

● **NEBRASKA**  
RESOURCES

DEVELOPMENT  
FUND



SEPTEMBER

● **1982**  
biennial  
report

**to the**

GOVERNOR **and** LEGISLATURE

● PREPARED BY THE  
NEBRASKA NATURAL RESOURCES COMMISSION

NEBRASKA RESOURCES DEVELOPMENT FUND

BIENNIAL REPORT  
(July 1, 1980 - June 30, 1982)

TO THE

GOVERNOR AND THE LEGISLATURE

September, 1982

Introduction

The Nebraska Resources Development Fund Act of 1974 established the Nebraska Resources Development Fund (NRDF) to assist Nebraskans in the development and wise use of the State's water and land resources. The Resources Development Fund can be used to provide grants and/or loans to local political subdivisions of the state or agencies of the state, or it can be used by the Natural Resources Commission to acquire an interest in a project in the name of the State.

The Resources Development Fund is based on a conjunctive administrative system that delegates responsibilities to the Natural Resources Commission and the statutorily created "Advisory Board". The Advisory Board is responsible for the review of projects and programs and the determination of project and program eligibility for Resources Development Fund assistance. In addition, the Advisory Board makes recommendations to the Commission as to the type and amount of financial assistance that may be provided.

The Natural Resources Commission is responsible for the actual approval of projects and programs and the allocation of funds for their implementation. The determination of funding priorities is a sole responsibility of the Commission. In addition the Commission carries out the day-to-day administrative activities which include the negotiation and execution of contracts and other necessary documents to protect the State's investment, the disbursement of funds to project sponsors, the accounting of monies expended, and the preparation of reports.

Members of the Advisory Board and Natural Resources Commission, as of June 30, 1982, were:

NATURAL RESOURCES COMMISSION MEMBERS

Alvin Narjes, Chairman  
George Kleen, Vice-Chairman  
Robert Bell  
Jim Cook  
Robert Gifford  
Richard Hahn  
Howard Hardy  
Wayne Johnson

Rudolf Kokes  
Harold Kopf  
Ervin Lechner  
Maureen Monen  
Warren Patefield  
Henry Reifschneider  
Don Thompson  
Clinton Von Seggern

ADVISORY BOARD MEMBERS

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Representing Bert Garvin  
Department of Agriculture

Gale Hutton  
Representing Dan Drain  
Department of Environmental Control

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Vincent Dreeszen  
Conservation & Survey Division-UNL

Dayle Williamson  
Natural Resources Commission

Project Review

As of June 30, 1982, twenty-six water resources projects have received financial assistance from the Resources Development Fund. The total allocation for these projects is \$17,184,781.05. The great majority of the projects funded are projects that provide for the storage of water and the beneficial use(s) of that water. Flood control, sediment and erosion control, wildlife enhancement, and recreation, including fishing, boating, and swimming, have been the primary benefits that have resulted.

During the last two years projects that have specifically provided groundwater recharge benefits via seepage from reservoirs (three projects) or via a canal (one project) have received funding. Several of the 26 funded projects have dealt with the construction of dams that are part of the Soil Conservation Service's P.L. 566 Watershed Program or its Resource Conservation and Development (RC&D) Project.

Natural resources districts (NRDs) generally have served as the local project sponsors receiving Resources Development Fund assistance. However, a few projects have been sponsored, either solely or jointly, by counties and communities.

During fiscal years 1981 and 1982 five projects were completed and five new projects were funded. In addition one project, School Creek Site No. 3, was terminated by the project sponsor due to increased costs and the lack of local support. Another project, the Wauneta Flood Control Project, was again funded after the project sponsor selected and developed an alternative design. The sponsor had previously terminated the project due to unanticipated costs associated with the original design.

In addition the rules and regulations of the Resources Development Fund were revised to include (1) consultation with the Game and Parks Commission regarding threatened and endangered species, (2) greater involvement by the Natural Resources Commission in the review of project proposals and applications, and (3) more flexibility for the Commission regarding changes in projects and cost increases.

Due to public request and the lack of project development, the Commission conducted a review of the Rawhide Creek Project. As a result it prescribed the sponsor meet three requirements before the disbursement of additional funds for the project would be approved.

#### Project Status

As of June 30, 1982, a total of 11 projects, including School Creek, that received financial assistance from the Resources Development Fund have been completed. Fifteen other projects have been approved by the Commission and have received funding through the Resources Development Fund. Another project has been approved by the Commission but has not received any funds to date due to the lack of adequate funds. Brief descriptions of these projects follow:

COMPLETED PROJECTS

AOWA CREEK (Buckskin Hills)  
Sponsor: Lewis & Clark NRD

This project, structure number 6-7A of the Aowa Creek P.L. 566 Watershed Project, was sponsored by the Lewis & Clark NRD. This site was planned as a multi-purpose structure and includes provisions for flood control, grade stabilization, and fish and wildlife. Location of the structure is about four miles southwest of Newcastle. The project utilized a NRDF grant of \$144,650.00 for land acquisition.

CLATONIA CREEK  
Sponsor: Lower Big Blue NRD

Located one mile north of Clatonia, this project involved the acquisition of 155 acres and the development of recreation facilities and fish and wildlife features for a Soil Conservation Service P.L. 566 Watershed structure. The resulting reservoir has a surface area of approximately 46 acres. NRDF assistance was in the form of a \$162,750.00 grant.

CLEAR CREEK WATERSHED  
Sponsor: Central Platte NRD

This flood control project consists of six flood water retarding structures located in northern Polk County. The reservoirs also provide sediment control and water for livestock. Total NRDF assistance was \$343,126.91 in the form of a grant.

CRYSTAL LAKE  
Sponsor: Adams County

This project consisted of the renovation of an existing public recreation area along the Little Blue River near Ayr. The enlargement of an oxbow was the major feature of the project. The total project cost to the NRDF was \$67,806.83 in the form of a grant.

CUB CREEK  
Sponsor: Middle Niobrara NRD

This project was developed in conjunction with the improvement of Highway 12 west of Springview. The resulting road structure impounds a 33 acre lake that provides recreation opportunities and fish and wildlife habitat. NRDF assistance was a grant of \$67,625.00.

#### LOOMIS PIPELINE

Sponsor: Central Nebraska Public Power and Irrigation District and the Village of Loomis

Located at Loomis, this project involved the enclosing of a portion of an irrigation lateral in buried pipe. Improved water conveyance and protection of the health, safety, and general welfare of Loomis residents resulted from the project. A grant for \$33,750.00 comprised the NRDF assistance.

#### MASKENTHINE

Sponsor: Lower Elkhorn NRD

This project, located approximately one mile north of Stanton, was constructed on Maskenthine Creek. The resulting 94 acre reservoir provides flood control, fish and wildlife habitat, sediment control, and many recreational opportunities. Financial assistance amounting to a grant of \$269,978.98 was provided by the NRDF.

#### McCOOK FLOOD CONTROL

Sponsor: Middle Republican NRD

The NRDF provided a grant of \$512,000.00 for this flood control project in the northeast section of McCook. The construction of a floodwater retarding structure and stream channel improvement are the main project features.

#### PRAIRIE CREEK

Sponsor: Central Platte NRD

This project combined snagging and clearing operations to provide a clean floodway along a wooded portion of Prairie Creek near Grand Island. The project utilized a NRDF grant of \$243,975.00.

#### SCHOOL CREEK

Sponsor: Upper Big Blue NRD

The School Creek Project, located in northern Clay County, was designed to provide groundwater recharge, flood control, sediment and erosion control, and recreation benefits. Dam Site #3, located north of Sutton, was to be the first structure to be constructed in the School Creek Watershed. It was to have a permanent pool of 160 acres and would have controlled a drainage area of approximately 23 square miles.

At its June 17, 1982 meeting, the project sponsor officially suspended the project. This action was taken because project costs exceeded project benefits and no practical way was found to make the project economically feasible. Poor public support was also a factor in the sponsor's decision. Engineering and design work, the land rights survey, and land appraisals had been conducted prior to the sponsor's decision. No land had been acquired and no construction had taken place.

WEST SAND DRAW

Sponsor: Middle Niobrara NRD

This project involved the construction of a dam on Brown County right-of-way northwest of Ainsworth. The structure traps sediment which otherwise would be carried down to Plum Creek, a high value trout stream. The project, which also provides grade stabilization and an improved road crossing, utilized a NRDF grant of \$36,364.91.

APPROVED PROJECTS

BIG SANDY #1

Sponsor: Little Blue NRD

Big Sandy #1 is the first of seven potential structures to be constructed as part of the Big Sandy Creek Watershed. The project, located on the U.S.D.A. Meat Animal Research Center west of Clay Center, consists of a floodwater retarding and groundwater recharge structure with a conservation pool of 330 acres. A study is being conducted to determine the amount of groundwater recharge that occurs at the reservoir, which is basically completed at this time.

BIG SANDY #2

Sponsor: Little Blue NRD

Big Sandy #2, the second of seven potential structures in the Big Sandy Creek Watershed, is designed to provide groundwater recharge along with flood control and wildlife habitat. The structure will be located approximately four miles northeast of Bruning on a tributary of Dry Sandy Creek. The reservoir will have a conservation pool of 250 acres and a flood pool of 560 acres.

BUFFALO CREEK

Sponsor: Central Platte NRD

The Buffalo Creek Watershed Project as originally planned consisted of 13 floodwater retarding structures to be constructed in the uplands of the watershed north of Lexington. The major purpose of the project is to provide flood protection for the lowland areas of the watershed. The structures will also provide fish and wildlife, recreation, and groundwater recharge benefits. The design for Structure B-1 has been altered to add a canal from an existing irrigation canal in order to improve groundwater recharge.

BUFFALO CREEK

Sponsor: Papio NRD

The Buffalo Creek Watershed Project in Sarpy County originally consisted of 10 structures. The primary purpose of the project is to provide grade stabilization and control erosion. Reduction of flood damages and improvement of water quality are secondary purposes.

CENTRAL BUTLER WATER MANAGEMENT PROJECT

Sponsor: Lower Platte North NRD

The primary purposes of the Central Butler Water Management Project are to reduce flooding and improve surface drainage in the David City area. The project includes the construction of three earthen dams, the construction and improvement of drainage ditches, and the installation of storm sewers.

LONG BRANCH

Sponsor: Nemaha NRD

Long Branch (Site 21) is the designated multi-purpose structure in the Long Branch Watershed. The project site consists of 460 acres located approximately two and one half miles northwest of Humboldt. The structure will be constructed on Kirkham Creek and will have a permanent pool of 160 acres. The project will provide flood control, grade stabilization, recreation, and wildlife habitat.

LOST CREEK

Sponsor: City of Columbus

The Lost Creek Flood Control Project consists of an excavated floodway and a training levee that will intercept storm runoff west and north of Columbus and convey it to the Loup Power Canal. The project, which is to handle a 100-year flood, has been designed by the Corps of Engineers. The Corps is providing \$4,000,000 of the total project cost.

OLIVER RESERVOIR

Sponsor: South Platte NRD

The Oliver Reservoir Project involves the reconstruction of an existing dam on Lodgepole Creek that was used to store water for irrigation. The project, located west of Kimball, includes extensive recreational development around the 280 acre reservoir. The structure also provides flood control benefits.

RAWHIDE CREEK

Sponsor: Lower Platte North NRD

The Rawhide Creek Flood Control Project is located to the north and west of Fremont and is designed to reduce flood problems in that city. The project consists of (1) the construction of a flood control structure on Trouble Creek, (2) the construction of three new channels to convey flood waters, and (3) the improvement of an existing drainage ditch.

SILVER CREEK

Sponsor: Central Platte NRD

The Silver Creek Flood Control Project consists of an excavated floodway along Silver Creek and Clarks Creek in Merrick County. The project is designed to convey runoff water from agricultural land in the area. Improved crop production will result from the project.

SOUTH FORK 2-A

Sponsor: Nemaha NRD

Structure 2-A of the P.L. 566 South Fork Watershed Program is the designated recreation structure in the watershed. The project will provide flood control, sediment and erosion control, wildlife habitat and recreation benefits. The site consists of 360 acres and the structure will have a conservation pool of 85 acres. The project is located near DuBois in the southeastern part of the state where little water-based recreation is available.

SUMMIT LAKE

Sponsor: Middle Missouri Tribs NRD

Summit Lake (Structure 5-A) of the P.L. 566 Tekamah - Mud Creek Watershed is the designated recreation structure in the watershed. The project will provide flood control benefits to the City of Tekamah and agricultural land and also water-based recreation to a region of the state that includes the Omaha metropolitan area. The project area is 400 acres and the reservoir will have a conservation pool of 190 acres.

THOMPSON CREEK

Sponsor: City of LaVista

This project will result in the construction of a floodwater retarding structure in the City of LaVista and will provide flood protection to homes that were constructed prior to the adoption of the city's floodplain ordinance. The project will also complement an existing city park below the structure site.

WALNUT CREEK

Sponsor: Lower Big Blue NRD

The Walnut Creek Flood Control Project originally consisted of five structures and is the first NRDF project that was developed as a watershed plan. The structures are located east and north of Crete and will provide recreation (Site 2) and grade stabilization as well as flood control benefits. The structures will have conservation pool areas ranging from 16 to 26 acres.

WAUNETA

Sponsor: Upper Republican NRD

The Wauneta Flood Control Project consists of realignment and enlargement of the Frenchman Creek channel and the replacement of two bridges. The project will provide flood control benefits to the Village of Wauneta. The project as currently designed is a revision of the original project that was obligated funds in 1979 and consisted of the construction of flood control structures on selected tributaries of Frenchman Creek above Wauneta. High land rights and construction costs necessitated modification of the original design.

WILLOW CREEK

Sponsor: Lower Elkhorn NRD

The Willow Creek Project is primarily a recreation/wildlife habitat project located southwest of Pierce. The project area is approximately 1,700 acres; 700 acres of that will be permanent pool that will provide water-based recreation opportunities. Water quality in the reservoir is anticipated to be very good.

Information regarding the financial status of the approved projects, as of June 30, 1982, is provided in the table on the following page.

FINANCIAL STATUS OF APPROVED PROJECTS

June 30, 1982

<u>Project Name</u>	<u>Amount Allocated</u>	<u>Amount Obligated</u>	<u>Amount Expended to Date</u>
Big Sandy #1	\$ 450,000.00	\$ 450,000.00	\$ 318,713.44
Big Sandy #2	645,750.00	367,500.00	-----
Buffalo Creek (Dawson Co.)	2,647,072.50	2,101,239.25	1,350,368.11
Buffalo Creek (Sarpy Co.)	617,817.30	167,058.44	167,058.44
Central Butler	450,960.00	278,970.00	156,078.95
Long Branch	342,030.00	198,187.50	-----
Lost Creek	1,068,000.00*	283,834.00	-----
Oliver Reservoir	1,059,500.00	1,059,500.00	922,191.57
Rawhide Creek	1,115,275.00	374,630.85	45,380.85
Silver Creek	1,954,950.00	1,760,720.53	934,031.09
South Fork 2-A	168,500.00	168,500.00	100,495.70
Summit Lake	410,325.00	410,325.00	409,763.66
Thompson Creek	136,612.50	-----	-----
Walnut Creek	264,225.00	264,225.00	219,974.85
Wauneta	452,504.22	334,671.72	60,560.57
Willow Creek	3,726,313.20	3,720,313.99	1,772,181.99
COMPLETED PROJECTS***	-----	-----	<u>1,948,171.33</u>
Total	\$15,509,834.72	\$11,939,676.28**	\$8,404,970.55

\* \$801,000.00 grant and \$267,000.00 loan.

\*\* Includes FY 83 appropriation of \$2,910,000.00.

\*\*\* Completed projects include Aowa Creek, Clatonia Creek, Clear Creek, Cub Creek, Crystal Lake, Loomis Pipeline, Maskenthine, McCook, Prairie Creek, School Creek, and West Sand Draw.

Projects Pending

Project proposals and/or applications have been submitted for 11 projects. These projects are presently in the planning or review stage. The total amount of NRDF assistance requested by these projects is \$11,568,780.00; however, it is possible that some may be terminated by their sponsors or that some may not be approved for NRDF assistance. Brief descriptions of these pending projects follow:

ANTELOPE CREEK

Sponsor: Lewis & Clark NRD

The project involves the construction of a dam on Antelope Creek in northwest Cedar County. The resulting reservoir would have a conservation pool of 44 surface acres and would primarily provide flood protection to prime farmland in the Missouri River valley. The sponsor has requested a NRDF grant for \$206,250.00.

COURTNEY GULCH

Sponsor: Lower Niobrara NRD

The sponsor has requested a NRDF grant of \$42,187.50 to help finance the construction of a road structure across a severely eroding gully in northeastern Boyd County. The North Central RC&D is providing technical assistance in this project. The sponsor is presently considering an alternate design that would not require NRDF assistance.

DESHLER FLOOD CONTROL

Sponsor: Little Blue NRD

Located adjacent to Deshler, this project would provide flood protection to the southern portion of the city. The resulting 120 surface acre reservoir would also provide recreation opportunities. The sponsor has requested a NRDF grant of \$600,000.00 for this project.

ELM CREEK

Sponsor: Burt County

This project would provide channel grade stabilization and reduce bank erosion along Elm Creek near Decatur. The sponsor has requested a NRDF grant of \$450,000.00.

MIRA CREEK

Sponsor: Lower Loup NRD

The purpose of this project is to improve the channel capacity of Mira Creek at the Village of North Loup in order to reduce flooding in that community. A NRDF grant of \$39,000.00 has been requested.

OGALLALA

Sponsor: Twin Platte NRD and City of Ogallala

This project is to provide flood protection to the City of Ogallala. Four potential dam sites and a storm drainage system through the city are being studied. The sponsor has requested a NRDF grant of \$1,479,382.50.

PAPIO SITE #18

Sponsor: City of Omaha

This project involves a NRDF grant of \$800,550.00 to assist the sponsor in developing recreation facilities and wildlife enhancement features at a Corps of Engineer's flood control reservoir near Millard. The reservoir is to have a conservation pool of 255 acres.

SHAW C.A.T. (Critical Area Treatment)

Sponsor: Middle Niobrara NRD

A grant of \$32,100.00 has been requested by the sponsor to assist in the construction of a road structure that would provide grade stabilization and sediment and erosion control benefits. The project is a North Central RC&D measure.

SPRING CREEK

Sponsor: Central Platte NRD, Dawson County, City of Lexington

This project has been proposed to reduce flooding and provide channel stabilization along Spring Creek near Lexington. A NRDF grant of \$3,375,000.00 was requested but the project is currently tabled.

SUTHERLAND WATERSHED

Sponsor: Twin Platte NRD

The purpose of this project is to reduce flooding in the Village of Sutherland. Potential dam sites and the construction of a storm drainage system are being studied. The sponsor has requested a NRDF grant of \$281,250.00.

WARM SLOUGH/MOORES CREEK

Sponsor: Central Platte NRD, City of Grand Island, Hall County, and Merrick County

This project would reduce the flooding of urban and rural land in the Grand Island vicinity. Stream channel improvements, a diversion, and detention/retention cells would be constructed. A NRDF grant of \$4,263,060.00 has been requested.

THE LOOK AHEAD

The Nebraska Resources Development Fund has assisted Nebraskans in the proper development of the State's land and water resources. Project development throughout Nebraska demonstrates that local subdivisions of government are taking the initiative to solve problems and take advantage of opportunities regarding their natural resources.

Cooperation among local, state, and federal agencies has been excellent and is fully expected to continue as Nebraskans develop additional projects in the future. Financial assistance from the Resources Development Fund will continue to make many of these projects a reality. Anticipated funding needs for Fiscal Year 1983-84 are shown on the following table.

NRDF FUNDING NEEDS

Fiscal Year 1983-84

<u>PROJECT NAME</u>	<u>ESTIMATED AMOUNT</u>
Antelope Creek	\$ 206,250
Big Sandy #2	278,000
Buffalo Creek (Dawson County)	132,000
Central Butler	171,990
Deshler Flood Control	415,000
Long Branch	84,000
Lost Creek	784,000
Ogallala	375,000
Rawhide Creek	704,000
Shaw C.A.T.	32,100
Silver Creek	450,000
Sutherland Watershed	225,000
Warm Slough/Moores Creek	<u>368,880</u>
Total	\$4,226,220

PROJECT LOCATION

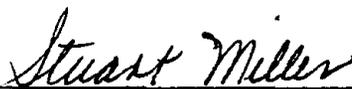
A project location map follows and is provided for your information.

Submitted to the Governor and Legislature.

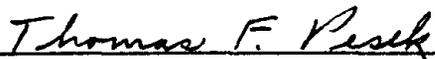
September, 1982.



Dayle G. Williamson  
Executive Secretary  
Nebraska Natural Resources Commission



Stuart Miller  
Nebraska Resources Development Fund  
Advisory Board



Thomas F. Pesek  
Administrative Coordinator  
Nebraska Resources Development Fund

# NEBRASKA RESOURCES DEVELOPMENT FUND

PROJECT LOCATION

September, 1982

COMPLETED PROJECTS

1. Aowa Creek
2. Clatonia Creek
3. Clear Creek Watershed
4. Crystal Lake
5. Cub Creek
6. Loomis Pipeline
7. Maskenthine
8. McCook Flood Control
9. Prairie Creek
10. School Creek
11. West Sand Draw

APPROVED PROJECTS

12. Big Sandy #1
13. Big Sandy #2
14. Buffalo Creek
15. Buffalo Creek
16. Central Butler
17. Long Branch
18. Lost Creek
19. Oliver Reservoir
20. Rawhide Creek
21. Silver Creek
22. South Fork 2-A

APPROVED PROJECTS

- (Continued)
23. Summit Lake
  24. Thompson Creek
  25. Walnut Creek
  26. Wauneta
  27. Willow Creek

PENDING PROJECTS

28. Antelope Creek
29. Courtney Gulch
30. Deshler Flood Control
31. Elm Creek
32. Mira Creek
33. Ogallala
34. Papio Site #18
35. Shaw CAT
36. Spring Creek
37. Sutherland Watershed
38. Warm Slough/Moores Creek

