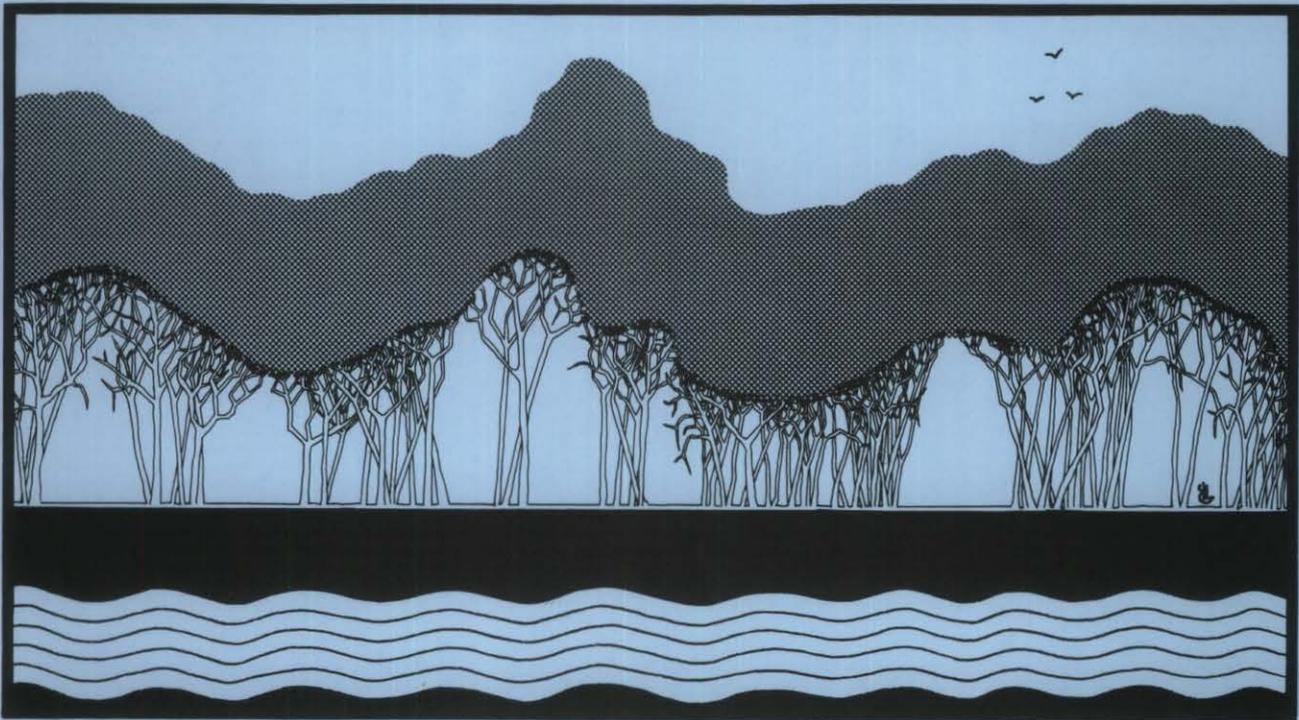


Nebraska Resources Development Fund  
1984 Biennial Report  
To the Governor and Legislature

**NEBRASKA**  
RESOURCES DEVELOPMENT  
FUND



**1984 Biennial Report  
to the  
Governor and Legislature**

PREPARED BY THE  
NEBRASKA NATURAL RESOURCES COMMISSION  
SEPTEMBER 1984

NEBRASKA RESOURCES DEVELOPMENT FUND

BIENNIAL REPORT  
(July 1, 1982 - June 30, 1984)

TO THE  
GOVERNOR AND THE LEGISLATURE

September 1984

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 Natural Resources Commission and the Advisory Board, as of June 30, 1984, were:

NATURAL RESOURCES COMMISSION MEMBERS

Clinton Von Seggern, Chairman  
Vince Kramper, Vice-Chairman  
Frank Bartak  
Robert Bell  
Milton Christensen  
Jim Cook  
Robert Gifford  
Richard Hahn

Howard Hardy  
Wayne Johnson  
Don Kavan  
Harold Kopf  
Larry Moore  
Paul Schroeder  
Mike Shaughnessy  
Clifford Welsh

ADVISORY BOARD MEMBERS

Rod Armstrong, Chairman  
Representing Steve Fowler  
Policy Research Office

Gale Hutton  
Representing Dennis Grams  
Department of Environmental Control

Bob Kuzelka, Vice-Chairman  
Representing Vincent Dreeszen  
Conservation & Survey Division-UNL

Stu Miller  
Representing Don Dworak  
Department of Economic Development

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Representing J. Michael Jess  
Department of Agriculture

Rob Raun  
Department of Agriculture

Gerald Chaffin  
Representing Gene Mahoney  
Game & Parks Commission

Dayle Williamson  
Natural Resources Commission

Project Review

As of June 30, 1984, 30 water resources projects have received financial assistance from the Resources Development Fund. The total allocation for these projects is \$21,171,000.32. 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, groundwater recharge, wildlife enhancement, and recreation, including fishing, boating, and swimming, have been the primary benefits that have resulted. Several of the 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. During fiscal years 1983 and 1984, three projects were completed and four new projects were funded.

In January, 1984, the NRDF Guidelines were published as revised. The revision process included expansion and updating of the economic feasibility section and more specific guidance regarding technical feasibility and environmental acceptability.

Project Status

As of June 30, 1984, a total of 14 projects, including School Creek, that received financial assistance from the Resources Development Fund have been completed.

It is estimated that approximately \$172,000,000 in benefits will accrue from these 30 projects during their project life periods (50 years). Sixteen other projects have been approved by the Commission and have received funding through the Resources Development Fund. Brief descriptions of these projects follows:

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.

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.

GLATONIA 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 \$87,489.83.

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 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 but was suspended by the project sponsor due to unanticipated costs that made the project economically infeasible. \$45,724.71 in NRDF funds were expended for engineering and land rights appraisals.

SUMMIT LAKE

Sponsor: Middle Missouri Tribes 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 provides 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 is 400 acres and the reservoir has a conservation pool of 190 acres.

WALNUT CREEK

Sponsor: Lower Big Blue NRD

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

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

ANTELOPE CREEK

Sponsor: Lewis & Clark NRD

The Antelope Creek Project involves the construction of an earthen dam on Antelope Creek in northwestern Cedar County. The structure will have a permanent pool of 44 acres and will provide both flood protection and recreational benefits. Due to Antelope Creek's excellent water quality and its perennial flow, the reservoir is expected to support a fine sport fishery.

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 is 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 was 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 as originally planned 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.

#### DESHLER

Sponsor: Little Blue NRD

The Deshler Flood Control Project consists of an earthen dam to be located just west of Deshler. The structure will provide flood control benefits to the southern part of the community and the resulting reservoir will provide various recreational opportunities. The reservoir will have a conservation pool of 122 acres and a flood pool of 333 acres. A county road and a state highway will have to be elevated but the project will allow the replacement of five bridges with less expensive structures in Deshler.

#### 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 approximately \$4,000,000 of the total project cost.

#### OGALLALA

Sponsor: City of Ogallala

The Ogallala Project consists of the reconstruction of two existing dams located on the north side of Ogallala to meet "high hazard" engineering standards. Urban stormwater facilities, consisting of trunk lines and collectors and associated outfalls to the South Platte River will also be constructed in order to attain comprehensive control of stormwater in the City of Ogallala.

#### 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.

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.

WAUNETA

Sponsor: Upper Republican NRD/Village of Wauneta

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 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, 1984, is provided in the table on the following page.

FINANCIAL STATUS OF APPROVED PROJECTS

June 30, 1984

<u>Project Name</u>	<u>Amount Allocated</u>	<u>Amount Obligated</u>	<u>Amount Expended To Date</u>
Antelope Creek	\$ 291,000.00	\$ 291,000.00	\$-----
Big Sandy #2	768,225.00	768,225.00	695,639.93
Buffalo Creek (Dawson Co.)	2,647,072.50	2,179,378.00	2,064,449.73
Buffalo Creek (Sarpy Co.)	617,817.30	404,845.94	175,995.89
Central Butler	539,250.00	539,250.00	379,230.85
Deshler	981,750.00	418,305.00	16,854.75
Long Branch	342,030.00	282,030.00	8,008.58
Lost Creek	1,068,000.00*	812,930.00	452,724.30
Ogallala	492,347.25	243,497.25	-----
Oliver Reservoir	1,059,500.00	1,059,500.00	945,902.51
Rawhide Creek	2,185,673.75	868,639.00	101,258.78
Silver Creek	2,307,608.05	2,307,608.05	1,616,151.21
South Fork 2-A	257,450.88	257,450.88	164,307.89
Thompson Creek	136,612.50	136,612.50	-----
Wauneta	556,648.15	556,648.15	531,034.41
Willow Creek	3,879,416.30	3,879,416.30	3,842,594.11
COMPLETED PROJECTS**	<u>3,040,598.64</u>	<u>3,040,598.64</u>	<u>3,040,598.64</u>
Total	\$21,171,000.32	\$18,045,934.71	\$14,034,751.58

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

\*\* Completed projects include Aowa Creek, Big Sandy #1, Clatonia Creek, Clear Creek Watershed, Crystal Lake, Cub Creek, Loomis Pipeline, Maskenthine, McCook Flood Control, Prairie Creek, School Creek, Summit Lake, Walnut 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 \$24,953,335.65; 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:

AURORA 35-11-6

Sponsor: Upper Big Blue NRD

This project involves the construction of a dam on a tributary of Lincoln Creek near Aurora. The resulting reservoir is to have a conservation pool of approximately 40 acres and will provide both recreation and groundwater recharge benefits. The sponsor has requested a NRDF grant of \$463,759.50.

ELKHORN RIVER BANK STABILIZATION PROJECT

Sponsor: Papio NRD

This project involves bank stabilization and erosion control along a 42-mile stretch of the Elkhorn River in Washington, Douglas, and Sarpy counties. The sponsor has indicated a NRDF grant of \$2,730,000.00 will be needed for this project, which would also include public recreation and access sites along the river.

ELKHORN RIVER IPA

Sponsor: Lower Elkhorn NRD

Bank stabilization and the development of public access sites along the Elkhorn River in Dodge County will result from this project. The Advisory Board has recommended a \$2,000,000.00 grant and a \$881,844.00 loan with funding contingent upon the IPA (Improvement Project Area) accepting an assessment schedule.

INMAN

Sponsor: Upper Elkhorn NRD

The sponsor has indicated a NRDF grant of \$232,500.00 may be needed to correct flood problems brought on by center pivot and associated drainage ditch development in the area. The improvement of natural drainageways and the construction of detention cells are being considered by the sponsor.

LODGEPOLE CREEK AT SIDNEY

Sponsor: City of Sidney

This Corps of Engineers project consists of channel improvement along Lodgepole Creek through Sidney. The sponsor has requested a NRDF grant of \$444,600.00 for this flood control project.

LOHFF Creek

Sponsor: Lower Republican NRD

This project consists of the construction of three dams in the Lohff Creek Watershed in southeastern Franklin County. The dams will reduce flood damages along Lohff Creek and in a portion of the Republican River Valley. The sponsor has requested a NRDF grant of \$300,000.00.

MIRA CREEK

Sponsor: Lower Loup NRD

This clearing and snagging 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 \$70,009.65 has been requested.

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.

SKULL CREEK

Sponsor: Lower Platte North NRD

The sponsor is developing a watershed project that will include several flood control structures. Located in northeastern Butler and northwestern Saunders counties, the project will also be coordinated with a land treatment program. The sponsor has indicated that a NRDF grant of \$837,150.00 will be needed.

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.

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 are proposed. A NRDF grant of \$5,477,722.50 has been requested.

WEeping WATER CREEK WATERSHED

Sponsor: Lower Platte South NRD

This flood control and recreation project is located in Cass and Otoe counties. The sponsor has indicated that a NRDF grant of \$7,340,200.00 will be needed to construct seven major reservoirs.

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 1985-86 are shown on the following table:

NRDF FUNDING NEEDS

Fiscal Year 1985-86

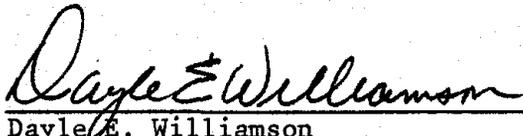
<u>PROJECT NAME</u>	<u>ESTIMATED AMOUNT</u>
Buffalo Creek (Sarpy County)	\$ 89,888
Deshler	479,445
Elkhorn River Bank Stabilization	200,000
Elkhorn River IPA	564,130
Lohff Creek	300,000
Long Branch	60,000
Ogallala	248,850
Rawhide	220,000
Sidney	220,000
Skull Creek	155,000
Warm Slough/Moores Creek	1,070,364
Weeping Water	<u>2,000,000</u>
Total	\$5,607,677

PROJECT LOCATION

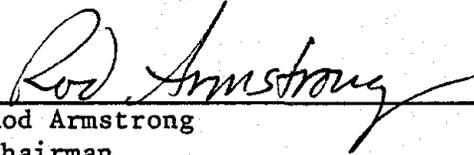
A project location map follows and is provided for your information.

Submitted to the Governor and Legislature

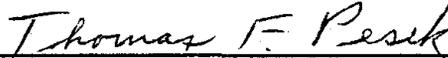
September 1984.



Dayle E. Williamson  
Executive Secretary  
Nebraska Natural Resources Commission



Rod Armstrong  
Chairman  
Nebraska Resources Development Fund  
Advisory Board



Thomas F. Pesek  
Administrative Coordinator  
Nebraska Resources Development Fund

NEBRASKA RESOURCES DEVELOPMENT FUND PROJECT LOCATION

September 1984

COMPLETED PROJECTS

1. Aowa Creek
2. Big Sandy #1
3. Clatonia Creek
4. Clear Creek Watershed
5. Crystal Lake
6. Cub Creek
7. Loomis Pipeline
8. Maskenthine
9. McCook Flood Control
10. Prairie Creek
11. School Creek
12. Summit Lake
13. Walnut Creek
14. West Sand Draw

APPROVED PROJECTS

15. Antelope Creek
16. Big Sandy #2
17. Buffalo Creek
18. Buffalo Creek
19. Central Butler
20. Deshler
21. Long Branch
22. Lost Creek
23. Ogallala
24. Oliver Reservoir
25. Rawhide Creek
26. Silver Creek
27. South Fork 2-A

APPROVED PROJECTS

- (Continued)
28. Thompson Creek
  29. Wauneta
  30. Willow Creek

PENDING PROJECTS

31. Aurora 35-11-6
32. Elkhorn River Bank Stabilization
33. Elkhorn River IPA
34. Inman
35. Lodgepole Creek at Sidney
36. Lohff Creek
37. Mira Creek
38. Papio Site #18
39. Skull Creek
40. Spring Creek
41. Warm Slough/Moores Creek
42. Weeping Water Creek

