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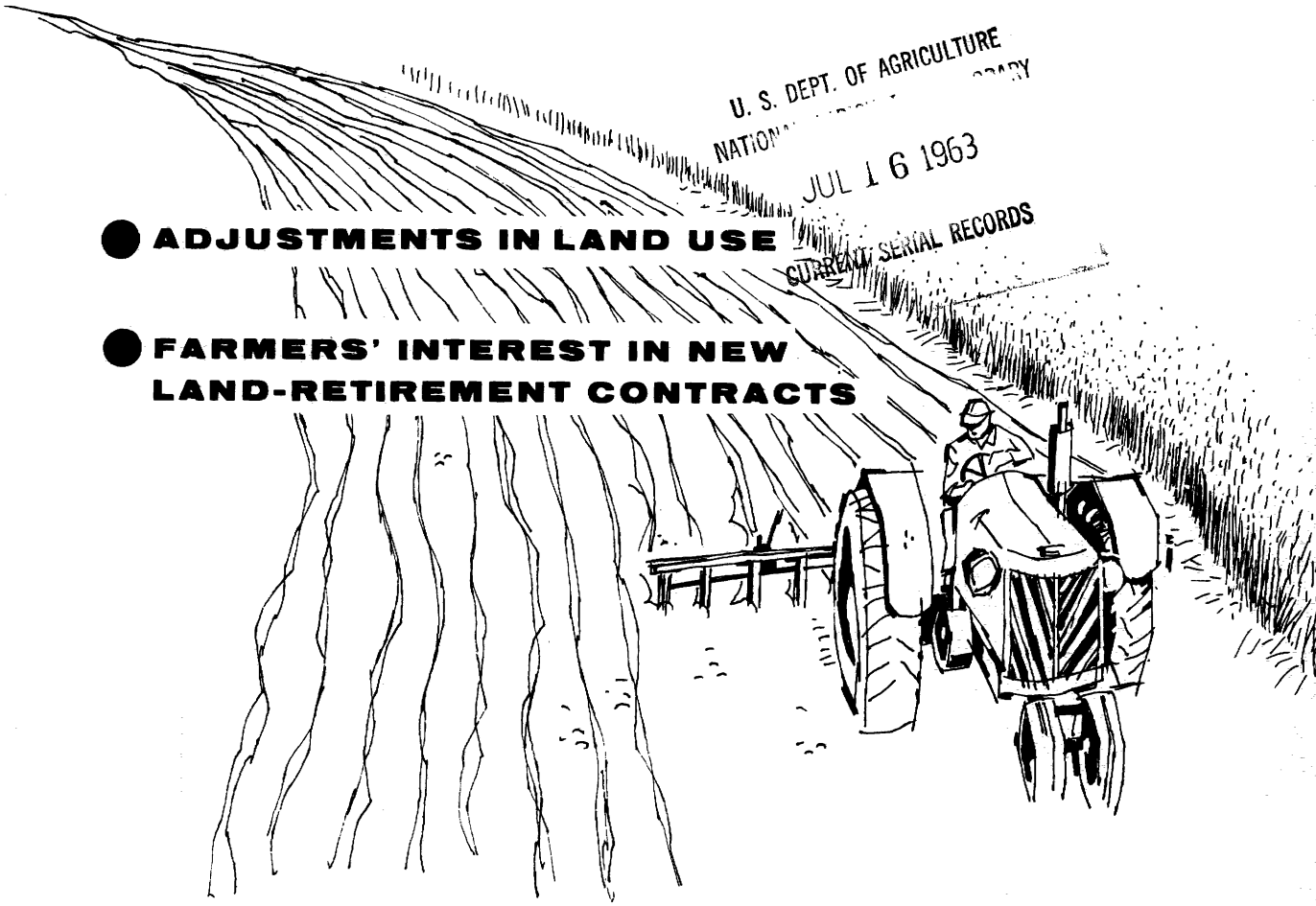
Release of land from CONSERVATION RESERVE CONTRACTS



- **ADJUSTMENTS IN LAND USE**
- **FARMERS' INTEREST IN NEW LAND-RETIREMENT CONTRACTS**

Economic Research Service • Farm Production Economics Division

U. S. DEPARTMENT OF AGRICULTURE

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SUMMARY

National Mail Survey

Forty-five percent of the 2.5 million acres of conservation reserve land released in 1961 was expected to remain in grass. Of this 1.1 million acres, farmers were expected to include about 450,000 acres or 40 percent, in the 1962 Wheat Stabilization and Feed Grain Programs. The remaining 680,000 acres were expected to remain in grass without being in a program.

About half the conservation reserve land released in 1961--1.2 million acres--had a feed grain base. About 30 percent of this acreage was expected to be diverted to a soil conserving use under the 1962 Feed Grain Program, leaving more than 800,000 acres available for the production of corn, grain sorghum, and barley in 1962. Another 160,000 acres of the land released in 1961 had been used to produce oats before being placed under contract. This land could be returned to the production of oats, a non-allotment crop which was not included in the 1962 Feed Grain Program, or could be used for the production of other crops not subject to farm programs.

Twelve percent of the land released in 1961 had a wheat allotment. About 32 percent of this wheat allotment land was expected to be diverted to a soil conserving use under the 1962 Wheat Stabilization Program, leaving 200,000 acres available for wheat production. Other allotment acreages released in 1962 included about 84,000 acres with cotton allotments, nearly 9,000 acres with peanut allotments, and 700 acres with tobacco allotments.

Six-Area Survey

The types of farms in an area influence the amount of land use adjustment obtained by a land-retirement program. In 6 areas with a high concentration of conservation reserve contracts a sample of farmers with contracts expiring in 1961 and 1963 were interviewed.

About 40 to 50 percent of the land being released was expected to remain in grass in three of the areas which had considerable livestock (Navarro County, Tex., Scurry County, Tex., and the Ward-McHenry County area, N. Dak.), and about 10 to 20 percent was expected to remain in grass in the three more highly specialized crop counties (Floyd County, Tex., Pennington County, Minn., and Cass County, N. Dak.).

The interest in new land-retirement contracts that might be offered varied widely between areas studied. Farmers in the areas studied said that at diversion rates equal to or slightly above rates in their expiring contracts, they would place under contract from 43 to 133 percent as much land as was being released in 1961 or was to be released in 1963. Farmers with livestock responded favorably to a land-retirement program which would allow grazing at a reduced payment rate. If a provision were included in the program requiring farmers to surrender their crop history, interest would fall off sharply.

Farmers in different areas preferred different types of new contracts. In four of the six areas studied, whole-farm contracts were preferred for about three-fourths of the land farmers were interested in placing under new contracts and part-farm contracts for the other one-fourth. In two areas with large acreages of high-value allotment crops, a majority of the farmers preferred part-farm contracts. About 70 percent of the land which farmers in all six areas said they would place under new land-retirement contracts had previously been under conservation reserve contracts. The variety of responses to new contracts indicates that, to be most effective for the least cost, a land-retirement program needs to offer several options in provisions and rates of payment.

RELEASE OF LAND FROM CONSERVATION RESERVE CONTRACTS

Adjustments in Land Use

Farmers' Interest in New Land-Retirement Contracts

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THE SITUATION

From 1956 to 1960 the Secretary of Agriculture, under the authority of the Soil Bank Act, signed conservation reserve contracts with more than 300,000 farmers. Farm owners and operators agreed under the contracts not to harvest crops or to pasture land placed in the Conservation Reserve Program for the duration of the contract and to reduce the total acreage of crops grown on their farms by the acreage put in the program. They also agreed to establish a permanent cover for soil protection if an acceptable one did not already exist. If the land already had a suitable cover, contracts could be for 3 years, otherwise they were for 5 to 10 years. When trees were to be planted for cover, contracts were for 10 years.

The contracts provided for two kinds of payments to the farmer: (1) Annual per-acre rental payments for each year of the contract; and (2) cost-sharing payments for carrying out conservation measures on the land under contract. Cost-sharing payments were to be made for establishing a vegetative or woody cover where none existed, for example, planting grass or trees; for building dams, pits, or ponds to protect cover crops or store water; and for protecting wildlife cover by appropriate water marsh management or dam and pond construction.

The Soil Bank Act also established, in addition to the Conservation Reserve Program, an Acreage Reserve Program under which farmers signed 1-year agreements in 1956, 1957, and 1958 to reduce their acreages of wheat, corn, cotton, rice, peanuts, and tobacco below their allotments, in return for payments to compensate them for loss of income. The study reported here, however, was concerned only with the Conservation Reserve Program of the Soil Bank.

When conservation reserve contracts expire, farmers can return the land to crop production, pasture, or any use they choose. The first conservation reserve contracts expired December 31, 1959; they covered 123,000 acres. Contracts covering 392,000 acres expired in 1960. Approximately 2.5 million acres, 9 percent of the land under contract, were released in 1961. The 25.8 million acres remaining under contract in 1962 will be released annually in units of irregular size through 1970 (table 1). The largest amounts released will be 6.8 million acres in 1963 and 6.1 million acres in 1968.

A total of 28.3 million acres of land were placed under contract during the life of the program. The use of this land after its release from contract will influence farm income, the supply of farm products, and the success of farm programs. The land retains its history of acreage allotments and base acreages of nonallotment crops while under contract, and for an additional number of years equal to the length of the contract if the land is not plowed after release. The land must be kept under protective conservation cover for the duration of the contract, and much of it may be more productive upon release than when it went into the program. The Soil Bank Division of the Agricultural Stabilization and Conservation Service estimates that if the land which had been producing feed grains before going under contract had

TABLE 1.--Estimated acreage being released from conservation reserve contracts, by regions, 1961-70[1]

Year	Northeast	Corn Belt	Lake States	Southeast and South Central	Northern Plains	Southern Plains	Mountain and Pacific	U.S.
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
1961.....	82	173	335	175	493	1,147	100	2,505
1962.....	47	88	242	124	280	471	60	1,312
1963.....	362	1,382	1,033	956	1,370	1,306	393	6,802
1964.....	208	651	460	513	911	502	166	3,411
1965.....	3	7	14	9	19	512	11	575
1966.....	16	14	267	303	298	1,299	77	2,274
1967.....	27	10	195	544	211	661	43	1,691
1968.....	203	388	480	1,284	1,462	1,994	303	6,114
1969.....	201	184	276	831	1,098	837	133	3,560
1970.....	27	1	16	20	0	--	0	64
Total.....	1,176	2,898	3,318	4,759	6,142	8,729	1,286	28,308

[1] Northeast Region--Maine, Vermont, New Hampshire, Connecticut, Massachusetts, Rhode Island, New York, Pennsylvania, New Jersey, Delaware, Maryland; Corn Belt--Ohio, Illinois, Indiana, Iowa, Missouri; Lake States--Wisconsin, Michigan Minnesota; Southeast and South-Central Regions--West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Arkansas, Louisiana; Northern Plains Region--Montana, North Dakota, South Dakota, Nebraska, Wyoming; Southern Plains Region--Colorado, Kansas, Oklahoma, New Mexico, Texas; Mountain and Pacific Regions--Idaho, Nevada, Arizona, Washington, Oregon, California.

Source: Soil Bank Division, ASCS. 1961 data do not include approximately 200,000 acres in contracts terminated due to death of owner or sale of the land, or for other reasons.

continued in production, it would in the years 1957 to 1962 have produced well over 2 billion bushels of the four feed grains (table 2). Significant quantities of the allotment crops and other commodities would also have been produced had the land under contract continued in production.

OBJECTIVES AND PROCEDURE

The purpose of the study reported here was to explore the following questions: (1) How much of the land that is now, or has been, in conservation reserve will be kept in grass? (2) What will be the effect of the release of land from contract on the national supply of land in various uses? (3) How will contract expirations affect production in selected areas? (4) What are the characteristics of farmers who are interested in various kinds of new land-retirement contracts? (5) What characteristics of farms and farmers are associated with keeping released land in grass or returning it to crop production?

A nationwide mail survey was made of ASCS county office managers in November 1961, to obtain information on expected use of land under contracts expiring December 31, 1961. A random sample of 150 names was drawn from the list of county office managers of all counties in the United States in which more than 10 contracts would expire December 31. The sample was stratified by geographic areas of the country.

Also in 1961, a personal interview survey was made in six selected areas of a random sample of landowners with contracts expiring December 31, 1961, or December 31, 1963. One area in Minnesota, two areas in North Dakota, and three in Texas were selected. Each area represented a different type of farming, but all had relatively large amounts of land being released from contract in both years.

Farmers whose contracts expired in 1961 were included in the personal interview survey because many of them had already made plans for using their released land, or at least had given consideration to alternatives. Farmers whose contracts would expire in 1963 were included because 6.8 million acres will be released in 1963--more than in any other year. A mail survey of absentee landowners in the areas studied was considered, but analysis of the records in the county offices revealed too few absentee landowners for an adequate survey.

TABLE 2.--Estimate of additional production that would have occurred in absence of Conservation Reserve Program, United States, 1957-62

Crop	Estimated production avoided
	Thousands
All corn.....bushels..	857,126
Wheat.....do....	283,254
Cotton.....bales..	2,123
Peanuts.....pounds..	600,416
Rice.....cwt..	855
Tobacco.....pounds..	78,687
Oats.....bushels..	646,210
Barley.....do....	190,972
Soybeans.....do....	97,183
Sorghum grain.....do....	675,242
Flaxseed.....do....	18,682
Dry edible beans.....cwt..	3,625
Irish potatoes.....cwt..	34,016
Hay and pasture.....(hay equivalent) tons..	32,070

Source: Soil Bank Division, ASCS. Production adjustment for 1957 through 1961 is based on each respective year's crop yields adjusted for location and quality of reserve acres; 1962 estimate is based on recent average yields adjusted for location and quality of land in program.

EFFECT OF 1961 CONTRACT EXPIRATIONS ON THE NATIONAL SUPPLY OF LAND

The data obtained in the mail survey of ASCS office managers provided a basis for projecting use in 1962 of land released from conservation reserve contracts throughout the United States in 1961. The total amount released on December 31, 1961, was 2.5 million acres. This included some land in all regions of the country, ranging from 1.1 million acres in the Southern Plains to 82,000 acres in the Northeast (table 1).

Most of this land was placed under contract before 1959, when the conservation reserve payment rates and the incentives to place whole farms in the program were lower than in 1959 and 1960. Also, land released at the end of 1961 did not include any land planted to trees under 10-year contracts. This is especially important for the Southeast Region, where nearly half the conservation reserve acreage is in trees.

In many other respects, however, the land released in 1961 is representative of land to be released in subsequent years. The largest acreages to be released, for example, tend to be in the same areas and States in all the years of expiration (tables 1 and 3). The Plains States, with about 50 percent of all the land in conservation reserve, account for about 40 to 90 percent of the acreage expiring in the different years. The Northeast, with only 4 percent of the total acreage under contract, accounts for no more than 6 percent of the land to be released in any one year. Relatively large amounts of land will be released in Texas, the Dakotas, and Minnesota in all years of contract expiration.

Adjustment to Grass

Projections based on replies of the county office managers surveyed indicated that 45 percent of the 2.5 million acres released from conservation reserve contracts throughout the United States in 1961 would remain in grass in 1962 and that about 55 percent would be cropped (table 4). Of the 1.1 million acres expected to remain in grass, about 450,000 acres, or about 40 percent, were expected to be placed in the 1962 wheat and feed grain diversion programs. Some of this acreage probably would have remained in grass even without the diversion programs. It is worthy of note that 680,000 acres were expected to remain in grass without benefit of programs other than the continued protection of crop history on farms with allotment acreage.

The proportion of released land expected to remain in grass ranged from 41 percent in the Lake States to 51 percent in the Northeast. Estimated acreages ranged from about 42,000 acres in the Northeast to over 500,000 acres in the Southern Plains.

Expected Use of Land to Be Cropped

According to the survey, the feed grain base acreages of corn, grain sorghum, and barley released from conservation contracts in 1961 varied from a low of 24 percent of the total land released in the Mountain and Pacific Regions to a high of 63 percent of the total in the Southern Plains Region (table 5). Nationally, 47 percent of the land released in 1961 had a feed grain base.

About 3 percent of the land released from contracts was cotton allotment acreage and 12 percent was wheat allotment acreage. The acreage with cotton allotments was concentrated in the Southern Plains, and the acreage with wheat allotments in the Northern and Southern Plains and in Idaho and Utah. When the percentage figures from the survey are applied to the total acreage being released from contract in each area, it appears that about 100,000 acres of wheat allotment land were released in the Northern Plains, 92,000 acres in the Southern Plains, and 64,000 acres in the Mountain and Pacific Regions (75 percent of which was in Idaho and Utah), out of a total of about 294,000 acres.

The survey indicated that not all the wheat allotment acreage being released would be used for wheat production in 1962. The released acreage expected to be diverted from wheat production to a conserving use under the 1962 Wheat Stabilization Program varied from 14 percent of the allotment acreage released in the Northern Plains to 66 percent in the Corn Belt (table 6). The national estimate was 31 percent, about 90,000 acres, which would leave a little over 200,000 acres available for wheat production in 1962. In areas where the estimated percentage of acreage to be diverted under the 1962 Wheat Stabilization Program was above 40 percent, the large number of farms with small wheat acreages were probably the cause. Under the 1962 wheat program, only farms growing less than 13.5

TABLE 3.--Acreage being released from conservation reserve contracts, 10 States with most land in expiring contracts, specified years, 1961 to 1968

State and year	Acreage expiring	State and year	Acreage expiring
1961	1,000 acres	1963	1,000 acres
1 Texas	707	1 Texas	571
2 Minnesota	226	2 Minnesota	504
3 North Dakota	204	3 North Dakota	496
4 South Dakota	182	4 South Dakota	381
5 Oklahoma	168	5 Iowa	352
6 Colorado	104	6 Nebraska	324
7 New Mexico	88	7 Kansas	302
8 Kansas	81	8 Oklahoma	296
9 Iowa	61	9 Wisconsin	276
10 Nebraska	60	10 Missouri	266
10-State total	1,881	10-State total	3,768
United States	2,505	United States	6,802
1962		1968	
1 Texas	220	1 Texas	629
2 Minnesota	199	2 Colorado	587
3 North Dakota	139	3 North Dakota	558
4 Oklahoma	104	4 South Dakota	418
5 South Dakota	95	5 Kansas	398
6 Kansas	87	6 Georgia	315
7 Missouri	51	7 Oklahoma	307
8 Colorado	44	8 Minnesota	286
9 Arkansas	28	9 Nebraska	222
10 Mississippi	26	10 Montana	222
10-State total	993	10-State total	3,942
United States	1,312	United States	6,114

acres of wheat were allowed to divert more than 40 percent of their allotments.

It is estimated that about 1.2 million acres of land with feed grain bases were released in 1961. Of this, 723,000 acres were in the Southern Plains, 158,000 in the Northern Plains, and 90,000 in the Lake States. About 30 percent of the national total was expected to be included in the 1962 Feed Grain Program, leaving more than 800,000 acres available for feed grain production. Another 160,000 acres of the land released in 1961 had been used to produce oats before being placed under contract, and could be returned to the production of oats or any other crop not restricted by Government programs. The production of oats (although a feed grain) was not controlled by the 1962 Feed Grain Program.

Projecting the Effect of Contract Expirations

It is estimated that 1961 contract expirations added nearly 1 million acres to

TABLE 4.--Expected use of land in 1962 following release from conservation reserve contracts Dec. 31, 1961, by regions

Region[1]	Land in expiring contracts				
	Total	To remain in grass[2]		To be cropped	
	1,000 acres	Percent	1,000 acres	Percent	1,000 acres
Northeast	82	51	42	49	40
Corn Belt	173	47	81	53	92
Lake States	335	41	137	59	198
Southeast and South Central	175	45	79	55	96
Northern Plains	493	48	237	52	256
Mountain and Pacific	100	49	49	51	51
Southern Plains	1,147	44	505	56	642
United States	2,505	45	1,130	55	1,375

[1] See table 1 for States in each region.
[2] Includes land that is expected to be diverted under the 1962 wheat and feed grain programs.

TABLE 5.--Previous use of land released from conservation reserve contracts Dec. 31, 1961, by regions

Region[1]	Total acreage being released	Land with allotment or feed grain base			Other uses before contract	
		Cotton	Wheat	Feed grain	Oats	Other
	1,000 acres	Percent	Percent	Percent	Percent	Percent
Northeast	82	0	18	34	11	37
Corn Belt	173	0	4	62	4	30
Lake States	335	0	4	27	10	59
Southeast and South Central	175	8	2	25	8	[2] 52
Northern Plains	493	0	20	32	5	43
Mountain and Pacific	100	1	64	24	3	8
Southern Plains	1,147	6	8	63	6	17
United States	2,505	3	12	47	6	32

[1] See table 1 for States in each region.
[2] In this area, 5 percent of the released land is peanut allotment acreage and 0.4 percent is tobacco allotment acreage.

the acreage available to produce the four feed grains. A ton of feed grain per acre from this available land in 1962 would increase feed grain production by approximately 1 million tons over the 137 million tons produced in 1961.

Contract expirations added a little more than 200,000 acres to the acreage available for wheat production in 1962. At 20 bushels an acre, 200,000 acres would add 4 million bushels of wheat to the 1961 production of 1,211 million bushels.

TABLE 6.--Land released from conservation reserve contracts Dec. 31, 1961, that was available for production of wheat, corn, grain sorghum, and barley in 1962, by regions

Region[1]	With wheat allotments				With feed grain base			
	Acreage	To be diverted under 1962 wheat program		Available for wheat production	Acreage	To be diverted under 1962 feed grain program		Available for production of 3 feed grains
	Thousands	Percent	1,000 acres	1,000 acres	Thousands	Percent	1,000 acres	1,000 acres
Northeast.....	15	54	8	7	28	37	10	18
Corn Belt.....	7	66	5	2	107	52	56	51
Lake States.....	13	60	8	5	90	56	50	40
Southeast and South Central.	4	65	3	1	44	59	26	18
Northern Plains.	99	14	14	85	158	15	24	134
Mountain-Pacific	64	18	12	52	24	19	5	19
Southern Plains.	92	43	40	52	723	27	195	528
United States.	294	31	90	204	1,174	31	366	808

[1] See table 1 for States in each region.

By using the data from this study, the use of grassland acreage being released from contract each year through 1970 can be projected. This requires the assumption that farmers with contracts expiring in different years will respond in about the same way. Both the acreage in tree contracts and farmers' decisions to adjust land to noncrop uses must be considered in this projection.

Of the 25.8 million acres remaining under contract after December 31, 1961, 2.1 million acres are in tree contracts. This land will have been in trees for 10 years when it is released from contract, and will be permanently adjusted to noncrop use. Acreage in trees is expected to be released from contract in the years 1966-71 as follows:

	Acres
1966.....	286,000
1967.....	389,000
1968.....	839,000
1969.....	567,000
1970.....	64,000
1971.....	5,800

By subtracting from the acreage being released each year (table 1) the acreage in tree contracts, and by applying the percentage distribution of expected land use given in tables 4, 5, and 6, the acreage expected to return to each use other than trees can be projected. For example, 2,274,000 acres of land will be released from contract in 1966. Subtracting the 286,000 acres in expiring tree contracts leaves 1,988,000 acres which farmers will leave in grass or use for crops. If farmers in 1966 follow the same pattern as farmers with contracts ending in 1961, they will leave 45 percent of this acreage, or 1,023,000 acres, in grass. If, as in 1961, 47 percent of the released land has a feed grain base, about 934,000 acres will be available for feed grain production.

Expiration of conservation reserve contracts affects farm income as well as farm production. Additional income will be forthcoming in most cases as a result of the released land returning to some use, but the income from the annual conservation reserve rental payments will be eliminated. The 32,173 conservation reserve contracts which expired in 1961 had been

paying $26.8 million annually into the agricultural sector of the economy. Although for all contracts written annual payments average only $832, and are limited to $5,000, conservation reserve payments constitute a considerable part of the total farm income of many of the farmers with whole-farm contracts (70 percent of all participants). These payments are also a source of income to the many merchants who sell items to farmers. The annual rental payment of over $311 million on the contracts remaining in effect in 1962 will be gradually withdrawn from farm income as these contracts expire. The subsequent use that is made of the land will determine the net effect of contract expirations on farm income.

FARM ADJUSTMENTS AFTER CONTRACT EXPIRATIONS IN 1961 AND 1963, IN SELECTED AREAS

Texas, North Dakota, and Minnesota are among the 10 States with the largest acreages in conservation reserve contracts. These States also figure importantly in the production of crops for which farm programs are in effect. Consequently, counties were selected in these three States for the personal interview survey. The counties selected vary widely in type of farming and in their present stage of adjustment to technological change.

Navarro County, Tex., is in the blackland area. Cotton is the major crop, but there appears to be some trend to close-seeded crops and livestock, accompanied by an increase in size of farms. Scurry County, Tex., is a rolling plains crop county with livestock ranches predominating in some parts of the county. Floyd County, Tex., in the southern part of the high plains, is primarily a crop county with irrigation in the western part of the county. Pennington County, Minn., is a transitional county between the cutover area and the Red River Valley. Cass County, N. Dak., in the Red River Valley, has relatively good soil and several crop alternatives. Ward and McHenry Counties in north central North Dakota comprise a dryland wheat area with considerable livestock farming.

The land and type-of-farming characteristics, as well as the potentials of these counties, exert an important influence on farmers in their selection of crop and program alternatives following termination of conservation reserve contracts.

Planned Use of Land After Release From Contract

Adjustments to Grass

In Navarro County, Tex., 74 percent of the farmers interviewed planned to leave permanently in grass the land released from conservation reserve contracts at the end of 1961 (table 7). This accounted for 49 percent of the land to be released. In Scurry County, Tex., 37 percent of the farmers planned to leave their released land in grass, accounting for 38 percent of all released land. In the Ward-McHenry area of North Dakota, 42 percent of the farmers with contracts expiring in 1961 planned to leave the land in grass. These farmers had 42 percent of the land released from contract in the area. The crop counties--Floyd County, Tex., Pennington County, Minn., and Cass County, N. Dak.--were in sharp contrast. In these counties, from 14 to 23 percent of the farmers with contracts ending in 1961 planned to leave their land, representing from 11 to 15 percent of the total being released, permanently in grass.

The proportion of the acreage being released from conservation reserve contracts in 1963 which was expected to remain in grass was about the same as in 1961 in all of the areas studied except Navarro County, Tex. In that county, farmers expected to leave 89 percent of the land to be released in 1963 permanently in grass, compared with 49 percent of the land to be released in 1961. This reflects the trend in Navarro County toward more livestock farming.

In the six areas studied, the proportion of the released land that was to remain in grass did not vary significantly according to whether the land had been in whole-farm or part-farm contracts.

Use of Land to be Cropped

On the land released in 1961 and 1963 which farmers expected to return to crops, the major use planned was feed grain production. Wheat production was the next most important use in Floyd and Cass Counties, cotton in the other two Texas counties, and flax in Pennington County and the Ward-McHenry area (table 7).

From these data it appears that, in most of the areas, the farmers interviewed planned to place only limited quantities of their released land in the 1962 feed grain

TABLE 7.--Expected use of land in year following release from conservation reserve contracts in 1961 and 1963, six selected areas

Year and county	Total acreage being released	To remain in grass		Distribution of land not to remain in grass						
		Percentage of released farms	Percentage of released acreage	Total acreage diverted	Production of 4 feed grains	In feed grain program	Production of wheat	In wheat program	Production of cotton or flax	In other uses or undecided
	Acres	Percent	Percent	Acres	Percent	Percent	Percent	Percent	Percent	Percent
Land released in 1961:										
Navarro, Tex.	3,669	74	49	1,871	64	6	0	0	[1] 22	8
Scurry, Tex.	16,173	37	38	10,027	41	35	7	0	[1] 15	2
Floyd, Tex.	9,082	23	15	7,720	38	11	22	8	[1] 6	15
Pennington, Minn.	12,424	14	13	10,809	57	0	2	0	[2] 23	18
Cass, N. Dak.	8,948	14	11	7,964	49	2	20	1	[2] 22	6
Ward-McHenry, N. Dak.	9,980	42	42	5,788	55	1	7	0	[2] 19	18
Land released in 1963:										
Navarro, Tex.	20,803	82	89	2,288	31	4	0	0	[1] 31	34
Scurry, Tex.	4,818	39	45	2,650	45	19	2	0	[1] 13	21
Floyd, Tex.	8,203	15	16	6,890	34	9	26	0	[1] 9	22
Pennington, Minn.	10,306	10	19	8,348	52	0	3	0	[2] 25	20
Cass, N. Dak.	8,647	10	11	7,696	24	0	20	0	[2] 16	40
Ward-McHenry, N. Dak.	26,168	38	39	15,962	46	0	12	1	[2] 18	23

[1] Cotton.
[2] Flax.

and wheat programs. However, the interviews were conducted prior to the sign-up periods.

Farmer Interest in Signing New Land-Retirement Contracts

The farmers interviewed were asked the amounts of land they would place under new land-retirement contracts similar to the expiring conservation reserve contracts but at different levels of payment, assuming continuation of the 1962 wheat and feed grain programs and the 1962 level of prices. They were also asked the amounts of land that they would place under contracts which permitted grazing at half the 1960 conservation reserve rental payment rate and with the crop history of the land preserved, transferable, or lost.

New Contracts not Permitting Grazing

Farmers in Navarro County and in the Ward-McHenry area showed the greatest interest in signing new contracts similar to the old ones; those in Pennington and Scurry Counties were least interested (table 8). At 80 percent of the average 1960 diversion payment rate, Navarro County farmers who had contracts expiring in 1961 were willing to sign new contracts for 54 percent as much land as was being released. At the 1960 rate, which was above the average rate for expiring contracts, they would place under contract 133 percent as much land as was being released, and at 120 percent of the 1960 rate, they would include 163 percent as much. Those who would not place any land under new contracts at the above rates would sign contracts at a rate of $19 per acre (178 percent of the average 1960 rate for the county) for 7 percent as much land as was included in their expiring contracts.

In contrast, Scurry County farmers with contracts expiring in 1961 would, at 80 percent of the 1960 average rate, place under contract only 5 percent as much land as was being released. At the 1960 rate, they would include 48 percent as much, and at 120 percent of the 1960 rate they would include 88 percent as much.

To summarize, only in Navarro County would farmers with contracts expiring in 1961 put as many acres as were being released into new contracts at the 1960 conservation reserve payment rate. In this county, considerable adjustment in agriculture is already underway. In the six areas as a whole, a rate of 20 percent above 1960 would be needed to attract an amount of land roughly equal to the amount being released from contract. A rate of 80 percent of the 1960 payment would attract fewer acres than farmers said they planned to leave permanently in grass with no program. Apparently these farmers expected to derive considerable income from the acreage they planned to leave in grass.

The preferred length of new contracts was from 5 to 8 years.

New Contracts Permitting Grazing

A program allowing grazing at half the 1960 conservation reserve payment rate and preserving crop history would receive a more favorable response in the livestock counties than in the counties more highly specialized in crops (table 9). In Navarro County, Tex., farmers would be interested in including more land under new grazing contracts than was being released--188 percent as much land as was released in 1961 and 140 percent as much land as was released in 1963. In Scurry County, Tex., farmers said they would contract to graze about 90 percent of the land released in 1961 and about two-thirds of that released in 1963. The comparable figures for the Ward-McHenry area of North Dakota were about 50 and 40 percent, respectively. In the crop counties of Pennington, Minn., and Cass, N. Dak., the farmers would be interested in including relatively little land in grazing contracts--8 to 28 percent of the land released in 1961 and 1963. The farmers interviewed in Floyd County, Tex., said they would contract to graze about two-thirds of the land being released from contracts in 1961 and about one third of that being released in 1963.

A program allowing grazing at half the 1960 conservation reserve payment rate, but with a requirement that crop history be surrendered as part of the agreement, would receive a poor response in all areas except Navarro County, where an adjustment out of crop production has been underway independently of the influence of the Conservation Reserve Program. Interest in such a program was particularly low in the crop counties, as would be expected, being zero in Floyd County. Farmers showed about the same interest in a grazing program which would allow transfer of crop history rights as they did in a program which would preserve crop history rights only on the land where it presently exists.

TABLE 8.--Interest of farmers in signing land-retirement contracts at varying payment rates, six selected areas

Year and county	Total acreage being released	Average payment rate of all expiring contracts	Percentage of released land that would be contracted at--								Average length of contract desired
			80 percent of 1960 rate		1960 rate		120 percent of 1960 rate		Higher rates[2]		
			Average rate[1]	Contracted	Average rate[1]	Contracted	Average rate[1]	Contracted	Average rate	Contracted	
Land released in 1961:	Acres	Dollars	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Years
Navarro, Tex..	3,669	10.70	9.60	54	12.00	133	14.40	163	19	7	7
Scurry, Tex...	16,173	9.00	8.80	5	11.00	48	13.20	88	20	20	5
Floyd, Tex....	9,082	11.15	10.40	12	13.00	73	15.60	102	19	12	8
Pennington, Minn.....	12,424	9.20	8.00	3	10.00	48	12.00	82	18	35	6
Cass, N. Dak..	8,948	13.00	10.70	7	13.40	58	16.00	126	20	24	6
Ward-McHenry, N. Dak.....	9,980	8.80	7.15	33	9.00	78	10.70	117	14	11	8
Land released in 1963:											
Navarro, Tex..	20,803	11.80	9.40	48	11.80	120	14.10	137	15	3	7
Scurry, Tex...	4,818	10.25	8.40	14	10.50	72	12.50	120	--	--	7
Floyd, Tex....	8,203	13.75	11.50	13	14.20	76	17.00	100	32	8	7
Pennington, Minn.....	10,306	10.00	8.00	8	10.00	43	12.00	83	17	8	7
Cass, N. Dak..	8,647	13.90	10.70	15	13.40	55	16.00	115	--	--	8
Ward-McHenry, N. Dak.....	26,168	9.60	7.15	24	9.00	78	10.70	91	18	3	6

[1] Each farmer's response was based on the 1960 payment rate for his farm.

[2] If no land would be contracted at any of the previous levels of payment, the farmer was asked the lowest rate at which he would contract land, and the acreage he would put under contract.

TABLE 9.--Interest of farmers in signing land-retirement contracts with grazing permitted, at alternative rates of payment and with varying crop history provisions, six selected areas

Year and county	Total acreage being released	Average payment rate of all expiring contracts	Percentage of released land that would be contracted at--						Average length of contract desired
			One-half the 1960 conservation reserve rate per acre				Higher rate with history preserved[3]		
			Average rate[1]	Crop history was--			Average rate	Contracted	
				Lost	Preserved	Transferable[2]			
Land released in 1961:	Acres	Dollars	Dollars	Percent	Percent	Percent	Dollars	Percent	Years
Navarro, Tex.	3,669	10.70	6.00	119	188	188	10.00	11	8
Scurry, Tex..	16,173	9.00	5.50	25	89	92	12.70	8	5
Floyd, Tex...	9,082	11.15	6.50	0	71	80	--	--	7
Pennington, Minn.....	12,424	9.20	5.00	11	14	14	7.92	5	6
Cass, N. Dak.	8,948	13.00	6.70	6	27	44	15.91	7	5
Ward-McHenry, N. Dak.	9,980	8.80	4.50	17	53	55	9.35	36	7
Land released in 1963:									
Navarro, Tex.	20,803	11.80	5.90	57	140	144	13.75	4	8
Scurry, Tex..	4,818	10.25	5.25	0	65	65	11.30	22	7
Floyd, Tex...	8,203	13.75	7.10	0	34	34	20.00	5	8
Pennington, Minn.....	10,306	10.00	5.00	3	8	8	7.10	4	8
Cass, N. Dak.	8,647	13.90	6.70	9	28	29	13.46	16	8
Ward-McHenry N. Dak.....	26,168	9.60	4.50	7	38	38	9.00	16	7

[1] Each farmer's response was based on the 1960 payment rate for his farm.

[2] May be used on other land which this farmer owns; may be sold, or rented out.

[3] If no land would be contracted at one-half the 1960 conservation reserve rate, farmers were asked the lowest rate at which they would contract land under these terms.

Comparison of Attitudes Toward Grazing and Nongrazing Contracts

Interest in signing land-retirement contracts under a program which would allow grazing varied among areas in about the same way as interest in a nongrazing program. This seems to indicate a higher "interest quotient" in a land-retirement type program in some areas than in others, irrespective of the details of the program. However, within this general framework, the specific provisions of a program affected the degree of interest within an area. This was evident in the Minnesota and North Dakota counties, where some farmers indicated that they would not be interested in contracts that allowed grazing but would be interested in contracts that allowed them to harvest hay.

Farmers appeared to desire contracts of the same duration for programs allowing grazing as for programs not permitting grazing. The farmers interviewed were hesitant to commit themselves and their land to either type of arrangement for longer than 5 to 8 years, largely because of uncertainty about future farm programs.

Effects of Types of Expiring Contracts

Farmers with whole-farm contracts showed more interest in new contracts of the same type as those expiring than did farmers with part-farm contracts. Those with whole-farm contracts ending in 1961 would have contracted three times as great a proportion of their released land as those with part-farm contracts. The difference was less for farmers with contracts ending in 1963, but it was still great.

Among farmers who would have placed released land under new contracts permitting grazing at a reduced rate, it was again the farmers with expiring whole-farm contracts who showed the greatest interest. The question now arises as to whether new whole-farm or part-farm contracts were desired.

In Navarro County, Tex., and in Cass County and the Ward-McHenry area, N. Dak., farmers who were interested in new contracts, whether grazing or nongrazing, desired whole-farm contracts for about three-fourths of the land they were interested in contracting. Because of their large acreages of high value allotment crops, farmers in Scurry and Floyd Counties, Tex., preferred part-farm contracts for 77 percent of the land they were interested in contracting.

Effect of Date Contract Signed

Farmers with contracts ending in 1961 and those with contracts ending in 1963 both appeared to have the same attitude toward signing the two types of new land-retirement contracts discussed--contracts resembling expiring contracts and contracts allowing grazing. A large majority of the farmers interviewed who had contracts ending in 1961 had put their land under contract in 1956 and 1957, the first 2 years of the program (table 10). A majority of the contracts ending in 1963 were signed in 1959 or were extended after several provisions of the program--such as rates--had been changed and stronger incentives for whole-farm contracts had been added. Analysis of data from the six areas, however, does not indicate differences in attitude toward the program between the farmers with contracts ending in 1961 and those with contracts ending in 1963. Both groups gave similar answers regarding planned land use and interest in new program alternatives. This suggests the possibility that the results of this study are applicable to the land released in 1962 and to be released in the period 1964 through 1969.

Some Differences Between Farmers Planning to Keep Land in Grass and Those Returning it to Other Uses

A hypothesis of the study was that farmers with conservation reserve contracts who made a permanent land use adjustment would have different personal and resource characteristics than farmers planning to return their released land to crop production. Data were obtained from the farmers surveyed concerning their income, residence, and occupational characteristics and their use of nonland farm resources during the contract period. The data were grouped by year of contract expiration and by whether the farmers planned to crop the released land or leave it in grass. Analysis revealed few consistent differences between farmers who planned to make the adjustment to grass and those who did not, but some differences were identified (table 11).

Income and Employment

Farmers with land in the Conservation Reserve Program have the time they previously used on the contracted land available for other uses, such as to increase their

TABLE 10.--Conservation reserve contracts expiring in 1961 and 1963: Percentage signed each year from 1956 to 1959, and percentage extended, six selected areas

Year and county	Percentage signed in--				Percentage extended
	1956	1957	1958	1959	
	Percent	Percent	Percent	Percent	Percent
Contracts expiring in 1961:					
Navarro, Tex.	6	92	--	2	2
Scurry, Tex.	64	36	--	--	32
Floyd, Tex.	73	25	--	2	45
Pennington, Minn.	--	94	2	4	6
Cass, N. Dak.	--	100	--	--	6
Ward-McHenry, N. Dak.	--	100	--	--	12
Contracts expiring in 1963:					
Navarro, Tex.	--	4	10	86	8
Scurry, Tex.	16	10	3	71	29
Floyd, Tex.	13	13	3	71	32
Pennington, Minn.	--	22	35	43	41
Cass, N. Dak.	--	21	--	79	18
Ward-McHenry, N. Dak.	--	8	10	82	16

nonfarm incomes. In the areas studied, about a fourth of the farmers planning to crop their land after contracts ended had higher nonfarm incomes than when the contracts were signed and roughly a third had the same. It might be expected that a larger portion of the farmers who planned to leave their land in grass after contracts expired would have increased their nonfarm incomes, but no substantial differences appeared from our analysis.

Employment off the farm was the most important single source of nonfarm income of the farmers interviewed. For all areas studied, it was the source of nonfarm income for nearly half the sample farmers, and in some areas for as many as three-fourths. For a substantial proportion of the others, incomes were from private businesses and investments and retirement payments. No relationship appears to exist between the source of the nonfarm income and the decision to crop the land or leave it in grass. Similarly no relationship appears to exist between the amount of either farm or nonfarm income and farmers' plans for use of the released land.

Change in Residence and Occupation

Only about 12 percent of the farmers interviewed had changed their residence after signing conservation reserve contracts. Of the farmers with land being released in 1961 and 1963 about 12 and 20 percent, respectively, had changed their major occupation after signing contracts. The average farmer with a contract expiring in either of the 2 years studied was in his late fifties, but age did not seem to have a consistent influence on change in residence or occupation. None of these three factors appeared to have a consistent influence on farmers' decisions to crop the released land or leave it in grass.

Use of Buildings and Machinery

About 65 and 50 percent respectively of the farmers with land to be released in 1961 and 1963 reported that they had continued to use the buildings on the contracted land (table 11). A small proportion had disposed of their buildings by selling, moving, or destroying them, and some had no buildings or had left them vacant.

About 70 and 55 percent respectively of the farmers with land to be released in 1961 and 1963 reported that they had continued to use their machinery while the land was under contract. Only a small proportion had sold their machinery. Some had no machinery or were not using it before placing the land under contract.

TABLE 11.--Characteristics of farmers with conservation reserve contracts expiring in 1961 and 1963, sorted by plans to crop the released land or leave it in grass

Characteristics	Planned use of land released in 1961		Planned use of land released in 1963	
	Crop	Leave in grass	Crop	Leave in grass
1961 nonfarm income compared with nonfarm income in year contract signed:	Percent of farmers	Percent of farmers	Percent of farmers	Percent of farmers
Higher	28	21	28	19
Lower	8	11	13	18
About same	35	43	33	45
None	29	25	26	18
Source of nonfarm income, 1961:				
Private business	17	20	12	16
Employment off farm	52	27	52	48
Investments	13	40	11	14
Retirement income	18	13	25	22
1961 nonfarm income of--				
Under $1,000	28	28	38	36
$1,000-$1,999	15	24	21	22
$2,000-$4,999	29	28	28	31
$5,000 and over	28	20	13	11
1961 gross farm income of--				
Under $2,500	46	46	60	50
$2,500-$4,999	17	8	21	22
$5,000-$9,999	19	19	10	13
$10,000 and over	18	27	9	15
Residence changed after signing contract	15	10	10	12
Major occupation changed after signing contract	12	12	22	18
Use of buildings while land under contract:				
Using buildings	60	72	52	51
No buildings	26	16	25	19
Buildings left vacant	10	8	15	25
Buildings disposed of	4	4	8	5
Use of machinery while land under contract:				
Used	69	71	55	54
No machinery	13	15	19	26
Not used	13	3	14	16
Sold	5	11	12	4

TABLE 11.--Characteristics of farmers with conservation reserve contracts expiring in 1961 and 1963, sorted by plans to crop the released land or leave it in grass--Continued

Characteristics	Planned use of land released in 1961		Planned use of land released in 1963	
	Crop	Leave in grass	Crop	Leave in grass
	Percent of farmers	Percent of farmers	Percent of farmers	Percent of farmers
Work on land before Dec. 1:				
Fallowed	32	0	--	--
Plowed	43	6	--	--
Seeded	16	2	--	--
Other operations	1	1	--	--
Nothing	31	91	--	--
Use of land after contract expiration:				
Farmed by owner	70	92	70	91
Rented out	29	8	29	6
Sold	1	0	1	3
Expected change in livestock numbers after release of land:				
No change	75	76	86	73
Increase	10	12	2	10
Decrease	15	12	12	17
Expected change in yields after contract expirations:				
Higher	78	63	83	67
Lower	3	10	1	1
About the same	19	27	16	32

It appears from this study that there is no relationship between the use of buildings or machinery while the land is under contract and farmers' decisions to crop the land or leave it in grass.

Land Worked Before December 1

Farmers are allowed to work and seed land under contract after July 1 of the year the contract expires. This is particularly advantageous to farmers in fallow and fall-seeded areas. Farmers surveyed who planned to crop land released from contract December 31, 1961, had fallowed 32 percent and plowed 43 percent of the land by November 30. In contrast, no work had been done on 91 percent of the land to remain in grass. A few farmers who planned to leave their land in grass had worked and reseeded the land because they were dissatisfied with the existing cover for grazing or harvest.

Land Tenure

Farmers were asked the expected tenure status of the land the year following its release from contract. Relatively more of the land that was to be kept in grass was to be used by the owner and relatively more of the land that was to be cropped was to be rented out. This was true in all but two of the areas studied as well as in the six areas as a whole.

Nearly 30 percent of the survey farmers who planned to crop the land released in 1961 had rented it out by November 30; in

contrast, only about 7 percent of the farmers who planned to leave their land in grass had rented out their land.

Very few owners planned to sell land when their conservation reserve contracts expired.

Value of Land

For both years studied, the average value per acre of released land that farmers planned to leave in grass was less than that of released land they planned to crop. This would support the expectation that the lower-value, lower-productivity land would be the type most likely to remain in grass. Navarro County, Tex., where much of the higher-value land is staying in grass, was the only exception. The difference in value per acre between the land to be cropped and that expected to remain in grass varied considerably between areas, from $3 to $68.

Change in Yields

Considerable discussion has occurred in many circles concerning the influence of the Conservation Reserve Program on yields. Some authorities maintain that the resting of the soil and the accumulation of organic matter will increase yields substantially. Equally competent authorities argue that the vegetation which has been growing will have used the moisture in the soil and that water will be a limiting factor. Perhaps both are correct, and the yields on land released from contract will vary according to soil, climate, and other characteristics of an area.

Of the farmers who planned to crop their released land, 78 percent of those with contracts expiring in 1961 and 83 percent of those with contracts expiring in 1963 expected higher yields, as compared with 63 and 67 percent of those who planned to keep their land in grass. Of the farmers who expected higher yields, the majority expected yields to be 15 to 30 percent higher, with a few expecting increases of as much as 50 percent.

Change in Livestock Numbers

Relatively more of the farmers who planned to leave their land in grass than of those planning to crop their land expected to increase their livestock numbers. About 80 percent of the farmers with contracts expiring in both years expected to make no changes and about 14 percent expected to decrease their livestock numbers.

CONCLUSIONS

The Conservation Reserve Program may be expected to result in considerable land use adjustment in total, with more adjustment taking place in areas with livestock than in cash crop farming areas. The farmers interviewed in this study who planned, as a result of participation in the program, to make a permanent land use adjustment from cultivated crops to grassland had land of lower value and lower yield. They planned to rent out more of their land, and planned to increase their livestock numbers more than the farmers who were returning their released land to cultivated crop production.

The major crop which farmers plan to produce on the released land is feed grains. This is largely because nearly half the land was used to produce feed grains before being put under contract, and therefore retains its feed grain base upon release. A limited amount of the released land will be returned to wheat production. The return of the land to the production of feed grains and wheat will increase the total production of commodities already in surplus. But the acreage of land going back into their production is small relative to total acreage.

The release of land from conservation reserve contracts also will affect farm income. The effect on farmers' incomes, both individually and in the aggregate, will depend on whether the annual increase in income resulting from returning the land to production is greater or smaller than the annual conservation reserve payments received while the land was under contract.

It is difficult to draw conclusions concerning the kind of new land-retirement program that would attract the land which farmers plan to return to crop production, and yet would not offer excessive payments for land which farmers plan to leave in grass. From the wide variation in the responses of the farmers interviewed, it appears that an effective program should offer a variety of options in provisions and in rates of payment.

Perhaps the use of crop-restricting easements, purchased by giving farmers Government loans with variable rates of

interest, is a method of limiting production that is worthy of further study. A schedule of loan rates could be developed to vary according to the quality of land and what land use adjustment was being made. For example, an adjustment from cultivated crop use to trees or recreational use would command a larger loan than an adjustment from crops to pasture on land of the same quality. The farmer would retain the prerogative of changing his land use at any time by repaying all or part of his loan and the interest, depending on the land use shift he desired to make.

The amount of money needed to finance the easement loans would be substantial, but the easements could be acquired over a reasonable period of years with the expectation that the loans would eventually be repaid when the land was needed for production. The relationship between the variable interest rate on the loan and the level of farm prices would be critical.

A cooperative USDA and Nebraska Agricultural Experiment Station study on the feasibility of Government purchase of crop restricting easements is nearing completion.

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