

## **Nebraska** Platte-Republican Resource Area CREP

## **Annual Performance Report**

For the period: March 19, 2005 to September 30th 2005

This performance report is submitted to fulfill the requirements of Section VI., Parts I. and J. of the Memorandum of Agreement (MOA) between the U.S. Department of Agriculture, Commodity Credit Corporation and the State of Nebraska concerning the implementation of the Nebraska Platte-Republican Resources Area Conservation Reserve Enhancement Program (CREP) signed on March 19, 2005. This report addresses: the status of enrollments /level of program participation, the results of the annual monitoring program, non-federal CREP program expenditures, and progress on fulfilling other State commitments. It also contains recommendations to improve the program.

## **INTRODUCTION**

The agreement between the United States Department of Agriculture (USDA), Commodity Credit Corporation (CCC), and the State of Nebraska initiated the Nebraska Platte-Republican Resources Area Conservation Reserve Enhancement Program for the improvement of water quantity and quality, and the enhancement of wildlife habitat in designated areas of the Platte and Republican River Basins. The Memorandum of Agreement was signed by Floyd D. Gabler, Deputy Under Secretary for Farm and Foreign Agricultural Services for the USDA and Nebraska Governor Dave Heineman on March 19, 2005.

The Nebraska Platte-Republican Resources Area CREP is a cooperative effort between the USDA Farm Services Agency (FSA), the Natural Resources Conservation Service (NRCS), and the State of Nebraska. The CREP is part of the Conservation Reserve Program (CRP), operated by the Farm Service Agency (FSA) for the CCC.

The overall goals of the Nebraska Platte-Republican Resources Area CREP are to significantly reduce the amount of irrigation water consumptive use, and agricultural chemicals and sediment entering waters of the State from agricultural lands and transportation corridors. The reduction of ground and surface water use and of non-point source contaminants, through establishment of permanent vegetative cover, will also enhance associated wildlife habitat, both terrestrial and aquatic. These goals are to be accomplished by terminating all irrigation practices on 100,000 acres of land located in the State Conservation Priority Area for Water Quality (the "Priority Area").

In addition to not irrigating the land enrolled in CREP, the following conservation practices will be implemented on the land. (Figure 1)

- Up to 85,000 acres of CP2, CP4D, and CP25 (Establishment of Permanent Native Grasses, Permanent Wildlife Habitat, and rare and declining habitat)
- Up to 10,000 acres of CP21 and CP22 (Filter Strips and Riparian Buffers)
- Up to 5,000 acres of CP23 and CP23A (Wetland Restoration, and Wetland Restoration, Non-Floodplain)

The Priority Area includes land adjacent to the Republican River and the Platte River and their tributaries. Each river resource area is to have 50,000 acres enrolled in it. In the Platte Resource Area there is an additional enrollment limitation of only 10,000 acres above Lake McConaughy and of that, 5,000 acres are limited to land irrigated with ground water only and 5,000 to land irrigated with surface water only or a combination of ground water and surface water. Appendix A identifies these specific geographic areas.

## LEVEL OF PROGRAM PARTICIPATION

Sign-up for the Nebraska Platte-Republican Resources Area CREP began on April 4, 2005 and has exceeded expectations. Despite the facts that, by that time of the year, most producers have purchased seed and made other preparations and commitments for the coming production season and that less than six months remained in the contract year, there was a tremendous amount of interest. Over 52,300 acres were offered for enrollment by September 30, 2005, filling more than one half of the allotted 100,000 acres. Sign-up was particularly strong in the Republican Resources Area and four-fifths of the 50,000 acres eligible are already enrolled. Interest in the program in the Upper Platte Resources Area was also strong with the entire limit of 5,000 acres of groundwater and/or surface water already being spoken for. Sign-up in the Lower Platte Resources Area was the poorest. The breakdown for acres offered for the Nebraska Platte-Republican Resources Area CREP is indicated in the table below.

### Acres Offered by Resources Area for Federal FY 2004-2005 (April 4-Sept. 30)

Resources Area	Acres Offered	
Republican Resources Area	39,304.87	
Platte Resources Area	12,997.40	
Below Lake McConaughy	3,089.20	
Above Lake McConaughy	9,908.20	
-Groundwater Only	1,866.70	
-Groundwater and/or Surface Water	8,041.50	
TOTAL	52,302.27	

### Acres Offered by Practice for Federal FY 2004-2005 (April 4-Sept. 30)

Practice	Acres Offered
CP2, CP4D, & CP25	52,291.07
CP21 & CP22	11.20
CP23 & CP23A	0.00
Total	52,302.27

As of September 30, 2005, twelve contracts were fully approved for the Nebraska Platte-Republican Resources Area CREP. All approved contracts were for groundwater only with three contracts in the Lower Platte Resources Area and nine contracts in the Republican Resources Area. The low number of fully completed contracts was due to many factors including the fact that many producers had already made plans for the upcoming cropping season so elected for deferred enrollment into the program, and the length of time it took to approve the Water Use Contracts involving surface water. Surface water appropriations are usufructory property rights and many applicants were unsure of the exact location of their water rights. This resulted in numerous corrections having to be made in the applications prior to approval.

Approved Contracts (CI	RP-1) by Coun	ty for Federal FY 2004-2005 (	A	pril 4-Sept. 30)

County	Practice	Contracts	Irrigated	Non-Irrigated	Total
			Acres	Acres	Acres
Dundy	CP-2	5	549.2	11.6	560.8
Gosper	CP-2	1	79.47	0	79.47
Hayes	CP-2	1	707.10	18.8	725.9
Hitchcock	CP-2	3	457.30	0	457.3
Keith	CP-2	2	365.50	0	365.5
Totals		12	2158.57	30.4	2188.97

## ANNUAL MONITORING PROGRAM

Since there were only a few contracts in full effect during the first six months of the program, there was a limited capability to provide meaningful monitoring results. The twelve contracts covered 2,188.97 acres. Of those 2,188.97 acres, 2,158.57 acres were irrigated while 30.4 acres were non-irrigated. (The only non-irrigated lands allowed in the program are corners of fields irrigated with center pivots when the entire field is enrolled.)

The Nebraska Department of Natural Resources analyzed the twelve contracts and the 2,158.57 irrigated acres that were fully enrolled into the program this year to determine the total savings in water based on consumptive use. Each of the twelve contracts fully enrolled into the program this year were served by groundwater only. Consumptive use per acre for these groundwater only acres was derived from calculations provided by Derrel Martin, Professor of Biological Systems Engineering at the University of Nebraska. Appendix C identifies the range of the average consumptive irrigation requirement (CIR) to irrigate a full yield corn crop across the state of Nebraska. The CIR is the amount of water consumed by irrigation when water is applied at a rate that meets the full crop demand.

The location of each of the contracts was analyzed against the CIR map to interpolate an average CIR. The average CIR was then multiplied by the acres under each individual contract to determine the total savings in consumptive use. The total acres and consumptive use savings in each of the resources areas can be seen in the table below.

	Republican Resources Area	Upper Platte Resources Area	Lower Platte Resources Area	Totals
# of Contracts Groundwater Only	9	0	3	12
# of Contracts Groundwater and/or Surface Water	0	0	0	0
# of Acres Groundwater Only	444.97	0	1744	2158.57
# of Acres Groundwater and/or Surface Water	0	0	0	0
Consumptive Use Savings in acre feet	460.81	0	1787.62	2248.44

### Consumptive Use Savings by Resources Area

Monitoring efforts from the Nebraska Game and Parks Commission (NGPC) for the Nebraska Platte-Republican Resources Area CREP were completed in 2005 to provide baseline information that will allow NGPC to identify responses in upland game from enrollments in the area. Baseline information is being established using the northern bobwhite whistle count surveys, August roadside surveys, and the Rural Mail Carrier Survey.

On Harlan County Reservoir, more intensive surveys were completed for ring-necked pheasants to identify baseline information and benefits from on-going habitat restoration and management work on lands owned by the U.S. Army Corps of Engineers. 2005 surveys on and adjacent to Harlan County Reservoir indicated that there were nearly five times as many crowing cock pheasants on nearby private land (12.7/stop) than on the public area (2.6/stop) in the spring, however August brood surveys indicated that there were more than two times the number of pheasant broods and chicks on the public area (0.07 broods/mile and 0.27 chicks/mile) than on the nearby private lands (0.03 broods/mile and 0.1 chicks/mile). These surveys indicate that habitat work on Harlan County Reservoir has improved pheasant nesting success, and chick survival on the area is at least 50% higher than that on nearby private lands, which meets the goals of the work on the Reservoir. Continued management and restoration activities are planned to attempt to further increase the benefits of the area for pheasant nesting and broodrearing. The response of ring-necked pheasants from habitat work at Harlan County Reservoir indicate that as new CREP areas are planted and established, we have a high potential for seeing significant increases in pheasant populations due to increased recruitment (nesting success and chick survival).

## SUMMARY OF NON-FEDERAL PROGRAM EXPENDITURES

The State of Nebraska agreed to contribute not less than 20 percent nor more than 50 percent of the overall annual program costs, through cash contributions or in-kind services. The in-kind services include current water conservation activities, water quality activities, and wildlife enhancement activities, proportioned out to reflect the amount of CREP area within each organization's individual jurisdiction. The table below indicates the level of support that various local and state agencies have pledged to the project and the in-kind services they provided. Since this report does not cover a full year and since most of the organizations contributing to the CREP program do not use the same fiscal year as the federal government and have a wide variety of fiscal years, it was necessary to estimate the amount of in-kind services provided by some organizations.

Organization	Projected	Actual	
Bostwick Irrigation District	\$494,473	\$465,792.00*	
Pathfinder Irrigation District	\$190,500	\$244,141.00*	
Central Nebraska Public Power and Irrigation District		\$15,153.62	
Nebraska Public Power District	\$143,120	\$149,307.00	
Nebraska Department of Agriculture	\$13,500	\$25,825.00	
Nebraska Department of Natural Resources	\$887,000	\$1,158,691.03	
Nebraska Game and Parks	\$130,000	\$176,554.33	
Central Platte Natural Resources District	\$345,460	\$360,007.11*	
North Platte Natural Resources District	\$100,000	\$325,285.69*	
Twin Platte Natural Resources District	\$32,000	\$32,000.00*	
Tri-Basin Natural Resources District	\$217,250	\$150,903.03*	
Lower Republican Natural Resources District	\$366,000	\$176,136.00*	
Middle Republican Natural Resources District	\$151,116	\$127,840.00*	
Upper Republican Natural Resources District	\$100,000	\$225,000.00*	
TOTAL:	\$3,170,419	\$3,652,635.81	

### In-kind Services by Organization for Federal FY 2004-2005

\* The in-kind services provided by these organizations did not facilitate accounting in the federal fiscal year and were estimated.

## PROGRESS ON FULFILLING OTHER PROGRAM COMMITMENTS

1. Provide cost share payments.

To date the Department of Natural Resources has not received any requests for cost share payments.

2. Pay all cost associated with annual monitoring programs.

Development of the annual monitoring program will be done this year.

3. Provide wildlife conservation planning for producers on an as requested basis.

To date the State has not received any requests from producers for wildlife conservation planning.

4. Establish an Enhancement Program Steering Committee.

The Department of Natural Resources has established a CREP Steering Committee. The list of members can be found in Appendix D. The Committee met and formed subcommittees to work on a variety of projects.

5. Provide staffing support for a full-time CREP administrative coordinator.

The Department of Natural Resources has appointed a CREP coordinator to facilitate and oversee program implementation, coordination, promotional activities, technical assistance, and monitoring and evaluation. The CREP Coordinator has other responsibilities in addition to CREP but the Department Director and Deputy Director also devote considerable amounts of their time to facilitating CREP and overseeing implementation.

6. Seek applicants willing to participate in CREP.

Applicants were sought through the publication of various newsletters from area natural resources districts (NRDs), the Nebraska Department of Natural Resources, the FSA, and through a number of press releases.

7. Facilitate provision of technical assistance from local conservation districts.

Funding through the Nebraska Soil and Water Conservation Fund and the Nebraska Natural Resources Water Quality Fund was provided to the local conservation districts to aid in delivering technical assistance.

8. Implement a broad campaign for continuous public information and education regarding the CREP.

The public was continusly informed and educated through the publication of various newsletters from area NRDs, the Nebraska Department of Natural Resources, the FSA, and through a number of press releases.

9. Work to ensure coordination with other agricultural conservation programs of State and federal agencies.

Agencies governing other agricultural conservation programs are included on the CREP Steering Committee. Dialog between these agencies continues through the Platte-Republican Resources Area CREP sign-up process.

10. Enter into a Water Use Contract with every CREP participant.

To date the Department of Natural Resources has entered into 331 Water Use Contracts for the Federal FY 2004-2005.

11. Take all reasonable steps to ensure water savings achieved by Water Use Contracts shall be used for environmental and public recreational purposes in a stream, river, aquifer, or reservoir.

The Department of Natural Resources required all applicants whose irrigation water could not be saved in a storage reservoir or underground aquifer to seek a transfer to instream flow to meet the objectives of CREP.

12. Take all reasonable steps to enforce the requirements of the Water Use Contracts.

There were only twelve signed Water Use Contracts in force during the reporting period. There was no noncompliance and no enforcement action was required.

13. Seek the approval of this agreement with such independent boards or bodies within the State as may be necessary or appropriate to maximize objectives of CREP.

The Department of Natural Resources worked with all affected irrigation districts, natural resources districts and water storage reservoir owners to ensure that water savings achieved by CREP would be stored or transferred to maximize the objectives of CREP.

## **RECCOMENDATIONS FOR PROGRAM IMPROVEMENT**

Despite the initial success of the Nebraska Platte-Republican Resources Area CREP, there is still room for improvement. In order to streamline the application process and make the program available for all the applicants who wish to enter the program, the following recommendations are made.

### Change the Existing Acreage Limitations

The MOA limits participation in the Republican Resource Area to 50,000 acres. There has been much more interest in CREP in the Republican Resource Area than in the Platte Resource Area, therefore, it is recommended that the acreage limitations for both Resources Areas be lifted. The original cap of 100,000 acres will remain but there will be no other restriction on the number of acres that may be enrolled in the Republican Resources Area. The Platte Resources Area is further limited to only 10,000 acres in the Upper Platte Resources Area (above Lake McConaughy), with 5,000 acres allowed for groundwater only uses and 5,000 acres for groundwater and/or surface water. It is recommended that the limits on acres irrigated with ground water only also be lifted. The only limit that would remain would be the 5,000 acres of land irrigated with groundwater and surface water combined or with surface water only in the Upper Platte Resources Area. We are not recommending lifting this limitation because Lake McConaughy receives a significant amount of water from recharge from surface water irrigation projects importing water from Wyoming. If the water remains in Wyoming and is not applied by surface water irrigation in Nebraska, the Lake will not benefit from the recharge.

#### Target Advertising Campaign for Conservation Practices CP21, CP22, CP23 and CP23A

Total acres offered for the conservation practices CP21, and CP22 (Filter Strips and Riparian Buffers), and CP23 and CP23A (Wetland Restoration, and Wetland Restoration, Non-Floodplain) are at 11.2 acres for the entire project area. It is recommended that radio and print advertisements targeting these specific practices be conducted this fiscal year. During the next fiscal year, the natural resources districts will also work with the University of Nebraska and other agencies to identify land suitable for these practices. The owners of suitable land will be solicited for participation in CREP.

### Revise the Water Use Contract

The Water Use Contract utilized to obtain a binding commitment from landowners who apply for CREP amounts to eight pages of very formal language. Experience has shown the Department of Natural Resources which provisions were unclear or confusing. It is recommended that the Water Use Contract be revised to address the unclear provisions and to include more elaborate instructions. We also recommend training sessions with the natural resources districts and FSA field staff.

Submitted by: Jeremy F. Gehle, DNR CREP Coordinator Nebraska Department of Natural Resources

# **APPENDICES**

# APPENDIX A: CREP Resources Area Maps

- Figure 1: Nebraska Platte-Republican Resources Area
- Figure 2: Republican Resources Area
- Figure 3: Lower Platte Resources Area
- Figure 4: Upper Platte Resources Area

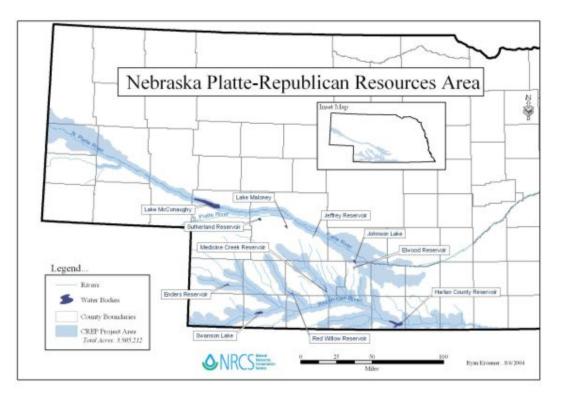
## APPENDIX B: CREP Application Acres FY 2004-2005

# **APPENDIX C:** Consumptive Irrigation Requirement Map

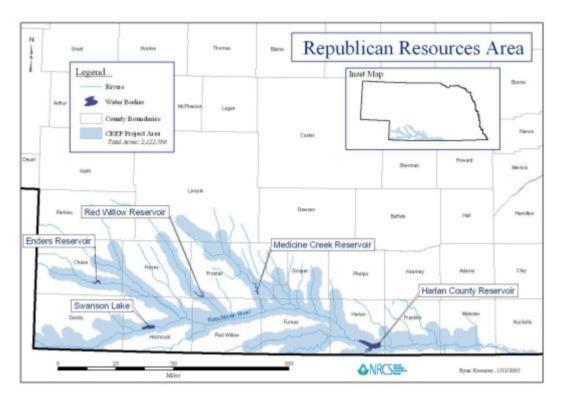
APPENDIX D: CREP Steering Committee Members

# **APPENDIX A**

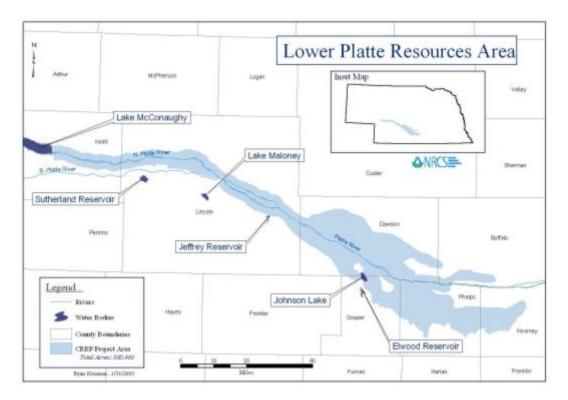
### Figure 1



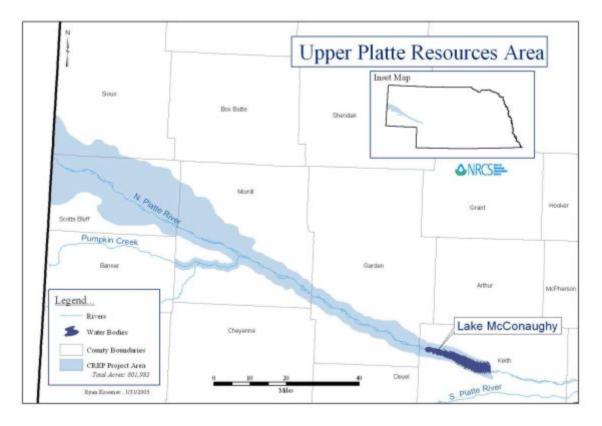
### Figure 2



### Figure 3



### Figure 4



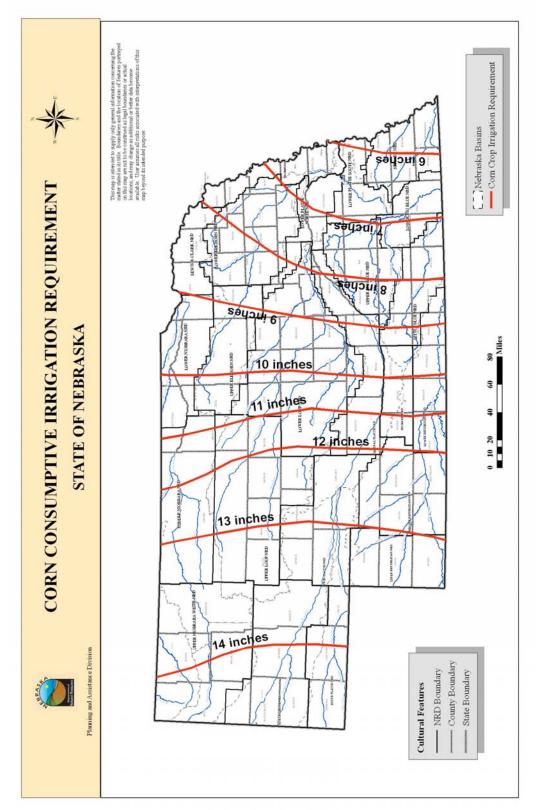
# **APPENDIX B**

Nebraska Platte-Republican Resources Area CREP Application Acres FY 2004-2005

County	CP2	CP21	CP25	CP4D	Total for County
Chase	5448.80				5448.80
Dawson	444.60				444.60
Dundy	5205.60				5205.60
Franklin	992.10			1012.20	2004.30
Frontier	3079.19				3079.19
Furnas	3372.50				3372.50
Garden	758.90			25.20	784.10
Gosper	3177.50				3177.50
Harlan	1293.20				1293.20
Hayes	1179.70				1179.70
Hitchcock	4810.28		251.10	146.30	5207.68
Keith	1974.40				1974.40
Lincoln	1449.60			334.50	1784.10
Morrill	2566.60				2566.60
Phelps	253.60				253.60
Red Willow	2610.00	11.20	4768.20	284.90	7674.30
Scotts Bluff	3596.80		629.90	1308.80	5535.50
Sioux	221.20		56.50	71.20	348.90
Webster	967.70				967.70
	43402.27	11.20	5705.70	3183.10	52302.27

# **APPENDIX C**

Consumptive Irrigation Requirement (CIR)



# **APPENDIX D**

# **CREP** Steering Committee

FSA State Committee: -Milt Rogers		
Farm Service Agency (FSA) -Brian Wolford -Greg Reisdorff	-Lavaine Moore -Molly Tebo	
Natural Resources Conserva		
-Steve Chick	-Rafael Ricuarte	-Dave Griffith
Nebraska Department of Na	tural Resources (NDNR):	
-Ann Bleed	-Gayle Starr	-Pam Andersen
-Brian Dunnigan	-Ann Diers	-Susan France
-Jeremy Gehle		
Nahraska Donartmont of En	vironmontal Quality (NDEQ).	
-Elbert Traylor	<u>vironmental Quality (NDEQ):</u>	
Elocit Huylor		
<u>Nebraska Game and Parks</u>	<u>Commission (NGPC):</u>	
-Tim McCoy	-Don Gablehouse	
-Keith Koupal	-Bill Baxter	
<u>Nebraska Department of Ag</u> -Craig Romary	- Bobbie Kriz-Wickham	
-Crarg Romary		
Agriculture Groups:		
-Jay Rempe (Farm Bu	reau)	
Rural Development Commis	ssion:	
-John Erikson		
Local Governments:		
	) -Greg Plester (URNRD) -Ro	on Cacek (NPNRD)
-Milt Moravec (CPNF		· · · · · · · · · · · · · · · · · · ·
-Mike Clements (LRN		-Jasper Fanning (URNRD)
-Dick Ehhman (NRD/		
Irrigation and Power:		
-Marsha Trompke (Cl		· · · · · ·
-Randy Zach (NPPD)	-Dennis Strauch (Pathfinder	Г)
Congress / Senate:		
-Bob Bettger (Osborn	e) -Christina Muedking (Osbo	orne)
-John Berge (Nelson)	-Lyndsy Mlady (Hagel)	-Mary Crawford (Hagel)