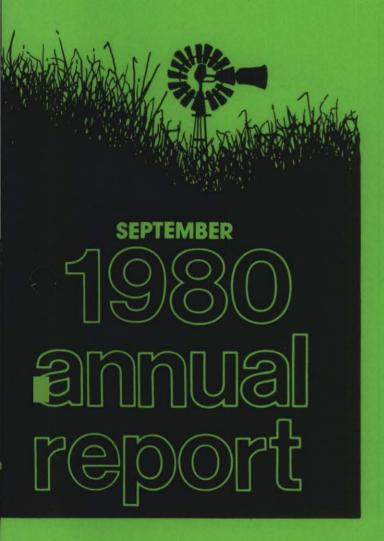
# NEBRASKA RESOURCES

# DEVELOPMENT FUND



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to the GOVERNOR and LEGISLATURE

#### NEBRASKA RESOURCES DEVELOPMENT FUND

#### ANNUAL REPORT

TO THE

#### GOVERNOR AND THE LEGISLATURE

September, 1980

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Accurate prediction of rainfall in Nebraska has always been difficult. Even when the time of a particular rainfall event is pinpointed, the duration and amount of such is often extremely scattered. Thus, Nebraska must strive to make water available for those periods when rainfall is short and crops and livestock thirst.

A definite commitment to Nebraskans, setting in motion a system for provision of an ample supply of water, was made by the state's lawmakers in 1974. From the onset of the Resources Development Fund, storage of water for the most beneficent purpose has been addressed. The Development Fund has often been maligned as a fund which funds outdoor recreation projects. This is certainly the case - of the twenty-one funded projects, eighteen contain outdoor recreation aspects as project components. However, only two were primarily developed as "recreation projects" per se and both provide water storage.

Some other interesting statistics should also be brought to light. Of the twenty-one projects, fourteen are developed as watershed type projects providing sediment and erosion control which goes hand in hand with efforts of the Soil Conservation Service and the Department of Environmental Control's Non-Point Source Program. Seven of the projects have been or are portions of the SCS Watershed Program and are developed utilizing their criteria and points to the cooperation required between local, state, and federal agencies.

Eighteen projects provide, as major components, flood control and flood protection for the people of Nebraska. These projects also assist in reducing local, state, and federal tax dollar outflow by reducing the maintenance and rebuilding of roads and bridges which characteristically follows rainfall events. Storage is a major component of fifteen of these projects, and three are designed to provide significant groundwater recharge.

The past year was one in which two precedents were set by the Commission. The first of these involved the withdrawal of funds from a project that had not shown advancement for two years. This action served notice to project sponsors that funds, although obligated, can be withdrawn if project progress does not coincide with the original plans and specifications. The second precedent was the reluctance of the Commission to obligate funds for project components when it was clear that the particular component would not be undertaken during the fiscal year.

The Priority Assessment Process resulted in the following project listing. The listing includes requested fund amounts for FY 1981 and the amount of funds previously obligated.

PRIORITY ASSESSMENT LISTING						
Project	Location	FY 1981 Obligation	Total Obligation For All Years			
Silver Creek	Near Central City	910,050.00	1,023,847.12			
Buffalo Creek	Near Lexington	447,105.75	1,316,355.75			
Buffalo Creek	Near Springfield	150,112.50	274,112.50			
Willow Creek	Near Pierce	450,000.00	900,000.00			
Central Butler	Near David City	182,250.00	278,970.00			
Lost Creek	Near Columbus	35,942.00	35,942.00			
Big Sandy	Near Clay Center	64,635.00	64,635.00			
		2,240,095.25				

Funded projects in the Development Fund are proceeding through various stages of construction at a variety of rates. The extreme variability in construction is an outcome of the weather fluctuations, the current local support situation, and the type of project under construction. The annual status of projects receiving funds is as follows:

#### FUNDED PROJECTS

BIG SANDY CREEK FLOOD CONTROL & GROUNDWATER RECHARGE PROJECT Sponsor: Little Blue Natural Resources District

The project has been divided into segments of a master plan of surface water development on the Big Sandy Creek Watershed. The project is designed to include six flood control and groundwater recharge structures. Located in a water short area of the state, around the general area of Clay Center, the sponsors believe that the project may significantly contribute to an increase in groundwater supplies. The Big Sandy Creek, a major tributary to the Little Blue River, covers an area of approximately 640 square miles. About one-third of the land area in the basin is presently irrigated and is a cause of the one foot per year drop in the groundwater table. The primary objective of this project is to utilize surplus surface water for groundwater recharge by a systematic regulation of the strategically placed reservoirs.

Sponsors presently estimate that the project will cost about seven million dollars to complete. The first structure is to be built southwest of Clay Center; this structure is estimated to cost about \$880,000, and sponsors have requested \$660,135 from the Development Fund. A grant for \$64,635 was awarded the sponsors for first component completion during FY 1981.

BUFFALO CREEK FLOOD CONTROL PROJECT
Sponsor: Central Platte Natural Resources District

The plan for the Buffalo Creek Watershed in Dawson County originally visualized the installation of thirteen flood control structures. These were to control runoff and reduce flood potential for about 75,000 acres. The project has since been changed, and two sites have been eliminated from the plan. The change was necessary due to cost increases resulting from inflation. Further, structure site B-l has been authorized a structural design alteration. This change adds a canal to the structure from an existing irrigation canal, the purpose of which is to supply a permanent source of water and provide a constant source of groundwater recharge. Total cost of the project has escalated to about 1.8 million dollars. The Commission has obligated \$1,316,355.75 to the project as 75% of the sponsor's cost. Reimbursement for project work now totals \$609,226.79. Five structures have been completed, and the largest site (B-1) is now in the advanced planning stage.

Sponsor: Papio Natural Resources District

Accelerated erosion has caused considerable damage to croplands in the 16,400 acre Buffalo Creek area of Sarpy County. Two structures out of a total of eight have been completed. The original total project cost was established at \$256,000. Due to design change and structural corrections, the total cost now exceeds \$823,000. The sponsor has been reimbursed \$82,536.03 as the portion eligible from the Development Fund. The Commission has obligated to the sponsor a total amount of \$274,112.00 for FY 1981. One more structure is being prepared for construction.

CENTRAL BUTLER WATER MANAGEMENT PROJECT

Sponsor: Lower Platte North Natural Resources District

Upper Big Blue Natural Resources District

Butler County City of David City

The project is designed to divert storm water away from and out of David City, to eliminate standing water from ditches and to better utilize the resulting runoff water. An 11.6 square mile area is to benefit from the combined diversion and storage aspects of the project. Divided into five segments, the "H" Street reconstruction and Miller dam have been completed. The Commission has obligated \$278,970 of the requested \$450,960 to be utilized through this fiscal year.

CLATONIA CREEK FLOOD CONTROL & RECREATION PROJECT Sponsor: Lower Big Blue Natural Resources District

Structure 3-A of the P.L. 566 Watershed Program was designed as the recreation associated structure in that watershed. Primarily, a flood control structure, it is one of eight such structures in the watershed. The dam has been completed on 155 acres of land and is designed to hold 44 acres of permanent water for subsidiary recreation. Obligated \$152,561.25 for development, sponsors have presently been reimbursed \$95,468 toward the development of the site located just northwest of Clatonia.

CLEAR CREEK FLOOD CONTROL PROJECT

Sponsor: Central Platte Natural Resources District

Three of the five flood control structures have been completed, and preconstruction and construction have been started on the remaining two. The project will serve to intercept runoff water from the uplands along the Platte River. This action will reduce the volume and velocity of runoff, thus providing protection to road, bridges, and crop and pasture land. Inflation forced the project sponsors to request an increase in funding in the amount of \$45,257.91. The Commission has granted the project increase and have now obligated \$319,832.91 for the project. Sponsors have been reimbursed \$205,705.45. The project is located north and west of Osceola.

LOST CREEK FLOOD CONTROL PROJECT

Sponsor: City of Columbus

The project consists of an excavated floodway on an east-west alignment that will functionally intercept storm runoff and convey it in an easterly direction to the Loup Power Canal. The project is a joint effort between the City of Columbus, the Resources Development Fund, and the U.S. Army Corps of Engineers. Total cost of the project has been estimated at \$4,205,000. The Commission has obligated \$35,942.00 for Fiscal Year 1981.

MC COOK FLOOD CONTROL PROJECT

Sponsor: Middle Republican Natural Resources District

The project has undergone a revision due primarily to the inflation spiral. It now consists of a dry flood control structure located northwest of McCook and a realignment and reworking of Kelly Canyon through the city. The project is almost completed, and the west structure functioned well during a local storm event. Of the \$512,000 obligated to the project, sponsors have been reimbursed \$407,715.65.

OLIVER RESERVOIR RECREATION & FLOOD CONTROL PROJECT Sponsor: South Platte Natural Resources District

Reconstruction of the dam has been completed, and recreation aspects are now being undertaken. Local support runs high, and volunteer labor has assisted in holding down the cost. Even with the "free" help, the obligated Development Funds are set at \$1,059,500.00. Sponsors have been reimbursed \$727,501.58.

RAWHIDE CREEK FLOOD CONTROL PROJECT
Sponsor: Lower Platte North Natural Resources District

Project sponsors voted to suspend the project for an undetermined amount of time. It is anticipated that they will reconsider project aspects and submit a request for additional funds. The Commission has reimbursed the sponsor \$45,380.85 for initial project aspects. However, further funding was withdrawn when a lack of activity necessitated the action.

SCHOOL CREEK FLOOD CONTROL PROJECT
Sponsor: Upper Big Blue Natural Resources District

As reported last year the sponsoring agency was awarded a loan of \$154,482 and a grant of \$187,143 for construction of a flood control structure northeast of the City of Sutton. Project sponsors are presently developing a change to the project which would derive more public benefits and less non-public benefits. Final design is to be completed in October, and an amended application is being prepared and will be submitted to the Natural Resources Commission in the near future.

SILVER CREEK FLOOD CONTROL PROJECT
Sponsor: Central Platte Natural Resources District

The project, located just west of the Town of Silver Creek, is composed of a restructuring of the Silver Creek system to allow adequate removal of storm water. This is to be accomplished through construction of low flow channels along the flat valley land of the drainage basin. The Commission has obligated \$1,023,847.12 of the \$2,178,635 requested for initial construction. Construction was scheduled to commence on or about September 2nd. The contract was awarded to the low bidder who withdrew from the project prior to beginning work. The contract has now been offered to the next low bidder. Construction on the lower end should begin soon.

SOUTH FORK 2-A FLOOD CONTROL & RECREATION PROJECT

Sponsor: Nemaha Natural Resources District

Land acquisition for structure 2-A of the South Fork Watershed has been completed. Design on this multipurpose flood control and recreation watershed structure, located west of DuBois, is to be completed during the fall months of this year. Construction is anticipated for the spring of 1981. This project is funded by the local NRD, the Soil Conservation Service, and the Nebraska Resources Development Fund. The sponsors have been reimbursed \$100,495.70 of the obligated \$168,500.

SUMMIT LAKE FLOOD CONTROL & RECREATION PROJECT Sponsor: Middle Missouri Tribs Natural Resources District

Summit Lake, or structure 5-A of the Tekamah-Mud Creek Watershed P.L. 566 Program, has been constructed. Recreation engineering and design is about 50 percent completed, and the contract may be let this fall. Summit Lake is one of fifteen structures in the watershed and will provide flood control on 10,112 acres as well as provide recreation for northeast Nebraska. Sponsors have been reimbursed \$229,457.97 of the obligated \$410,325.00.

WALNUT CREEK FLOOD CONTROL & RECREATION PROJECT Sponsor: Lower Big Blue Natural Resources District

Three of the five structures have been completed, and recreation on structure 2 has been developed. The sponsor is acquiring land rights on the remaining two structures and anticipates late fall or early spring construction. Reimbursement on the three structures stands at \$201,432.73 of the obligated \$286,945.00.

WILLOW CREEK RECREATION PROJECT
Sponsor: Lower Elkhorn Natural Resources District

Land acquisition is proceeding as 400 acres have been purchased. The 615 acre lake, located west of Pierce, is scheduled for fall, 1981 or spring, 1982 construction. Sponsors have requested \$3,016,125 and have been thus obligated \$900,000 of which \$160,000 has been reimbursed. The sponsoring agency has won a court judgment on construction of the project.

#### STATUS OF FUNDED PROJECTS

PROJECT NAME	PROJECT ALLOCATION	AMOUNT OBLIGATED	AMOUNT EXPENDED TO DATE
Big Sandy Creek	660,135.00	64,653.00	
Buffalo Creek, Central Platte	2,233,020.00	1,316,355.75	609,226.78
Buffalo Creek, Papio	617,817.30	274,112.50	123,566.18
Central Butler	450,960.00	278,970.00	
Clatonia Creek	152,561.25	152,561.25	95,468.86
Clear Creek	319,832.91	319,832.91	230, 192.83
Lost Creek	677,812.00	35,942.00	
McCook	512,000.00	512,000.00	407,715.65
Oliver Reservoir	1,059,500.00	1,059,500.00	727,501.58
Rawhide Creek	45,380.85	45,380.85	45,380.85
School Creek	341,625.00	341,625.00	
Silver Creek	1,954,950.00	1,023,847.12	123,802.27
South Fork	168,500.00	168,500.00	100,495.70
Summit Lake	410,325.00	410,325.00	229,457.97
Walnut Creek	286,945.50	286,945.50	201,432.73
Willow Creek	3,016,125.00	900,000.00	160,000.00
*COMPLETED PROJECTS			834,898.78
	12,907,492.81	7,190,550.88	3,889,140.18

\$324,550.34 Amount Unobligated.

\*Completed Projects include: Aowa Creek, Crystal Lake, Cub Creek, Maskenthine, Prairie Creek, as well as the terminated Wauneta Project.

### PROJECTS UNDER REVIEW

LOOMIS PIPELINE

Sponsor: Village of Loomis, Nebraska

The Village of Loomis has requested funding of \$45,000 to assist the community in financing their share of a pipeline to be jointly constructed with the Central Nebraska Public Power and Irrigation District. The District is in the process of upgrading the lateral through Loomis. The Village Board desires to enclose the lateral in a pipe and do away with the open ditch. They feel that the newly constructed open lateral would be an extremely possible health hazard. The District is paying the other half of the project cost. The project request is now in the review stage.

SPRING CREEK FLOOD CONTROL PROJECT

Sponsor: Central Platte Natural Resources District

Dawson County City of Lexington

The project purposes are flood control, bank and stream bed stabilization. Flooding periodically occurs within and around Lexington, and the project design is to reduce or stop these problems. At present, the City of Lexington has voted to not proceed with the project. Therefore, the project has been tabled.

WARM SLOUGH/MOORE'S CREEK FLOOD CONTROL PROJECT Sponsor: Central Platte Natural Resources District

The project is under design to assist in removal of water from the flat Platte flood plains along Warm Slough and Moore's Creek east of Grand Island. Total estimated cost is about \$4,000,000. The sponsors now plan to have a set of alternatives developed by the end of September. A "best" alternative will be selected prior to the end of the year.

WEST SAND DRAW SEDIMENT & EROSION PROJECT Sponsor: Middle Niobrara Natural Resources District

This sediment and erosion project, located northwest of Ainsworth, is situated in the sharply breaking, highly erosive area of the Niobrara River drainage. Project sponsors have requested \$37,537.50 as 75% of the local cost of the project. The project has been presented to the Commission, and action will probably take place at the September Commission meeting.

#### COMPLETED PROJECTS

AOWA CREEK FLOOD CONTROL & RECREATION PROJECT Sponsor: Lewis & Clark Natural Resources District

This project, also called structure number 6-7A of the Aowa Creek Watershed Plan is sponsored by the Lewis & Clark NRD. It is one of 65 structures in the P.L. 566 project and is designed for flood control and grade stabilization. This site was planned as a multi-purpose structure and includes provisions for fish and wildlife. Location of the structure is about 9 miles west of Ponca State Park and about 2½ miles southwest of Newcastle. The project has utilized all obligated NRDF funds (\$144,650) for land acquisition. The project construction has been completed, and final inspections have been held.

CRYSTAL LAKE RECREATION PROJECT
Sponsor: Adams County Board of Supervisors

The project, located near Ayr, Nebraska, has been completed and is presently in use. The total project cost to the Development Fund was \$67,806.83, about \$13,000 less than was requested.

CUB CREEK RECREATION PROJECT

Sponsor: Middle Niobrara Natural Resources District

The Middle Niobrara NRD, as sponsor of the project, requested and utilized \$67,575 for construction of a road structure with recreation benefits. Fish have been stocked; Highway 12 is finished; and many trees have been planted.

MASKENTHINE FLOOD CONTROL & RECREATION PROJECT Sponsor: Lower Elkhorn Natural Resources District

The project used \$269,978.98 of Development Fund monies. It has developed into a prime recreation area in northeast Nebraska.

PRAIRIE CREEK SNAGGING & CLEARING PROJECT Sponsor: Central Platte Natural Resources District

The project combined snagging and clearing operations to provide a clean floodway along a wooded portion of Prairie Creek in central Nebraska. The completed project was funded at \$243,975.

WAUNETA FLOOD CONTROL PROJECT

Sponsor: Upper Republican Natural Resources District

The project as initially developed was halted due to excessive cost of construction. The Development Fund reimbursed the sponsors for work completed at \$42,862.97.

#### THE LOOK AHEAD

The Development Fund has the potential to assist the Legislature in its quest for the proper development of the state's land and water resources. A priority assessment by the Legislature which would first pinpoint state area needs and secondly prescribe a manner of correction of perceived problems would be an excellent aid to program alignment. This aid could be utilized by both the state and local entities in their "looks ahead" in regard to natural resource programs.

Project development throughout Nebraska demonstrates that resource managers are working to solve the local problems. This local problem solving also assists the overall state's effort when both groups of governmental subdivisions work together. To date, the cooperation of local, state, and federal in project partnership has been excellent; and accomplishments have been significant. More of the same is anticipated with the increasing emphasis on water storage.

The Commission asked for a potential project listing along with the estimated required funds for Fiscal Year 1981-82. The following information depicts the project (some are now partially funded and others are not), the sponsor organization, and the anticipated dollar request:

#### RESOURCES DEVELORMENT FUND NEEDS Fiscal Year 1981-82

PROJECT	SPONSOR		AMOUNT
Big Sandy	Little Blue NRD	\$	829,000.00
Buffalo Creek	Central Platte NRD		900,000.00
Buffalo Creek	Papio NRD		244,000.00
Central Butler	Lower Platte North NRD		382,200.00
Long Branch	Nemaha		690,000.00
Loomis Project	Village of Loomis		25,000.00
Lost Creek	City of Columbus		350,000.00
Rawhide	Lower Platte North NRD		894,888.00
Silver Creek	Central Platte NRD		625,137.00
Sutherland Watershed	Twin Platte NRD		465,000.00
Warm Slough	Central Platte NRD		333,440.00
Willow Creek	Lower Elkhorn NRD		750,000.00
		\$6	6,488,665.00

#### PROJECT LOCATION

The project location map is provided for your use.

Submitted to the Governor and Legislature.

September, 1980.

Davle E. Williamson

Executive Secretary

Nebraska Natural Resources Commission

John/Alloway, Chairman

Nebraska Resources Development Fund

Advisory Board

Ray Hartung

Administrative Coordinator

Nebraska Resources Development Fund

## **Development Fund**

PROJECT LOCATION September, 1980

#### PROJECT COMPLETED

- 1. Aowa Creek
- 2. Crystal Lake
- 3. Cub Creek
- 4. Maskenthine
- 5. Prairie Creek
- 6. Wauneta

## PROJECT COMPLETELY FUNDED

- 7. Clatonia Creek
- 8. Clear Creek
- 9. McCook
- 10. Oliver Reservoir
- 11. School Creek
- 12. South Fork
- 13. Summit Lake
- 14. Walnut Creek

#### PROJECT

#### PARTIALLY FUNDED

- 15. Big Sandy Creek
- 16. Buffalo Creek (C. Platte)
  17. Buffalo Creek (Papio)
- 18. Central Butler
- 19. Lost Creek
- 20. Rawhide
- 21. Silver Creek
- 22. Willow Creek

#### NOT FUNDED TO DATE

- 23. Long Branch
- 24. Loomis
- 25. Spring Creek
- 26. Sutherland Watershed
- 27. Warm Slough/Moore's Creek
- 28. West Sand Draw

