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Major Characteristics of and Post-Contract Land Use Intentions For Conservation Reserve Program Wetland Tracts

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MAJOR CHARACTERISTICS OF AND POST-CONTRACT
LAND USE INTENTIONS FOR CONSERVATION
RESERVE PROGRAM WETLAND TRACTS*

by

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MAJOR CHARACTERISTICS OF AND POST-CONTRACT LAND USE INTENTIONS
FOR CONSERVATION RESERVE PROGRAM WETLAND TRACTS

Abstract

South Dakota has one-third of the 410,000 wetland acres enrolled in the U.S. Conservation Reserve Program in the 8th and 9th signup periods in 1989. The major objectives are: (1) to examine the major characteristics of CRP wetland tracts, and (2) to determine post-CRP contract land use plans for CRP wetland tracts. The major data sources are the USDA CRP contract file database for South Dakota and a 1993 CRP survey of a random sample of South Dakota CRP contract holders.

The major physical, location, and crop base characteristics of 2429 CRP wetland contracts in South Dakota indicates a profile conducive for returning CRP wetlands to crop production after contract expiration.

Post-contract land use intentions are obtained from a 1993 CRP survey completed by South Dakota CRP contract holders. Nearly 30% (160 of 556) of respondents have CRP wetland acres. Respondents with CRP wetlands intend to return 65% of their CRP acres and nearly 40% of their CRP wetland acres to crop production. Several implications for management, public policy and research are discussed.

MAJOR CHARACTERISTICS OF AND POST-CONTRACT LAND USE INTENTIONS
FOR CONSERVATION RESERVE PROGRAM WETLAND TRACTS

by Dr. Larry Janssen, Dr. Martin Beutler

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Land use decisions upon contract expiration will affect 35.4 million acres of Conservation Reserve Program (CRP) lands in the United States during the years 1996-2001. Most of the acres enrolled in CRP were highly erodible cropland, but some other environmentally sensitive croplands (including cropped wetlands) were also enrolled in different signup periods. For example, a national total of 410,000 cropped wetland acres were enrolled in 1989 during the 8th and 9th CRP signup periods.

Increased research and public attention is focused on post-CRP land use intentions of CRP contract holders. Recent conferences in Denver, Colorado (January 10-11, 1994) and in Washington D.C. (February 10-11, 1994) were held to present current information on this subject.

Results from national and state-level surveys of CRP contract holders indicate a majority of CRP land will likely return to crop production upon contract expiration (Nowak et.al. 1991; Dicks, 1994; Ghebremicael, 1994; Gustafson and Hill, 1994). "As important as knowing how much land participants plan to return to production is knowing which lands will be returned to crop production. The location and physical characteristics of the land will determine

the social and environmental costs associated with returning the acreage to crop production" (Dicks, 1994. p. 3). Some information is available on post-CRP land use intentions by location and by various physical characteristics of CRP land, but almost no information is available for CRP wetland contracts.

This report is focused on major characteristics of and post-contract land use intentions of CRP wetland tracts. The overall objectives are: (1) to examine the major characteristics of CRP wetland contracts, and (2) to determine contract holders' post-CRP land use plans for these wetland tracts. This information is important because it can be used to help formulate actual land use management programs for CRP wetland tracts. It can also be used as background information for public policy decisions concerning wetlands and CRP lands.

The study location is South Dakota which has one-third of the 410,000 wetland acres enrolled in the Conservation Reservation Program. The major data sources are: (1) the USDA Conservation Reserve Program contract file for South Dakota, and (2) a 1993 CRP survey mailed to a random sample of 8.33% of South Dakota CRP contract holders and completed by 556 of 1133 persons contacted during March and April 1993. The CRP contract file contains data on selected physical and Federal program characteristics of each contract, while the CRP survey contains data on respondent land use intentions.

MAJOR CHARACTERISTICS OF CRP WETLAND CONTRACTS

Cropped wetlands were only eligible for CRP enrollment in the 8th and 9th signup periods in 1989. Most of these wetland contracts will expire in 1999. "If natural conditions permit, the eligible wetlands must be planted to trees to improve water quality, enhance wetland development, and provide wildlife food and cover" (Osborn et.al. 1992. p. 3)

Location - National and State

Three fifths of CRP wetland contract acres are located in the Prairie Pothole regions of South Dakota and North Dakota (Table 1). These Prairie Pothole wetlands are located in our nations primary production area for migratory waterfowl and are major breeding and nesting locations. In these two states, very few CRP contracts (<1%) and few CRP acres (<2600 acres) are planted to trees; most CRP lands were planted to tame grass mixtures or to native grasses.

Another 28.4% of CRP wetland contract acres are located in six states: Wisconsin, Iowa, Illinois, Louisiana, Mississippi, and Arkansas. The remaining 11.6% (47,100 wetland acres) are located in 29 other states (Table 1).

Regional Location of South Dakota CRP Wetland Contracts

South Dakota CRP contract data were developed from the USDA Conservation Reserve Program contract file for the State. Results indicate a total of 11552 CRP contracts and enrollment of 1,743,500 cropland acres.¹ Nearly two-thirds of South Dakota's CRP acres

¹ The CRP enrollment statistics calculated from the USDA contract file for South Dakota are somewhat lower than those published in USDA Statistical Bulletins. For example, total CRP enrollment calculated from the USDA contract file is 1.74 million

were enrolled in the first seven signup periods from 1986-1988, while one-third of CRP acres were enrolled in 1989 during the 8th and 9th signup periods. A majority (54%) of CRP acres enrolled in the 8th and 9th contained wetland acres (Table 1).

In South Dakota, a total of 2429 CRP contracts with 323,800 acres enrolled contain 114,600 wetland acres. Ninety five percent of South Dakota CRP wetland contracts and wetland acres are located in the four cropland intensive Prairie Pothole regions (north central, central, east central, and northeast) of the State. These same regions only have 52% of total CRP acres in South Dakota. Very few (<1%) of CRP wetland acres are located in the three regions west of the Missouri River where 45% of South Dakota's CRP acres are located (Map 1 and Table 2).

CRP wetland contracts are an important component of total CRP enrollment in the four Prairie Pothole regions. In these regions, 34% of total CRP acres are enrolled in wetland contracts.

The distribution of wetland acres and total enrolled acres per CRP wetland contract is skewed. The average (mean) wetland contract has 133 cropland acres enrolled including 47 acres of wetlands. However, the median wetland contract has 22 wetland acres and 90 enrolled acres.

acres, compared to published totals of 2.08 million acres in the first nine signup periods. Wetland acres enrolled are calculated as 114,800 compared to published totals of 135,600 acres (USDA Stat. Bul. 843). The primary reason for the discrepancy is that previously published totals included contracts offered that were not executed. The 1993 USDA contract file represents actual contracts currently in force.

The regional distribution of CRP contracts in South Dakota would have been considerably different if wetland contracts had not been enrolled. A majority (55%) of enrolled acres would have been located west of the Missouri River in the northwest, southwest, and south central region and 42% of enrolled acres would be located in the four Prairie Pothole regions. The regional distribution of other (non wetland) CRP contract in the 8th and 9th signup period is similar to the regional distribution of CRP contracts in the first seven signup periods and is significantly different ($p < 0.01$) from the regional distribution of CRP wetland contracts.

Land Capability Class and Erosion Level of CRP Wetland Contracts

Conservation compliance requirements and potential costs of converting CRP lands to crop production are related to its land capability class/subclass² and to its predicted erosion level. The land capability class distribution and pre-contract erosion level of CRP wetland contracts are compared with other CRP contracts enrolled in the same signup periods.

CRP wetland contract acres (86.3%) are concentrated in land capability classes 2 and 3, while most (92.4%) other CRP contract acres are distributed across land capability classes 2, 3, and 4 (Table 3). The two major subclass limitations on CRP wetland

² The land capability classification (LCC) system groups soils into eight classes based on their ability and limitations for producing crops. The LCC system identifies the relative suitability of each soil for cropland, pastureland, and woodland based on the severity of limitation or hazard for each land use. The subclass identifies the major limiting factor such as erosion or runoff (e), excess water (w), root zone limitation (s), or climatic limitation (c) - too hot/cold or too wet/dry (Murray et.al. 1983. p. 227-229).

contracts are erosion (e) or excess water (w), while erosion (e) is the primary limitation for other CRP contracts. The dominant soil types in most CRP wetland contracts were classified as 2e, 3w, 3e or 4w soil types. The dominant soil types in most other CRP contracts were classified as 3e, 4e, 2e, and 6e. It is important to understand that only the predominant land capability class and subclass are reported in the USDA database for each CRP contract. Thus a CRP contract with some previously cropped wetland acres may have a majority of contract acres in class 2e soils instead of class 3w soils.

The pre-contract estimated erosion level of CRP wetland contracts is significantly lower ($p < 0.05$) than the estimated erosion level of other CRP contracts in all regions of South Dakota. Statewide, the estimated pre-contract erosion level for CRP wetland contracts is 6.9 tons/acre/year compared to 11.0 tons/acre/year for other CRP contracts (Table 4).

Crop Base Acres and Rental Rates

Federal commodity program crop base acres are very important on CRP contracts in South Dakota. These crop base acres will be returned to CRP contract holders upon contract expiration and may be used to obtain Federal commodity program benefits if they participate in Federal commodity programs.

Almost all (99%) of CRP wetland contracts have some crop base acres. Crop base acres are a majority of CRP acres on 90% of CRP wetland contracts and consist of 72% of total acres enrolled in CRP wetland contracts! By comparison, 95% of other CRP contracts enrolled in the same signup periods have some crop base acres. Crop

base acres are a majority of CRP acres on 79% of other CRP contracts and consist of 67% of total acres enrolled.

Regional bid pools were used to establish maximum rental rates per acre. Within each bid pool region, the rental rate per acre of CRP wetland contracts are not significantly different than rental rates of other CRP contracts. The average (mean) rental rate of CRP wetland contracts varied from \$43.70 per acre in the south central region to \$51.55 per acre in the southeast region. A few wetland contracts in the southeast were bid from \$58 - \$60 per acre.

Major Characteristics and Post-CRP Wetland Use

Our examination of major characteristics of all (2429) wetland contracts in South Dakota indicates a profile conducive for returning CRP wetlands to crop production upon contract expiration. Almost all CRP wetlands are located in the cropland intensive (north central, central, northeast and east central) regions of the State. Nearly 86% of wetland contract acres are in land capability class 2 and 3 and estimated soil erosion rates are much lower than other CRP contracts. Federal commodity program base acres are a majority of enrolled acres on 90% of CRP wetland contracts.

Results from the 1993 SDSU survey of South Dakota CRP contract holders indicates the most important factors associated with post-CRP crop production decisions are: (1) crop base acres on CRP lands, (2) respondent assessment that Federal commodity programs are very important to their operation, and (3) location of CRP

contracts in eastern and central regions of South Dakota.³ These factors are present for most persons with CRP wetland contracts.

POST CONTRACT LAND USE INTENTIONS - RESULTS FROM A 1993 SURVEY
OF SOUTH DAKOTA CRP CONTRACT HOLDERS

The post-contract land use decisions of CRP contract holders are important to many people (producers, agribusiness managers, conservationists, landowners and others) because these decisions will impact various crop and livestock commodity markets, farm-level cost and returns, and environmental (soil erosion and water quality) quality. The greatest regional impacts will occur in the Great Plains states where most of the CRP land acres are located (Joyce, Mitchell, and Skold. 1991; Dicks, 1994).

In this section, post-CRP land use intentions of CRP wetland contract holders are presented and discussed. A total of 160 of 556 respondent contract holders reported CRP wetland acres. The regional distribution of CRP wetland acres and total CRP contract acres held by these 160 respondents are shown in Table 5. These respondents' CRP lands are primarily located in the four Prairie Pothole regions. They reported a total of 10,346 CRP wetland acres and 59,373 enrolled CRP acres. Many of these respondents reported multiple CRP contracts, but only one CRP wetland contract.

³ These findings are based on results from an economic decision model using stepwise logistic regression procedures. The dependent binary variable was the cropland use decision (yes or no) and explanatory variables included 15 socioeconomic, physical, location, and policy variables. The specific results and discussion of this model are available in another professional paper (Janssen and Ghebremicael, 1994) and in a SDSU Master's thesis (Ghebremicael, 1994).

Most respondents (78%) reported their CRP wetlands are isolated wetland (prairie potholes or depressions), 8% reported their CRP wetlands are along rivers or streams while 15% reported both isolated and riparian wetlands. Crop and hay production are the most prevalent land uses adjacent to enrolled CRP wetland tracts.

Post-CRP Land Use Intentions

A summary of post-CRP land use intentions of 160 CRP respondents reporting wetlands indicates 65% of CRP acres are expected to be converted to cropland, 27% of CRP acres will remain as grassland, and projected land use of 8% of CRP acres is uncertain. The proportion of other CRP lands expected to be converted to cropland is much lower and uncertainty of projected land use is much higher (Table 6). These land use intentions are indicated for the baseline assumption that CRP contracts will not be extended or renewed.

Nearly 26% of the 160 respondents reporting CRP wetland acres plan to convert all of their CRP lands to cropland, 19% plan to keep all of their CRP lands as grassland, while 47% plan to use about three-fifths of their CRP acres for cropland and retain two-fifths of their CRP acres in grassland. Another 8% of respondents are uncertain or did not reveal their post-CRP land use acreage intentions. Respondents reporting CRP wetland acres are much more likely to indicate post-CRP land use intentions of some cropland and some grassland, and are less likely to retain all of their CRP lands as grasslands (Table 7).

Post-CRP Wetland Use Intentions

Three-fourths of the 160 sampled CRP wetland contract respondents have post-CRP land use plans for their wetland acres. Multiple uses of wetland acres including cropping, haying, grazing, or providing wildlife habitat are prevalent (Table 8). The most prevalent multiple uses are: grazing and hay production, crop and hay production, grazing with crop/hay production, and wildlife habitat with grazing or hay production. Providing wildlife habitat is much less likely to be combined with crop production than with hay production or grazing.

Post-CRP land use intentions for wetlands and for all CRP lands are jointly considered for 145 respondents reporting their overall CRP land use. In most cases, wetland use intentions are conditioned by overall management plans for all of their CRP lands. Data in Table 9 shows the distribution of CRP wetland acres by post-CRP land use plans for wetland and total CRP acres.

The major findings from analysis of data in Table 9 are:

(1) Most (92%) wetland acres are located on CRP tracts with projected land use of crop production or a combination of crop and grass production. Very few (8%) wetland acres are located on CRP tracts expected to be completely used for grass production.

(2) Nearly two-fifths of wetland acres are intended for crop production or a combination of crop and forage production.

(3) A plurality of wetland acres (41.7%) are held by respondents who plan to return their CRP lands to crop production or crop/grass production, but are uncertain about wetland use upon contract expiration. Most respondents in the uncertain/other

wetland use category enrolled more wetland acres in CRP than respondents reporting specific wetland use intentions.

Respondents wetland use intentions are not related to most socio-economic characteristics, except for age and major source of gross farm income. Older respondents are more likely to be uncertain about their post-CRP wetland use intentions. The average age of respondents' uncertain about their wetland use intentions is 58 years, compared to 52 years for those reporting specific wetland use plans. Respondents reporting crop production as their major source of gross farm income are much more likely to select crop production as their intended post-CRP wetland use.

CONCLUSIONS AND IMPLICATIONS

A unique and little known aspect of the Conservation Reserve Program is enrollment of cropped wetland acres. Three-fifths of the 410,000 wetland acres enrolled in CRP are located in the Prairie Pothole regions of South Dakota and North Dakota. This study reports major characteristics of and post-CRP land use intentions of CRP wetland tracts in South Dakota.

Summary

Examination of major characteristics of all (2429) CRP wetland contracts in South Dakota indicates a profile conducive for returning CRP wetlands to crop production upon contract expiration. Almost all CRP wetland contracts are located in the cropland intensive regions of the State. Wetland acres are an average of 35% of total acres enrolled in these wetland contracts. Nearly 86% of wetland contract acres are in land capability class 2 or 3 and

estimated soil erosion rates are much lower than found in other CRP contracts. Federal commodity program base acres are a majority of enrolled acres on 90% of CRP wetland contracts.

Three-fourths of 160 sampled CRP wetland owners have post-CRP land use plans for their wetland acres. Multiple uses of wetlands for crop production, forage production, and wildlife habitat are prevalent. Most (92%) wetland acres are located on tracts where some or all acres are expected to return to crop production.

Respondents intend to return 65% of wetland contract acres and nearly 40% of wetland acres to crop production. A plurality of wetland acres are held by respondents who plan to return their CRP acres to crop production or crop/grass production, but are uncertain about or did not list any land use intentions for their wetland acres.

Implications

Land use decisions and management practices on post-CRP wetland tracts will potentially impact farm productivity, wildlife habitat, and water quality. There are likely conflicts between private economic returns and environmental values on many wetland tracts. For example, CRP wetland tracts in the Northern Plains are important sources of wildlife habitat and are located in the nation's primary production area for migratory waterfowl. Wildlife habitat and waterfowl production potential is greatly reduced if CRP wetlands are returned to crop production.

The physical, location and crop base characteristics of South Dakota CRP wetland tracts are conducive to returning a majority of these acres to crop production after contract expiration.

Respondents indicate that Federal farm program incentives for crop base acres will have a substantial impact on their land use decisions. Public policy modifications to change incentives on using CRP crop base acres could alter many post-CRP land use decisions.

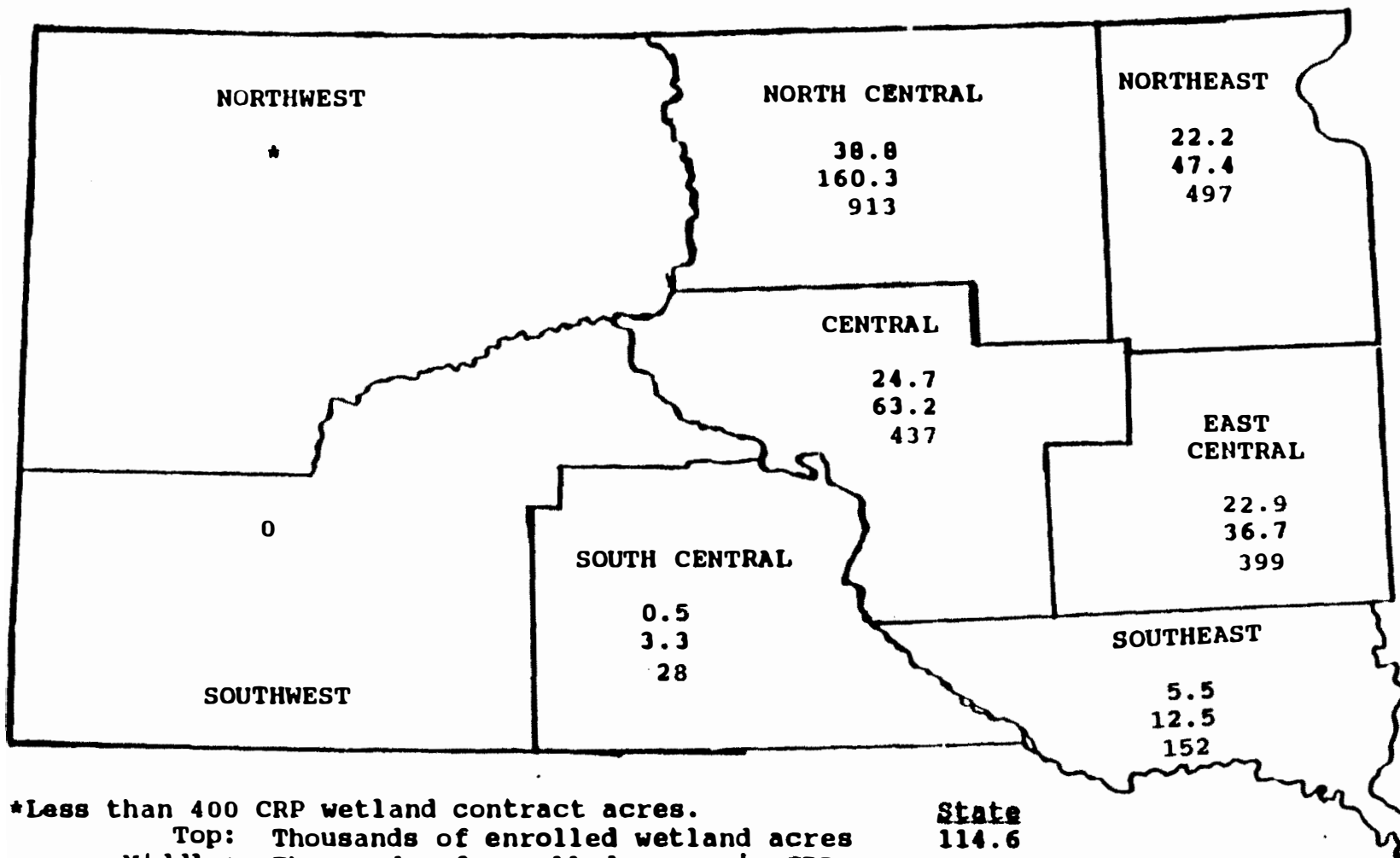
Crop production will probably offer the highest private economic net returns to most CRP wetland owners. If society in general (and conservation, environmental, and wildlife interest groups in particular) wants to modify this likely outcome, then a diverse set of public policy options (permanent easements, wetland reserve, cost-sharing, and other incentive programs to promote alternate uses of wetlands) are needed to retain more of these wetlands in permanent vegetation.

Applied farm management research/education programs targeted to agricultural wetland use decisions in the next 5-7 years should have high payoffs to society. Most CRP wetland contracts will not expire until 1999, which provides sufficient lead time to complete these programs.

REFERENCES CITED

- Dicks, M.R. 1994. "The Conservation Reserve Program: A Review." in Proceedings of NC 163 Post Conservation Reserve Program Land Use Conference. Denver, CO. p. 1-11.
- Ghebremicael, T.H. 1994. Analysis of Conservation Reserve Program Contracts, CRP Contract Holders' Characteristics, and Post-CRP Land Use Intentions in South Dakota, M.S. Thesis, South Dakota State University, Brookings, SD.
- Gustafson, C.R. and C.L. Hill. 1994. "Future Land Use Decisions of North Dakota Conservation Reserve Program Participants." in Proceedings of NC 163 Post Conservation Reserve Program Land Use Conference. Denver, CO. p. 27-41.
- Janssen, L.L. and T.H. Ghebremicael. 1994. "Post-Contract CRP Land Use Decisions in South Dakota: Results from a 1993 CRP Survey" in Proceedings of NC 163 Post Conservation Reserve Program Land Use Conference. Denver, CO. p. 42-50.
- Joyce, L.A., J.E. Mitchell, and M.D. Skold, ed. 1991 The Conservation Reserve - Yesterday, Today and Tomorrow: Symposium Proceedings, RM-203, USDA Forest Service, Fort Collins, CO.
- Murray, W.G., D.G. Harris, G.A. Miller, and N.S. Thompson. 1983 Farm Appraisal and Valuation. Sixth Edition, Iowa State Univ. Press. Ames, IA.
- Nowak, P.J., M. Schnepf, and R. Barnes. 1991. When Conservation Reserve Program Contracts Expire..A National Survey of Farm Owners and Operators Who Have Enrolled Land in the Conservation Reserve. Soil and Water Conservation Society, Ankeny, IA.
- Osborn, C.T., F. Llacuna, and M. Linsenbigler. 1992. The Conservation Reserve Program: Enrollment Statistics for Signup Periods 1-11 and Fiscal Years 1990-92. USDA Statistical Bulletin 843. Washington D.C.
- SAS Institute Inc. 1990. SAS/STAT Users' Guide, version 6, fourth edition, volume 2, SAS Institute Inc., Cary, NC.

Map 1. DISTRIBUTION OF ENROLLED WETLAND ACRES, CRP CONTRACT ACRES AND NUMBER OF CRP WETLAND CONTRACT BY REGION, SOUTH DAKOTA.



*Less than 400 CRP wetland contract acres.

Top:	Thousands of enrolled wetland acres	State	114.6
Middle:	Thousands of enrolled acres in CRP wetland contract		323.8
Bottom:	Number of CRP wetland contracts		242.9

Source: USDA Conservation Reserve Program contract file, South Dakota, 1993.

Table 1. Distribution of Wetland Acres Enrolled in Conservation Reserve Program.

<u>State</u>	<u>Wetland Acres</u>		<u>Number of Contracts</u>
	(1000)	pct.	
South Dakota	135.6	33.0	2847
North Dakota	111.6	27.2	1555
Wisconsin	29.4	7.2	1670
Iowa	14.6	3.6	458
Illinois	13.6	3.3	436
Louisiana	30.5	7.4	203
Mississippi	16.0	3.9	138
Arkansas	11.6	2.8	108
Other States ^a	<u>47.1</u>	<u>11.6</u>	<u>1033</u>
United States	410.0	100.0	8448

^a CRP wetland contracts are located in 29 other states. Less than 6000 CRP wetland acres are enrolled in any of these states.

Source: USDA Stat. Bulletin 843, 1992. Table 2, pp 11-12.

Table 2. Regional Distribution of CRP Contract Acres, by Signup Period and Contract Eligibility, South Dakota.

<u>Region</u>	<u>Total</u>	<u>Signup Period 1-7</u>	<u>Signup Period 8-9</u>	
			<u>Wetland Contracts</u>	<u>Other CRP Contracts</u>
-----thousands of acres enrolled-----				
Southeast	53.8	36.5	12.5	4.8
East Central	120.9	62.4	36.7	21.8
Northeast	256.4	171.1	47.4	37.9
North Central	372.6	158.3	160.3	54.0
Central	151.0	67.4	63.2	20.4
South Central	212.1	178.0	3.3	30.8
Southwest	198.0	140.1	0.0	57.9
Northwest	<u>378.7</u>	<u>330.7</u>	<u>0.4</u>	<u>47.6</u>
South Dakota	1743.5	1144.5	323.8	275.2
Number of Contracts	11552	7384	2429	1739

^a Based on data from 11,552 contracts. Most CRP contracts were eligible based on various HEL (highly erodible land) criteria. CRP wetland contracts were only eligible for enrollment in 1989 during the 8th and 9th signup periods.

Source: USDA Conservation Reserve Program contract file for South Dakota.

Table 3. Distribution of CRP Contract Acres by Land Capability Class, South Dakota^a

<u>Land Capability Class</u>	<u>CRP Wetland Contracts</u> --percent of acres enrolled--	<u>Other CRP Contracts</u> --percent of acres enrolled--
1	1.9	0.8
2	56.6	30.4
3	29.7	35.8
4	8.8	26.2
5-8	<u>3.0</u> 100.0	<u>6.8</u> 100.0
	-----number of acres enrolled-----	
	323,800	275,214

^a Based on land capability class data from 4,168 CRP contracts and 599,014 acres enrolled in the 8th and 9th signup periods.

Source: USDA Conservation Reserve Program contract file for South Dakota.

Table 4. Predicted Erosion Level of CRP Contracts in South Dakota, Statewide and Regional.

<u>Region/State</u>	<u>Predicted erosion level^a</u>	
	<u>CRP Wetland Contracts</u>	<u>Other CRP Contracts</u>
	-----tons/acre/year-----	
Southeast	5.8	13.9
East Central	5.0	8.4
Northeast	8.3	10.7
North Central	6.7	10.8
Central	7.6	11.8
South Central	8.8	11.8
South Dakota	6.9	11.0

^a Based on pre-contract erosion data from 4,168 CRP contracts in the 8th and 9th signup periods.

Source: USDA Conservation Reserve Program contract file for South Dakota.

Table 5. Regional Distribution of Wetland Acres as
Percent of CRP Acres.

<u>Region</u>	<u>N</u>	<u>Wetland acres</u>	<u>Total CRP acres</u>	<u>Wetland acres as % of CRP acres</u>
East Central	22	802	4,151	19.3%
Northeast	45	2,667	13,291	20.1%
North Central	42	4,307	17,926	24.0%
Central	23	1,976	8,613	22.9%
All other regions	28	594	15,392	3.8%
South Dakota	160	10,346	59,373	17.4%

Source: 1993 South Dakota CRP Survey.

N = Number of respondents reporting wetland acres on their CRP lands. Many respondents have multiple CRP contracts but most respondents have only one CRP contract with wetlands.

Table 6. Projected Post-CRP Land Use Distribution.

<u>Post-CRP Land Use Intention</u>	<u>All Respondents</u>	<u>Respondents Reporting</u>	
		<u>CRP Wetlands</u>	<u>No CRP Wetlands</u>
N =	556	160	396
	-----percent of CRP acres-----		
Crop Production	51.5	64.8	44.9
Grass Production	29.4	27.2	30.6
Uncertain/Other	<u>19.2</u>	<u>8.0</u>	<u>24.5</u>
	100.0	100.0	100.0
Number of CRP Acres	181,005	59,373	121,632

Source: 1993 South Dakota CRP Survey.

Table 7. Distribution of Post-CRP Intended Land Use of CRP Tracts by Presence/Absence of CRP Wetland Acres.

<u>Post-CRP Intended Land Use of CRP Tracts</u>	<u>All Respondents</u>	<u>Respondents Reporting</u>	
		<u>CRP Wetlands</u>	<u>No CRP Wetlands</u>
	-----percent of respondents-----		
Cropland Only	29.3	26.2	30.6
Grassland Only	25.2	18.8	27.8
Cropland and Grassland	34.7	47.5	29.5
Uncertain/Other	<u>10.8</u>	<u>7.5</u>	<u>12.1</u>
	100.0	100.0	100.0
Number of Respondents	556	160	396

Chi Square Statistic = 28.55 with 6 d.f. (p <= 0.001)

Source: 1993 South Dakota CRP Survey

Table 8. Multiple Use of Many CRP Wetlands is Projected after Contract Expiration.

<u>Post-CRP Wetland Intention</u>	<u>Respondents with CRP Wetland Contracts</u>	
	<u>N</u>	<u>Pct.^a</u>
Drain/redrain Wetland and use for crop/hay production	13	8.1
Keep in Wetlands and use for:		
Crop production	62	38.8
Hay production	65	40.6
Grazing	50	31.3
Wildlife Habitat	44	27.5
Uncertain/Other	39	24.5

^a Percent of 160 respondents reporting CRP wetland acres.

Source: 1993 South Dakota CRP Survey.

Table 9. Distribution of CRP Wetland Acres by Post-CRP Land Use Plans for Wetland Acres and Total CRP Acres.

<u>Post-Crp Wetland Use Intentions</u>	<u>Post-Crp Land Use Intention for CRP Contract Acres^a</u>			column <u>pct. total</u>
	<u>Crop and Grass Production</u>	<u>Crop Production Only</u>	<u>Grass Production Only</u>	
-----percent of wetland acres-----				
Crop and Forage production	19.8	0.7	-	= 20.5
Forage production only	11.4	-	7.6	= 19.0
Crop production only	7.4	11.4	-	= 18.8
Uncertain/ Other	<u>21.0</u> 59.6	<u>20.3</u> 32.4	<u>0.4</u> 8.0	= <u>41.7</u> 100.0

^a Wetland acres tabulated for 148 of 160 respondents indicating their post-CRP land use plans, percent totals are based on 9730 wetland acres.

Source: 1993 South Dakota CRP Survey.