6.3 Conservation Reserve Program

After several years without new signups or significant new program activity, the Conservation Reserve Program (CRP) became active on multiple fronts in 1995 and 1996. In 1995, USDA allowed early release from CRP contracts, permitted 1-year extensions of contracts scheduled to expire in 1995, and held a 13th signup to replace early-out acres with more environmentally sensitive cropland. In 1996, USDA allowed a second early-out opportunity and another 1-year extension of expiring contracts. Also in 1996, the Federal Agriculture Improvement and Reform Act continued the CRP at a maximum of 36.4 million acres through the year 2002. In March 1997, USDA held a major signup based on new program rules that expanded land eligibility conditions, and revised rental payment limits and the environmental ranking acceptance process. Of 23.3 million acres offered, USDA accepted 16.1 million at an average rental fee of $39 an acre.

Contents

The Conservation Reserve Program (CRP), USDA's most ambitious conservation effort, was initiated by Congress in Title XII of the Food Security Act of 1985. As a voluntary long-term cropland retirement program, CRP provides participants (farm owners or operators) with an annual per-acre rent and half the cost of establishing a permanent land cover (usually grass or trees) in exchange for retiring highly erodible and/or environmentally sensitive cropland from production for 10-15 years. Although the enrollment mandate established in the 1985 Act was 40-45 million acres by the end of the 1990 crop year, by that point 33.9 million acres had been enrolled. The primary goal of the CRP during 1986-89 was to reduce soil erosion on highly erodible cropland. Secondary objectives included protecting the Nation's longrun capability to produce food and fiber, reducing sedimentation, improving water quality, fostering wildlife habitat, curbing the production of surplus commodities, and providing income support for farmers.

The Food, Agriculture, Conservation, and Trade Act of 1990 (1990 Farm Act) extended the CRP enrollment period through 1995, and redirected the goals of the CRP toward improving water quality and other environmental concerns. Under the 1990 Act, an additional 2.5 million acres were enrolled, bringing total enrollment to 36.4 million acres as of 1993. Subsequent appropriations legislation capped CRP enrollment at 38 million acres. In April 1996, President Clinton signed the Federal Agricultural Improvement and Reform Act (1996 Farm Act), continuing the CRP through 2002. Under this legislation, USDA was given authority to re-enroll existing CRP contracts, as well as enroll new acres, subject to a maximum annual enrollment of 36.4 million acres.

Table 6.3.1—Conservation Reserve Program activity, 1986-96

Event	Number of acres	Average rental payment when in CRP	Average erosion reduction when in CRP
	Million acres	*$/acre/year*	*Tons/acre/year*
Signup #1, March 1986[1]	0.75	42.06	26
Signup #2, May 1986	2.77	44.05	27
Signup #3, August 1986[2]	4.70	46.96	25
Signup #4, February 1987[3]	9.48	51.19	19
Signup #5, July 1987	4.44	48.03	17
Signup #6, February[4]	3.38	47.90	18
Signup #7, July 1988	2.60	49.71	17
Signup #8, February 1989[5]	2.46	51.04	14
Signup #9, July-August 1989	3.33	50.99	14
Signup #10, March 1991[6]	0.48	53.66	17
Signup #11, July 1991	1.00	59.37	15
Signup #12, June 1992	1.03	62.98	16
Early-out #1, May 1995	-0.70	58.51	20
Signup #13, September 1995[7]	0.62	53.93	10
1995 expirations	-0.13	46.36	26
Early-out #2, 1996	-0.77	57.41	17
1996 expirations	-0.96	60.51	22
Net enrollment, Dec. 1996[8]	32.96	49.20	19

[1] Eligible acres included cropland in land capability classes II-V eroding at least three times greater than the tolerance rate, or any cropland in land capability classes VI-VIII. [2] Eligible acres expanded to include cropland in land capability classes II-V eroding at least two time the tolerance rate and having gully erosion. [3] Eligible acres expanded to include cropland eroding above the tolerance rate with an erodibility index of 8 or greater. [4] Eligible acres expanded to include cropland in land capability classes II-V eroding at least two times the tolerance rate if planted in trees. Eligibility also extended to cropland areas 66-99 feet wide adjacent to permanent water bodies for placement in filter strips. [5] Eligible acres expanded to include cropped wetlands and cropland areas subject to scour erosion. [6] Eligible acres expanded to include cropland devoted to easement practices, cropland in State water quality areas, cropland in conservation priority areas, and cropland within established wellhead protection areas. Farmed wetlands, even if otherwise eligible, were ineligible for enrollment. [7] Eligible acres included fields with an average erodibility index greater than or equal to 8, cropland areas with evidence of scour erosion caused by out-of-bank water flows and floods occurring in at least one out of 10 years, wellhead protection areas identified by the Environmental Protection Agency, any cropland determined suitable for riparian buffer/filterstrips by NRCS, small farmed wetlands contained in and part of a field that were otherwise eligible, or any cropland located in the Chesapeake Bay region watershed, the Great region watershed, the Long Island Sound watershed, other areas designated as conservation priority areas in CRP signup 12, and newly approved State priority areas. [8] Net after subtracting 1.5 million acres terminated by producers prior to 1995 early-out.

Source: USDA, ERS, based on CRP contract data.

Program Status Up to the 1996 Farm Act

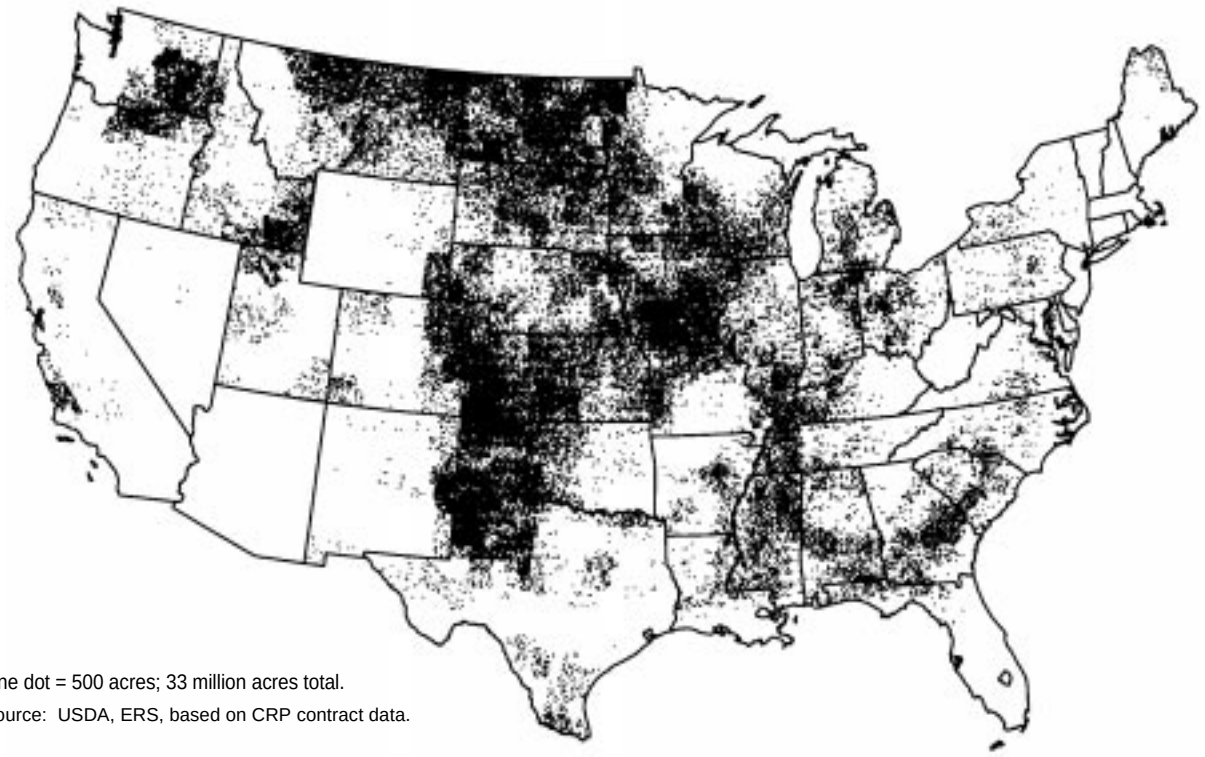
After 12 years, as of December 1996, the CRP contained approximately 33 million acres of idled cropland (table 6.3.1). This is less than the 37.0 million acres enrolled in signups 1-13 due to 704,000 acres removed in the May 1995 early-out, 1.5 million acres from contracts previously terminated by producers, 126,000 acres scheduled to expire in 1995 and not extended by producers, 768,000 acres removed under 1996 early-out authority, and 956,000 acres scheduled to expire in 1996 and not extended (table 6.3.2).

CRP acres (December 1996) were concentrated in the Great Plains and western Corn Belt (table 6.3.2, fig. 6.3.1). Annual CRP rental payments averaged about $49 per acre. Annual erosion reductions for the acreage in the program as of December 1996 totaled 626 million tons, or about 19 tons per acre. This is a 20-percent reduction in cropland erosion compared with conditions prior to the CRP. Most CRP acres were planted to grass, but the CRP also included 2.4 million acres of trees, 1.6 million acres of special wildlife practices (e.g. habitat, shallow water area), and 8,100 miles of filter strips along waterways.

Early-Outs and Contract Extensions in 1995

On December 14, 1994, the Secretary of Agriculture announced that, under authority of the 1985 and 1990 Farm Acts, USDA would (1) allow participants to be released early from contracts (or to reduce the number of acres under contract), and (2) allow producers with contracts expiring in 1995 to extend their contracts 1 year.

Figure 6.3.1--Acres under CRP contract, December 1996



One dot = 500 acres; 33 million acres total.

Source: USDA, ERS, based on CRP contract data.

Table 6.3.2—Remaining regional CRP enrollment, December 1996

Region	Enrolled in signups 1-12	Terminated by producers prior to early-out opportunity	Terminated by producers in early-out opportunity, May 1995	Enrolled in replacement signup 13, Sept. 1995	Unextended contracts that expired in 1995	Terminated by producers in 1996 early-out	Unextended contracts that expired in 1996[2]	Remaining enrollment[1]
				1,000 acres				
Appalachian	1,158	-54	-66	19	-20	-19	-97	922
Corn Belt	5,603	-126	-245	193	-23	-198	-383	4,821
Delta	1,248	-48	-18	47	-12	-9	-31	1,177
Lake States	3,008	-142	-96	68	-11	-185	-84	2,559
Mountain	6,687	-137	-62	76	-14	-100	-84	6,365
Northeast	226	-17	-9	10	-3	-5	-9	194
Northern Plains	9,664	-732	-96	100	-14	-144	-142	8,635
Pacific	1,791	-27	-14	18	-5	-27	-27	1,708
Southeast	1,693	-130	-22	28	-14	-10	-32	1,512
Southern Plains	5,343	-116	-75	58	-11	-71	-65	5,064
U.S.[1]	36,423	-1,528	-704	616	-126	-768	-956	32,956

[1] May not add across or down because of rounding.

[2] Includes acres terminated during Oct.-Dec. 1996 (FY 1997).

Source: USDA, ERS, based on FSA data on CRP contracts.

During May 15-June 2, 1995, CRP participants were permitted to request early contract releases without penalty or obligation to refund previous payments issued under the CRP. Prior to this opportunity, participants had been required to refund past CRP rental payments plus interest, liquidated damages, and, in many cases, cost-share payments previously paid under the contract. The early release was designed to replace these acres with more environmentally sensitive cropland under new CRP contracts, and to allow the released acres to produce additional grain given low stocks.

A number of conditions were in effect for the early release opportunity. First, certain environmentally sensitive CRP acres were ineligible. These included acres within 100 feet of a stream or other water body, acres covered by a CRP easement, and acres containing grass waterways, filter strips, shallow water areas for wildlife, bottomland timber on wetlands, field windbreaks, and shelterbelts established by the CRP. If the released CRP acres were to be cropped, eligibility for certain USDA benefits required they be farmed according to a Basic Conservation System (BCS), at least until the date the CRP contract would have expired. A BCS reduces soil erosion to the soil-loss tolerance level—the rate of soil erosion above which long-term soil productivity may be depleted. This is a higher, and potentially more costly, level of erosion control, than an Alternative Conservation System (ACS) which is required of highly erodible cropland and CRP acres after contracts expire. If the released CRP acres were to be hayed or grazed, they had to be managed in accordance with an approved haying or grazing plan determined by the Natural Resource Conservation Service (NRCS). Crop acreage bases, allotments, and quotas associated with the released CRP acres could not be reinstated until the 1996 crop year, making deficiency payments unavailable for 1995 even if released acres were planted that crop year. Finally, the effective date of the release could not exceed September 30, 1995.

It had been estimated that CRP participants could potentially opt to end contracts early on as many as 4.5 million acres. However, perhaps due to the lateness of the early-out opportunity in the crop year and the conditions listed above, producers requested early release on just 704,000 acres. Iowa had the most acres removed, followed by Texas and Minnesota. Regionally, early-out acres were greatest in the Corn Belt (245,000), followed by the Lake States (96,000) and the Northern Plains (96,000) (table 6.3.2).

Also, during May 15-June 2, 1995, CRP participants with contracts expiring September 30, 1995 (approximately 2 million acres) were allowed to submit requests to extend their contracts for 1 additional year. This opportunity was to help these participants whose contracts were expected to expire before passage of the farm bill make informed decisions about the use of their CRP acres in light of changes to conservation and commodity programs contained in new farm legislation. Of the acres scheduled to expire in 1995, 25,000 elected early-out in May, 1.7 million were extended for 1 year, and 126,000 expired on schedule. The additional government cost of extending the 1.7 million acres for 1 year was approximately $70 million.

Targeted 1995 Replacement Signup

To replace the acres granted early release in June 1995, USDA held a 13th CRP signup during September 11-22, 1995 to accept bids for new 10-15 year contracts. This was the first signup since June 1992. To enroll acres with the highest environmental benefits relative to government cost, bids were ranked by an environmental benefits index, much as in signups 10-12. However, substantial changes were made, among them:

- Cropland eligibility criteria were modified from past signups.
- Producers were given open access to information on how the environmental benefits index was calculated and on the maximum rental payment the Government would accept for their cropland based on their soil's productivity.
- States could develop their own bid-ranking process to be used in place of the national process. Colorado, Missouri, Nebraska, and Oregon developed their own processes.
- Environmental Priority (EP) bids, such as filter strips along waterways, were eligible for a 10-percent rental bonus to promote their enrollment.

Cropland eligible for enrollment included fields with an average erodibility index greater than or equal to 8. This criteria removed land capability class as a definition for highly erodible acres under CRP and replaced the two-thirds field predominance requirement used in previous signups. Eligibility also included cropland with evidence of scour erosion caused by out-of-bank water flows and floods occurring in at least 1 out of 10 years; wellhead protection areas identified by the Environmental Protection Agency; any cropland determined suitable

Table 6.3.3—Results of the 13th CRP signup, September 1995

Region	Acres bid	Acres accepted and contracted	Acres with trees	Average rental rate	Average erosion reduction
	1,000 acres			*$/acre/yr*	*tons/acre/yr*
Appalachian	29	19	4	54.92	11
Corn Belt	423	193	8	80.93	9
Delta	71	47	40	40.53	10
Lake States	144	68	8	59.13	6
Mountain	139	76	0	30.76	8
Northeast	16	10	0	43.95	5
Northern Plains	179	100	0	39.71	7
Pacific	30	18	0	49.00	8
Southeast	42	28	20	38.52	9
Southern Plains	101	58	0	32.45	25
U.S.	1,174	616	80	53.79	10

Source: USDA, ERS, based on FSA data on CRP contracts.

for riparian buffer/filterstrips by NRCS; small farmed wetlands contained in and part of a field that was otherwise eligible; and any cropland located in the Chesapeake Bay region watershed, the Great Lakes region watershed, the Long Island Sound watershed, other areas designated as conservation priority areas in CRP signup 12, and newly approved State priority areas.

A national ranking process was used to determine the amount of acreage to be approved in each State and to determine the actual acceptance of bids in States that did not develop their own process. The environmental benefits index used in the national ranking process was comprised of five factors, four characterizing the environmental contributions of each parcel offered and one characterizing the government cost of enrolling each parcel. The environmental factors included water quality protection (both ground water and surface water; a maximum of 20 points), creation of wildlife habitat (a maximum of 20 points), control of soil erodibility (a maximum of 20 points), and tree planting (a maximum of 10 points). The cost factor was based on the annual rental rate requested by the producer. For two bids with the same environmental score, the bid with the lower per-acre cost received a higher ranking in both the national and State ranking plans. In addition, certain acres categorized as EP bids (partial-field bids devoted exclusively to filter strips, shallow water areas for wildlife, field windbreaks, shelter belts, etc.) automatically received maximum environmental factor scores under both national and State ranking plans.

During the signup, USDA informed each applicant of the maximum annual per-acre rental payment the Government would accept (bid cap) for the cropland offered based on the soil's productivity. Applicants were free to request any rental amount, but bids that exceeded the bid cap were rejected at the county level. Applicants could increase their likelihood of bid acceptance by bidding less than the cap.

In total, 1.17 million acres were offered for enrollment by landowners and operators in the 13th signup (table 6.3.3). Of these, 683,000 were accepted to replace the acres removed in the May 1995 early-out opportunity, and of these, producers entered into contracts on 616,000 acres. The average annual rental cost for land accepted in the 13th signup was $53.79 per acre, significantly less than recent signups. The average erosion reduction for accepted acres was lower than under previous signups at 10 tons per acre per year. Thirty-one percent of accepted acres were located in the Corn Belt region, while 38 percent were from the Great Plains States (Northern Plains, Southern Plains, and Mountain regions). Most acres (80 percent) were planted with grass, but tree planting accounted for 80,000 acres (13 percent) and filter strips accounted for 31,000 acres (5 percent). The filter strip enrollment from the 13th signup represented a 58-percent increase in total CRP filter strip acres.

Early-Outs and Contract Extensions in 1996

On March 14, 1996, the Secretary of Agriculture announced a second early-out opportunity for March 20-April 26, 1996. This opportunity pertained to

CRP contracts scheduled to expire in September 1996, covering more than 14 million acres. As with the 1995 early-out opportunity, certain environmentally sensitive acres such as filter strips, acres within 100 feet of a stream or other water body, and grass waterways were not eligible. In addition, CRP acres with an erodibility index greater than 15 were ineligible. Unlike the 1995 early-out, producers that returned their released acres to crop production needed only adopt an Approved Conservation System to be eligible for USDA program benefits; and acreage bases, allotments, and quotas were restored for the 1996 crop year. USDA took this action to allow farmers to take advantage of high grain prices, to ensure higher production to meet demand, and meet the administration's commitment to an environmentally sound and cost-effective CRP. This early-out opportunity was later eclipsed by the passage of the 1996 Farm Act, which provided authority for producers to withdraw most lands from the CRP at any time, subject to 60-day notice to USDA. As of December 1996, nearly 768,000 acres were removed from the CRP under the 1996 early-out authority (table 6.3.2).

In addition to the early-out option, producers were allowed to extend their expiring 1996 contracts 1 year at existing rental rates during March 20-April 26, 1996. In announcing the signup period, the Secretary said, "A 1-year extension is the most prudent option until a new farm bill is enacted giving USDA enrollment authority and establishing a longer-term policy for the CRP." Operators chose to extend contracts on all but 956,000 acres (table 6.3.2).

Program Changes and Status Under the 1996 Farm Act

The new Federal Agricultural Improvement and Reform Act (1996 Farm Act), signed into law in April 1996, continued the CRP at a maximum of 36.4 million acres through the year 2002, and allowed USDA to enroll new acres in addition to re-enrolling existing CRP acres. The Act also provided authority for producers with contracts established before January 1, 1995, that have been in effect for at least 5 years, to withdraw from the CRP at any time subject to 60 days notice to USDA. However, CRP acres with filterstrips, grass waterways, riparian areas, windbreaks, shelterbelts, acres having an erodibility index greater than 15, and other lands with high environmental benefits as determined by the Secretary (including wetlands) are ineligible for early withdrawal. Producers will receive prorated rental payments for contracts that are withdrawn before the end of a fiscal year. The 1996 Act further stipulated that early withdrawal of a CRP contract shall not affect the ability of the owner or operator to submit a bid to re-enroll the land in the CRP at a future date. Finally, conservation requirements under conservation compliance, sodbuster, and swampbuster for CRP lands returned to production must be no more onerous than those required for similar lands in the area.

Continuous 14th Signup

Under the authority of the 1996 Farm Act, on September 4, 1996, USDA began a continuous CRP signup (referred to as the 14th signup) for filter strips, riparian buffers, grassed waterways, field windbreaks, shelterbelts, living snow fences, salt-tolerant vegetation, shallow water areas for wildlife, and wellhead protection areas designated by EPA. These partial-field practices involve a small amount of acreage, but provide disproportionately large environmental benefits. Producers wishing to enroll acres devoted to these practices may do so at any time, avoiding the need to wait for a discrete CRP signup period. If the producer is willing to accept no more than a maximum productivity-adjusted payment rate calculated by FSA, these acres will be automatically accepted. In addition, special bonus payments may also be available to attract certain high-priority practices.

15th Signup in March 1997

In early 1997, CRP acreage acceptance rules were finalized for a 15th signup opportunity March 3-28, 1997. The new rules expanded the base of eligible lands to more than 240 million acres, including about 65 percent of U.S. cultivated cropland, compared with around 100 million acres of highly erodible cropland eligible when the CRP was first initiated (table 6.3.4).

Table 6.3.4—Lands eligible for CRP signup, based on the 1996 Farm Act

Category	Million acres
Highly erodible cropland	142
Cropland in national priority areas	86
Cropland in State priority areas	24
Cropland adjacent to water bodies	13
Cropped wetlands and adjacent upland	8
Pastureland adjacent to water bodies	na
Total CRP land eligibility[1]	240

na = Not available.

[1] Excludes minor categories of eligible land and double-counting of acres falling into more than one category.

Source: USDA, ERS, based on FSA analysis.

Table 6.3.5—Results of the 15th CRP signup, March 1997

Region	Acres offered for enrollment	Acres accepted	Accepted acres formerly in CRP	Average rental rate	Existing or new tree acres accepted	Wetland restoration acres accepted	Average erodibility index
	1,000 acres		*Percent*	*$/acre/yr*		*1,000 acres*	
Appalachian	498.9	348.6	89.9	55	56.3	0.0	32
Corn Belt	2,787.0	1,670.4	81.2	70	40.0	7.1	27
Delta	674.8	613.5	80.9	37	442.7	9.2	24
Lake States	1,490.4	637.1	74.5	52	55.2	39.9	13
Mountain	5,443.1	4,132.1	71.7	32	3.6	1.6	15
Northeast	99.9	90.4	70.8	43	3.3	0.1	23
Northern Plains	6,026.1	5,050.3	67.6	36	5.3	724.3	10
Pacific	1,322.2	606.9	84.6	40	3.7	5.2	15
Southeast	781.8	584.7	86.2	37	440.9	0.5	15
Southern Plains	4,144.8	2,413.0	68.2	33	6.4	1.5	16
U.S.	23,269.1	16,147.0	72.7	39	1,057.5	790.3	16

Source: USDA, ERS, based on FSA CRP summary tables.

The additional eligible lands were mostly cropland in national and State environmental priority areas, cropland adjacent to water bodies, and cropped wetlands and adjacent upland.

Producers that wished to enroll eligible land with practices not covered by the continuous signup, including eligible acres from the 21.5 million acres with CRP contracts then scheduled to expire in 1997, had to submit bids for their land and compete with other bids for acceptance. Offers of eligible land were ranked using an environmental benefits index (EBI). The EBI for the 15th signup was composed of the sum of 6 environmental factors and a cost factor: wildlife habitat benefits (100 points maximum); water quality benefits from reduced water erosion, runoff, and leaching (100 points maximum); onfarm benefits of reduced wind or water erosion (100 points maximum); long-term benefits of cover beyond the contract period (50 points maximum); air quality benefits from reduced wind erosion (25 points maximum); benefits from enrollment in conservation priority areas (25 points maximum); and cost (200 points maximum).

On May 22, 1997, USDA accepted 16.1 million acres for enrollment in the CRP from the 15th signup period. Approximately 23.3 million acres had been offered by producers. Of the acres accepted, 4.4 million represented new acres not formerly enrolled in the program. The regional distribution of accepted acres was similar to the historic CRP except for small reductions in the Lake States and Pacific Regions, and a small increase in the Mountain Region (table 6.3.5).

The average environmental index (EBI) score for the acres enrolled in the 15th signup (307) was 46 percent greater than the average EBI of the historic CRP (210) owing mainly to improved wildlife habitat benefits, water quality benefits, and decreased rental costs. Approximately 84 percent of accepted acres were highly erodible, and nearly half of these acres had an erodibility index greater than 15. The average erodibility index for accepted acres was 16. Approximatley 1.1 million of the accepted acres were devoted to new or existing trees, while most of the remainder will be covered with various grasses. Included in the acres accepted in the 15th signup were over 790,000 acres of cropped wetland and associated acreage that will be restored and over 652,000 acres that were enrolled in State water quality areas.

Due to revised soil bid caps and enhanced program competition, annual rental costs were reduced from an average of $50 per acre under the historic CRP to $39 on the 15th signup accepted acres. In addition, over 60 percent of rental payments requested by producers were below established USDA soil bid caps. Based on the improved EBI and the lower rental cost, USDA announced that the newly accepted acreage

Wildlife Benefits of the Conservation Reserve Program

The CRP provides exceptional opportunities to enhance habitat for grassland-dependent birds and other wildlife. Lands enrolled in the CRP are extensive enough that they can have large-scale effects on populations of both game and nongame species. In some areas, CRP lands now represent the majority of available grassland habitat for wildlife. The CRP has created new grassland habitat for wildlife on an area twice the size of all national wildlife refuges and all State wildlife areas within the contiguous 48 States (Wildlife Management Institute, 1994).

Numerous studies have documented increased reproduction and diversity of game and nongame species in areas where CRP land is present. The CRP has been beneficial to many grassland wildlife species, including regular game birds (pheasants and ducks) and other species (lesser prairie chicken and the formerly endangered greater prairie chicken). Big-game wildlife such as elk, mule deer, white-tailed deer, and pronghorn antelope have also responded favorably to habitat improvement on CRP land in Western States.

CRP also improves aquatic habitats by reducing discharge of soil sediment and agricultural chemicals. Impacts would be most noticeable in rural watersheds dominated by agricultural activity. Improved aquatic habitat implies healthier and more diverse fish populations and enhanced recreational fishing opportunities.

Beneficial impacts on wildlife populations generate welfare benefits for those who participate in consumptive (hunting) and non-consumptive (observing) recreation activities. Even though no cash transactions may be involved, participants place a value on an increase in the quality of the recreation activity.

Estimating the environmental economic benefits of the CRP is difficult and imprecise due to the nonmarket nature of these effects. One study has estimated that benefits for small game hunting total about $3 billion for acres enrolled in the CRP (total over life of current contracts, not annual) (Ribaudo and others, 1990). Economic benefits from improved waterfowl hunting because of CRP are estimated to total $1.4 billion (Johnson and others, 1994). An estimate of benefits for nonconsumptive wildlife use (birdwatching, etc) totals $4.1 billion (Johnson and others, 1994). Freshwater fishing benefits are estimated to total $310 million (Ribaudo, 1989).

represented an 85 percent increase in the CRP's environmental cost-effectiveness (USDA, 1997).

Another CRP signup is planned for the fall of 1997.

Scheduled Contract Expirations

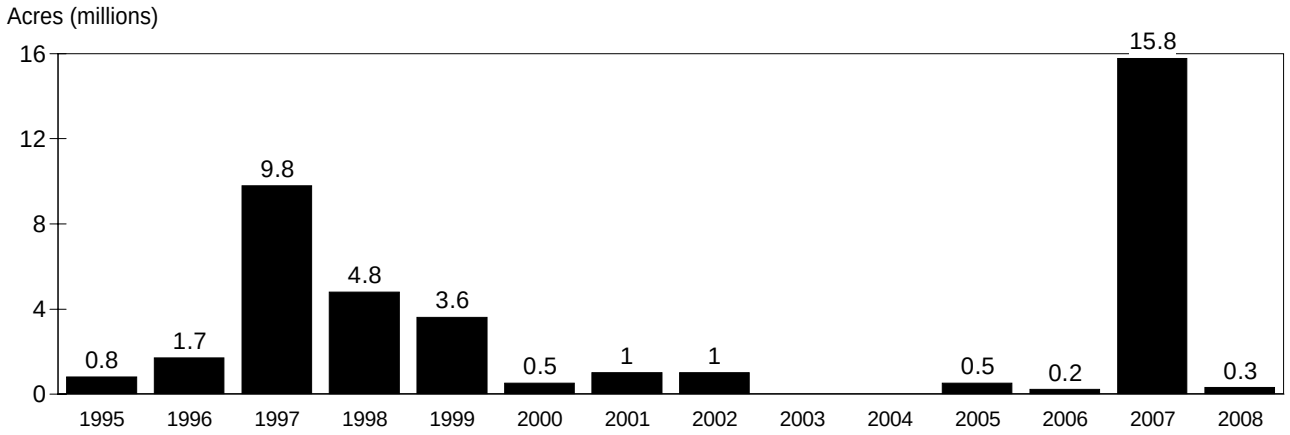
At the end of the CRP contract period, annual rental payments made by USDA to CRP contract-holders cease, and producers may decide the next use of their land. If the land is returned to crop production and it is highly erodible, producers must adopt an approved alternative conservation system to meet Conservation Compliance requirements for retaining eligibility for USDA farm program benefits. CRP contract expirations in 1995 and 1996 were small due to the 1-year contract extension options granted producers in these years (fig. 6.3.2). However, combining extended contract acres with acres from contracts scheduled to expire on September 30, 1997, brought anticipated 1997 contract expirations to 21.5 million acres. However, 11.7 million of these acres were accepted for new contracts in the 15th signup, leaving 9.8 million expected to expire in 1997.

Approximately 4.8 million acres are scheduled to expire in 1998, and 3.6 million acres in 1999.

Program Cost, Benefits, and Effectiveness

By idling highly erodible or other environmentally sensitive cropland, the CRP produces a wide range of physical and economic effects. Some effects, such as improved environmental quality and higher food costs, represent changes in the quantity or quality of real goods and services valued by society. These are the social benefits and costs. Other effects, including the disbursement of annual CRP rental payments and reduced outlays for USDA commodity programs, are not changes to real goods or services but to transfer payments between regions or sectors of the economy. Due to this fundamental difference, the overall effect of the CRP cannot be determined by simply adding up all the individual effects without regard to whether they represent real changes to social welfare or are merely transfer payments. Two separate accounting frameworks are necessary. The first focuses on CRP's net effect on social welfare, while the second

Figure 6.3.2--Schedule of CRP contract expirations, May 1997



1997 is net after subtracting 11.7 million acres scheduled to expire in 1997 but accepted for new contracts in the 15th signup.

Source: USDA, ERS, based on FSA data on CRP contracts.

summarizes the program's net effect on government spending.

For social welfare, it is necessary to estimate product and service value changes that occur with and without the CRP. In 1990, when the CRP stood at 33.9 million acres, ERS estimated net social benefits of $4.2-$9 billion in present value over the life of the program (Osborn and Konyar, 1990). This is the extent to which the social benefits of the CRP exceeded its social costs. Social benefits included increases in net farm income ($2.1-$6.3 billion), the value of future timber ($3.3 billion), preservation of soil productivity ($0.6-$1.7 billion), improved surface-water quality ($1.3-$4.2 billion), lower damages due to windblown dust ($0.3-$0.9 billion), and enhanced small-game hunting ($1.9-$3.1 billion). Social costs included higher food costs to consumers ($2.9-$7.8 billion), costs of establishing vegetative cover on CRP acres ($2.4 billion), and USDA technical assistance ($0.1 billion). Since then, the U.S. Fish and Wildlife Service has estimated additional wildlife benefits of $1.4 billion for waterfowl hunting, and $4.1 billion for nonconsumptive wildlife benefits, making wildlife the largest benefit category for the CRP and bringing overall net benefits of the CRP to $9.7-$14.5 billion (see box, "Wildlife Benefits of the Conservation Reserve Program").

In 1990, ERS also estimated the net government cost (the second evaluation framework) of the CRP at $6.6-$9.3 billion in present value over the life of the program. Program expenses were estimated at $14.6 billion in present value, of which $13 billion represented annual rental payments. Commodity program cost savings were estimated at $5.3-$8 billion. However, estimates of commodity program savings are very sensitive to assumptions about annual acreage reduction programs that would exist in the absence of the CRP. Estimates of commodity program savings, for example, would be much smaller if it were assumed that annual acreage reduction programs in the absence of the CRP would be larger.

While the CRP has provided significant conservation and environmental benefits, especially for wildlife, most agree that the overall program could have been structured to provide even greater benefits. In addition, the government cost of enrolling some CRP acres could have been lower, particularly in the Great Plains. Experience of program implementation before and after passage of the 1990 Farm Act shows that (1) active targeting of bids based on relative comparisons of environmental benefits and contract costs improves program cost-effectiveness, and (2) consideration of the productivity of the acres offered in each bid can reduce the likelihood of overpayment.

Signups 1-9, conducted under authority of the 1985 Farm Act, were subject to mandatory minimum annual enrollment levels as established in the Act. In an effort to meet these enrollment levels, USDA did

Recent ERS Reports on the Conservation Reserve Program

The Conservation Reserve Program: Enrollment Statistics for Signup Periods 1-12 and Fiscal Years 1986-93, SB-925, Nov. 1995 (C. Tim Osborn, Felix Llacuna, and Michael Linsenbigler). Through the 12th signup, 36.4 million acres had been enrolled in the CRP with an average annual rental cost of $49.67 per acre and an average annual erosion reduction of 19 tons per acre.

"Changes in Store for CRP," *Agricultural Outlook,* Sept. 1995 (C. Tim Osborn). Administration actions on the CRP as of 1995 are reviewed as are proposals for the future of the CRP, including legislative proposals by members of Congress, the Senate Agriculture Committee's early version of the conservation title, and the administration's farm policy guidelines.

Expiration of Conservation Reserve Program Contracts, AIB-664-2, April 1993 (C. Tim Osborn and Ralph E. Heimlich). Outlines the imminent expiration of CRP contracts, what is at stake, and alternative policy options.

"A Fresh Look at the CRP," *Agricultural Outlook,* Aug. 1990 (C. Tim Osborn and Kazim Konyar). Based on the 33.9 million acres enrolled in signup periods 1-9, net economic benefits of the CRP were estimated to be $4.2-$9 billion in present value over the life of the program. This included benefits to farm income, timber production, soil productivity, water quality, wildlife, and air quality.

The Conservation Reserve Program: An Economic Assessment, AER-626, Feb. 1990 (C. Edwin Young and C. Tim Osborn). The net economic benefits of a 45-million acre CRP were estimated to be $3.4-$11 billion in present value over the life of the program (1986-1999). Effects of placing less emphasis on soil erosion control and more emphasis on forestry and environmental benefits were also examined.

Natural Resources and Users Benefit from the Conservation Reserve Program, AER-627, Jan. 1990 (Marc O. Ribaudo, Daniel Colacicco, Linda L. Langner, Steven Piper, and Glenn D. Schiable). This report provides detailed natural resource benefit estimates resulting from the CRP, including soil productivity, water quality, air quality, wildlife habitat, and groundwater supply.

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not rank bids in signups 1-9. Rather, bids were accepted as long as (1) ownership and land eligibility criteria were met, and (2) the rental rate requested by the producer did not exceed a USDA maximum acceptable rental rate (MARR) established for a multicounty area or State. Therefore, an eligible parcel with twice the erodibility of another eligible parcel had no greater priority for enrollment. In addition, USDA established only one MARR for each area and this amount eventually became known to producers. As a result, producers could receive rental payments in excess of prevailing cash rents for enrolling less productive land. Also, MARR's were sometimes set too high in relation to average cash rents, primarily in the Great Plains, also contributing to overpayment.

Based on the need to enroll only a limited amount of additional acreage during 1990-95, under authority of the 1990 Farm Act, USDA actively ranked bids for acceptance in CRP signups 10-13. The ranking processes were designed to select acreage that provided the greatest conservation and environmental benefits relative to the government cost of enrollment. In addition, to reduce overpayment, new rental rate screening processes were instituted.

In signups 10-12, the rental payment requested by a producer was screened against a soil productivity-adjusted estimate of the rent that could be earned on comparable local cropland. Bids that exceeded this amount, adjusted for other costs incurred by producers due to CRP participation, were rejected. The bid screen amounts used in these signups were not related to the MARR's in signup periods 1-9. Next, eligible easement bids, primarily filterstrips, and wellhead protection bids that survived the rental rate screen were automatically approved for CRP enrollment. These bids typically involve a limited number of acres and a small government cost,

but provide significant conservation and environmental benefits. Finally, standard bids that survived the rental rate screen were ranked for acceptance based on the ratio of an environmental benefits index (EBI) to the government cost of the contract. In signups 10-12, the EBI was comprised of seven coequal indicators (surface-water quality, groundwater quality, soil productivity, conservation compliance assistance, tree planting, Hydrologic Unit Areas identified by the USDA Water Quality Initiative, and conservation priority areas). When submitting a bid, producers were not informed of the rental rate screen amount for their soil or how the EBI was calculated. Approximately 2.5 million acres were enrolled in signups 10-12. As discussed earlier, in signups 13 and 15, revised EBI's were used to rank bids and rental rate requests were screened against productivity-based soil rental rates that were announced during the signups.

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