or to retirement. Leaders that viewed the program positively also cited wildlife and recreation benefits and noted the subsequent economic benefits to non-agriculture sectors of the local economy. Leaders that viewed the program negatively consistently cited the impact of the program on the farm supply and service sector and generally blame the program for

farm consolidation, depopulation, and the current state of the local economy.

Leaders were fairly evenly split in their overall assessment of the program, and at times the program elicited strong differences of opinion, specifically regarding public access and emergency haying and grazing. And while there were numerous suggestions that covered nearly every aspect of the program, generally respondents were not advocating sweeping changes or eliminating the program. Leaders in each group stated the importance of targeting enrollment to erodible land to ensure that productive cropland is not retired. The wildlife benefits of the program were mentioned often as were concerns regarding public access. Leaders offered a variety of suggestions that advocated public access to land enrolled in the CRP.

### *Landowner Survey*

The landowner survey provided baseline characteristics of participating landowners, their motivations for enrollment, and their perceptions of the impact of the program. Most landowners are North Dakota residents (87 percent), and a majority live in the survey county (61 percent), thus casting some doubts on theories expressed by local leaders that many CRP contract holders leave the local area and take their CRP payments with them.

No single factor emerged as the primary motivation for enrolling land in the CRP. While landowners most common motivation for enrolling land in the CRP was economic in nature, soil quality issues were also an important consideration. The only clear consensus among landowners was that ‘increasing hunting opportunities’ was not a factor.

Taking marginal/uneconomic land out of production and providing a more stable income were the CRP benefits most important to farm viability. As was the case with factors motivating participants to enroll land in the CRP, landowners indicated wildlife and recreation benefits (hunting and hunting revenue) were largely irrelevant in terms of farm viability.

The CRP largely has not impacted farming operations, nor have landowners substantially

changed their management practices since enrolling land in the CRP. While 40 percent of respondents indicated the CRP helped the transition to retirement, most respondents indicated that the CRP did not affect the transfer of property either to the next generation (65 percent) or an unrelated buyer (78 percent). While this would support contentions made by local leaders that the CRP helped ease the transition to retirement for some operators, it also cast some doubt on assertions that the CRP facilitated wide-scale retirements or transfer of ownership. Considering the average age of landowner respondents was 61 years old with 41 percent over 65 years old, and 76 percent over 50 years old, the number of landowner respondents that used the program to facilitate retirement or transfer property does not seem disproportionate to respondent age.

Almost one half of the landowners indicated that the CRP payments were largely the same as cash rental rates, with remaining respondents evenly split between indicating that the CRP payments were higher or lower than cash rental rates. While it was often reported during leadership interviews that the CRP drove up cash rents or at minimum set a price floor, nearly 70 percent of the landowner respondents indicated the CRP had not impacted cash rents. These responses would suggest that the perception of the CRP inflating rental rates may be greater than the reality.

Landowners echoed the responses of local leaders regarding the impact of the CRP on related agri-business service sectors. The general consensus of landowners was that the CRP had negatively impacted the farm supply and service sector.

Landowners expressed strong agreement on a number of issues related to the CRP. A large majority of landowners agreed that the CRP ‘has helped stop erosion on erodible land,’ ‘reduced flooding,’ ‘improved water quality in adjacent bodies of water,’ ‘is a cost effective way to idle crop land,’ and ‘benefits both farmers and sportsmen.’

Most landowners believe that the CRP has contributed to the growth of most wildlife species populations which has in turn lead to more hunters

and more time spent hunting. While the consensus among landowners is that the CRP has positively impacted wildlife populations, it is important to note that other factors may have influenced wildlife populations as well. For example, the recent wet cycle has likely influenced game populations, especially waterfowl in the central ‘prairie pothole’ region. Identifying other contributing factors and estimating to what degree wildlife population growth is attributable to CRP is beyond the scope of this study. Landowners also generally agreed that select local non-agriculture businesses that support hunting and recreational activities had been positively impacted by the CRP.

While 45 percent of landowners felt that the amount of land posted “no hunting” had increased since the CRP began, 90 percent indicated that their posting practices had not changed. These numbers seem to suggest that respondents believe other landowners are posting more land while their own posting practices remain unchanged.

Landowners’ preferred land use upon contract expiration was to re-enroll land in the CRP program. Even among those landowners that believe cash rents were higher than CRP payments, a large majority (83 percent) would re-enroll at least some land. This would strongly suggest that factors other than contract rental rates motivate landowners to participate in the program.

### *Leadership Survey*

Because the leadership survey was not distributed to a random selection of local leaders and both official and unofficial community leaders were included in the survey, it is difficult to draw any definitive conclusions based on the leadership survey. However, a comparison of leader and landowner perceptions is useful for making relative comparisons.

Local decision makers agreed with landowners on several issues. Both groups felt that the CRP had reduced the amount of land available for rent and that cash rents had increased as a result of the CRP. Local decision makers also agreed with landowners that agri-business sectors had been negatively impacted by the CRP.

Leaders disagreed with landowners on several issues: 'more land should be put in the CRP,' 'the overall effect of the program on the local and state economy,' and 'CRP contract holders should have the right to use CRP land for fee and lease hunting.' Landowners generally agreed with these statements and local leaders generally disagreed. Again, considering leaders' occupations, (most were associated with the agriculture supply and service sector) and mounting concerns regarding local resident land access for hunting, their views on these issues are not unexpected.

Leaders did, however agree with landowners on a number of issues. There was widespread agreement among leaders that the CRP had a positive impact on wildlife populations, hunter activity and related non-agriculture sectors that support wildlife based recreational activities. Their opinions were consistent with landowners.

## SUMMARY

The purpose of this study was to establish baseline perceptions of the socioeconomic impacts of the Conservation Reserve Program in North Dakota. A few key themes emerged. Despite some problems and/or unintended consequences of the programs, the program remains very popular with landowners in North Dakota; and assuming no major changes in the program, participation levels will likely remain high. While some issues related to the program can elicit strong differences of opinion, there appears to be a general consensus on the program's environmental, wildlife, and recreation benefits. While many feel that the CRP is responsible for rural depopulation and the general decline of the farm and rural economy, even if the program were eliminated, not all the land currently enrolled in the program would return to crop production and it is not likely the rural economy would revert to pre-CRP conditions. Opinions on the state and local economic impacts of the program are more variable, ranging from very positive to very negative. Like most programs, perceptions of impacts are based largely on each individual's circumstance and personal experience, thus providing some insight to diversity of opinions on some aspects of the program.

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This document is a summary of a more comprehensive report which contains additional information. Additional copies of this summary and single copies of the main report, *Local Socioeconomic Impacts of the Conservation Reserve Program*, are available free of charge. Please address your requests to Carol Jensen, Department of Agribusiness and Applied Economics, North Dakota State University, P.O. Box 5636, Fargo, ND 58105-5636, (phone 701-231-7441, fax 701-231-7400), E-mail [cjensen@ndsuxext.nodak.edu](mailto:cjensen@ndsuxext.nodak.edu) or these documents are available on the world wide web at <http://agecon.lib.umn.edu/>.

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