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# Implications of Extending the Conservation Reserve Program for Iowa

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expectations for the CRP program enrollment were scaled back to 38 million acres by 1995. In addition, the program was redefined to target not only highly erodible cropland but also to achieve other social benefits. Administration of the program was changed from local ASCS offices to the national ASCS office in Washington, D.C. Bids were no longer to be evaluated on the basis of multicounty maximum acceptable rental rates. Instead, a formula for calculating the societal and environmental benefits per dollar of federal cost was used to evaluate bids. In addition to erosion, this formula included other factors such as proximity to a densely populated area, leaching potential of the land, surface runoff potential, and location. While all of these factors were important in the formula, the inclusion of location allowed higher, more competitive bids with respect to corn and soybean acreage to be accepted in the Midwest. In the tenth sign-up, the proportion of corn acres enrolled jumped to 18 percent while the proportion of wheat acres enrolled dropped to 20 percent.

Three more sign-ups have been held since the 1990 FACTA bringing the total CRP sign-ups to twelve. Current enrollment stands at 36.5 million acres, 1.5 million acres short of the 38 million acre goal. With continuing concern over the federal budget deficit, it appears unlikely that the additional enrollment of 1.5 million acres will be funded. The contracts for 1986 are due to expire in 1995. With the future of the CRP program likely to be decided in 1995 legislation, USDA has announced a one-year extension option for contracts expiring in September 1995. Beyond 1996, no funding has been appropriated to continue CRP contracts. There has been considerable discussion over the possibility of extending CRP contracts. Among the possibilities is a reduced program that targets only certain types of land and seeks permanent easements on agricultural production. If CRP contracts are extended or rebid, it appears that at least some portion of the required funding may come from deficiency payments through lower target prices or higher normal flex rates.

## Implications of Extending the Conservation Reserve Program for Iowa

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A variety of alternatives have recently been proposed for the future of the Conservation Reserve Program (CRP) program. Among the proposals are: elimination of the program, targeting specific land types for reentry into the program, allowing renewal of all contracts, and redefining the program to bid land in for a one time permanent easement payment. CARD evaluated five possible alternatives for extending the CRP program. The results of these scenarios are discussed below and presented in the corresponding graphs. Note that the results for Iowa should not be extrapolated to the whole United States. Results for the United States are different because other relevant crops, particularly wheat, are included.

Critical to the analysis are the assumptions about how CRP acreage returns to production after the contracts expire. The assumptions used in the CARD CRP analysis are based on a 1991 survey of farmers conducted by the Soil Conservation Service (SCS) to determine farmers' intentions after their CRP contracts expire. The survey indicates that only about 65 to 70 percent of all CRP acres would reenter field crop or hay production. However, the percentage reentering production varies by crop, with a higher proportion of corn base acres reentering production than wheat base acres. This result is incorporated in the assumptions made for each of the CRP scenarios. In addition, each of the scenarios assumes that land returns to production in the crop base from which it was bid out. In other words, if corn base was enrolled into the CRP program, it is assumed that when the contract expires, about 70 percent of the initial acreage will reenter corn production with the remaining 30 percent distributed among pasture, hay, trees, or wildlife areas. A more detailed discussion of assumptions will be included in the forthcoming CARD Staff Report entitled "Implications of Extending the Conservation Reserve Program."

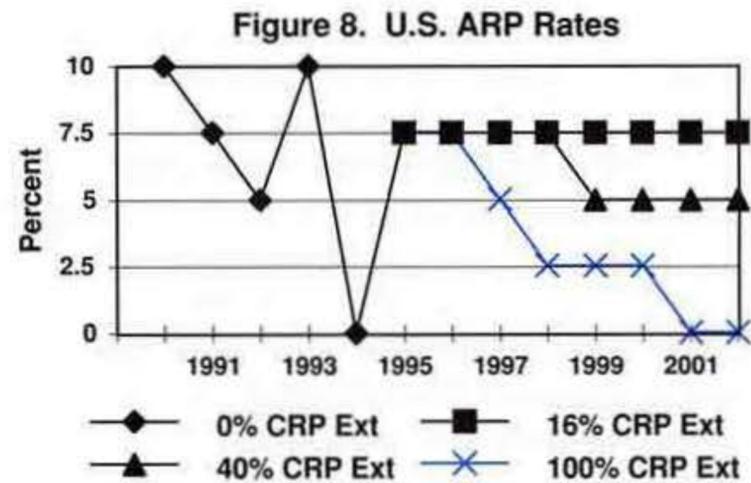
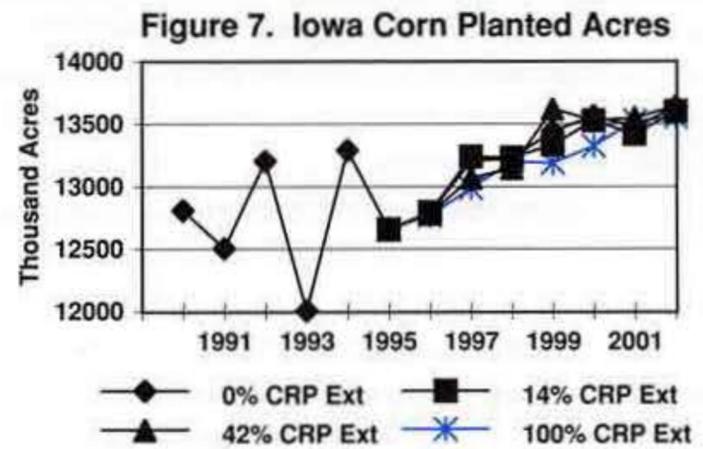
CARD evaluated five possible alternatives for extending the CRP program: elimination of the program, renewal of contracts on land with greater than 30 tons of erosion per acre (14 percent of all acres contracted in Iowa), renewal of contracts on land with greater than 20 tons of erosion per acre (42 percent of all acres contracted in Iowa), renewal of 50 percent of all acres contracted without targeting acreage, and 100 percent renewal of contracts.

The first scenario, zero percent extension of CRP contracts, was actually the CARD baseline for 1994. Under this scenario, all CRP contracts are expected to expire and not be renewed. The second scenario, extension of 14 percent of the CRP contracts, targets specific acres. In this scenario, acres in Iowa with greater than 30 tons per acre of erosion are reenrolled in the CRP program (about 14 percent of currently enrolled acres.) In the third scenario, extension of 42 percent of the CRP contracts, acres with greater than 20 tons per acre of erosion are reenrolled in the CRP program. In the fourth scenario, extension of 50 percent of the CRP contracts, no acreage targeting is done. Instead, 50 percent of current CRP contracts are reenrolled with erosion varying from 1 ton per acre to over 100 tons per acre. Finally, the fifth scenario, 100 percent extension of current CRP contracts, reenrolls all of the CRP acres.

Each of these scenarios were first run at the U.S. level to determine the effects of program extension on total acres in production by crop. The scenarios which considered some extension of the CRP program naturally showed less production initially which led to higher prices. Less production and higher prices reduced stocks to use ratios for many of the program crops. This resulted in set aside rate (ARP rate) reductions from the no-CRP contract extension scenario. In effect, this allows CRP acres to trade for ARP acres. Thus, the more acres reenrolled in the CRP program, the lower the ARP rate can be set. This has proved very effective in wheat, considering that nearly 30 percent of the acreage enrolled in the CRP program is wheat base and the ARP rate has been set at 0 percent since 1993. Without nearly 11 million of acres of wheat base enrolled in the CRP program, ARP rates for wheat would certainly have been much higher.

Once each of the five scenarios were run at the U.S. level, changes in farm program parameters such as ARP rates were then extended to the Iowa level. Because policy changes are made at the U.S. level, the effects of extending the CRP program are not always what one would expect. Figure 7 presents the impacts of four of the five different scenarios on corn acreage planted in Iowa. (The 50 percent scenario is omitted because it is very similar to the 42 percent scenario.)

Note that as many corn acres are planted when 100 percent of the CRP contracts are extended as when none of the CRP contracts are extended! The reason this happens is quite interesting. In Iowa, about 1.2 million acres of corn base are enrolled in the CRP



program. Note that the ARP rate drops from 7.5 percent under the 0 percent extension alternative to 0 percent under the 100 percent extension alternative. Figure 8 displays the ARP rates under the four scenarios. This allows about 900 thousand acres that were formerly set-aside to be planted. Recall that under the 0 percent extension scenario, 20 percent of the corn base is assumed to go to hay, pasture, trees, and wildlife areas and 80 percent of the corn base returns to production. Thus about 240 thousand acres do not return to corn production. (Note that this assumption is critical to determining whether corn acres increase or decrease under the scenarios.) The combination of ARP reductions and acreage not returning to production keep corn acreage planted virtually the same under all five scenarios.

Iowa corn prices are closely tied to U.S. corn prices and not much difference in corn prices is expected. Because slightly less corn acreage is planted on the U.S. level under the 100 percent scenario, corn prices are higher (see Figure 9).

The impacts of extending the CRP program under the different scenarios for soybeans are what one would anticipate. With higher levels of acreage bid back into the CRP program, soybean acres planted decline with no corresponding ARP adjustment. Thus the highest level of acreage planted to soybeans in Iowa occurs in the 0 percent CRP extension scenario (see Figure 10).

Figure 9. Iowa Corn Farm Price

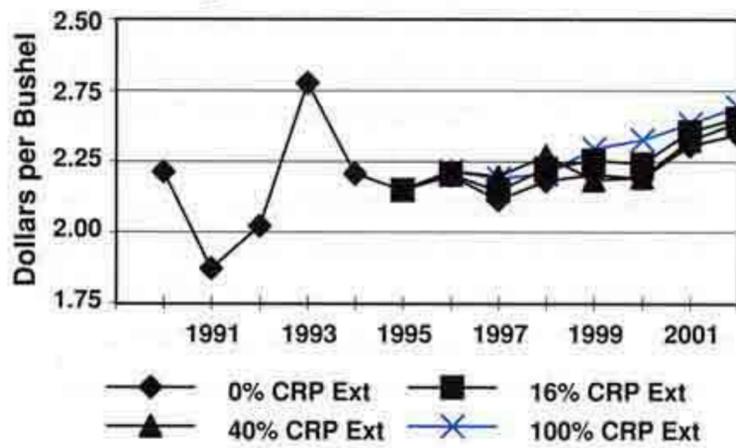


Figure 10. Iowa Soybean Planted Acres

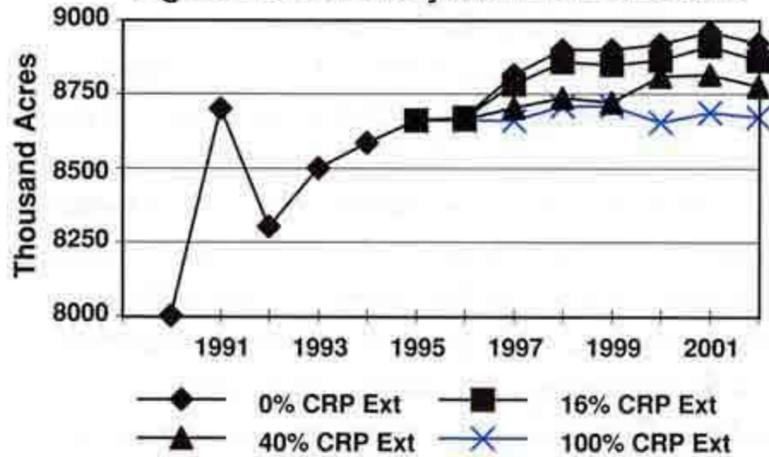
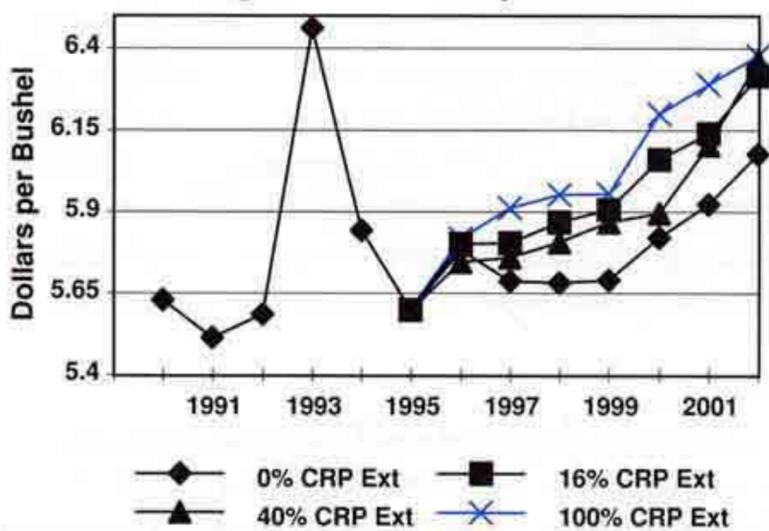


Figure 11. Iowa Soybean Price



Iowa soybean prices are also closely tied to U.S. soybean prices but unlike corn there is some price difference between the scenarios. With higher soybean production under the 0 percent CRP extension scenario, soybean prices are the lowest, ranging from \$5.65 to \$6.10 per bushel. Soybean prices are the highest under the 100 percent CRP extension scenario ranging from \$5.75 to \$6.40 per bushel (see Figure 11). Note that more price movement occurs in soybeans than corn because there is no ARP adjustment to offset soybean planted acreage.

Naturally, CRP payments to Iowa farmers increase as a larger proportion of the CRP contracts are extended. However, the effects on total government payments are less clear. Government payments are actually the lowest under the 14 percent CRP extension. This occurs because the increase in CRP payments from the 0 percent CRP extension scenario is offset by the reduced deficiency payments resulting from higher corn prices with no change in the ARP levels. Government payments are the highest under the 100 percent CRP extension scenario as larger CRP payments and lower ARP rates for corn offset lower deficiency payment rates from higher prices. Note, however, the relatively small difference in government payments to producers between scenarios (see Figure 12).

The bottom line is that Iowa farmers receive the most income under the 100 percent CRP extension scenario. In addition to the continuation of CRP payments, Iowa farmers would see an increase in corn cash receipts under the 100 percent CRP extension scenario. Surprisingly, the other scenarios where some portion of CRP contracts are extended are not far behind. Clearly the 0 percent CRP extension represents the least attractive option for farmers in terms of net farm income (see Figure 13) With no contract extension, producers lose not only CRP payments, but also face lower corn and soybean prices.

Figure 12. Government Payments

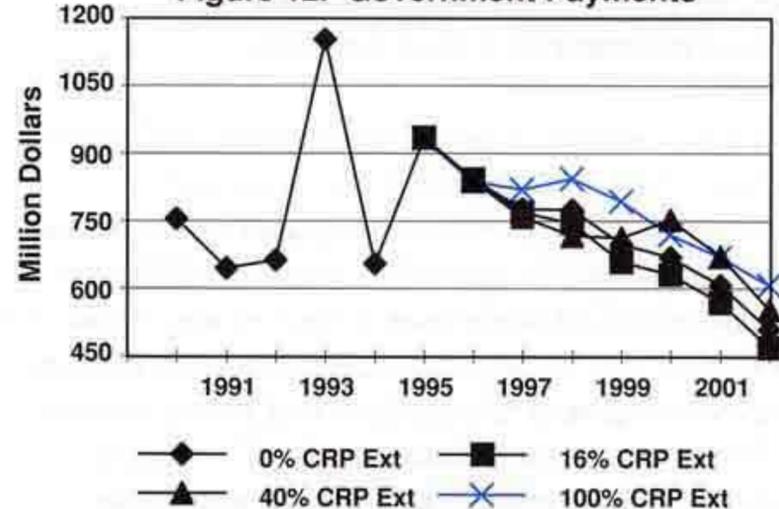


Figure 13. Iowa Net Farm Income

