

1 9 9 6 Biennial Report

Presented to the
Governor and the Legislature

on the

Nebraska Resources Development Fund



Published by the
Nebraska Natural Resources Commission
September 1996



This 1996 Biennial Report briefly describes the Nebraska Resources Development Fund and reports on its accomplishments during the twenty-two years it has been in existence. The public benefit resulting from this state financial assistance program has been great, yet many needs and opportunities relating to the management of our water resources remain.

The projects described in this report were the result of local, state, and in many cases, federal cooperation and cost-sharing. It is fair to say that without state assistance through the Resources Development Fund, several of these projects would not have been built. The floods of 1996 clearly demonstrated the value of the flood control projects at Scribner and Howells. Recreation projects such as Chalco Hills near Omaha, Czechland Lake near Prague, and Liberty Creek near Lawrence are being used by more people than originally anticipated. And sponsor interest in irrigation facility rehabilitation projects is increasing in the western part of our state.

With the support of Governor Nelson, the Legislature has increased the general fund appropriation for the Nebraska Resources Development Fund so additional project construction can occur. The members and staff of the Natural Resources Commission look forward to addressing future natural resources needs and opportunities through the Resources Development Fund.

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Rayle Williamson

Director of Natural Resources
Nebraska Natural Resources Commission

To Assist In The Development And Wise Use Of Nebraska's Water And Land Resources



Silver Creek Flood Control Project located in Merrick County

NEBRASKA RESOURCES DEVELOPMENT FUND BIENNIAL REPORT

(July 1, 1994 - June 30, 1996)

PRESENTED TO THE GOVERNOR AND THE LEGISLATURE

September 1996

INTRODUCTION

The **Nebraska Resources Development Fund Act** of 1974 created a fund to assist with the development and wise use of Nebraska's water and land resources. The **Nebraska Resources Development Fund** can be used to provide grants and/or loans to political subdivisions of the state or an agency 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 Act created a conjunctive administrative system with certain responsibilities delegated to the **Natural Resources Commission**, and other responsibilities delegated to a statutorily created "Advisory Board." On February 15, 1985, the Director of Natural Resources assumed the responsibilities and duties of the Advisory Board in accordance with the provisions of L.B. 1106.

The primary function of the Director is to determine project and program eligibility for Nebraska Resources Development Fund (NRDF) assistance. The Director must also determine the type of assistance appropriate: Grant, loan or a combination thereof. To accomplish these responsibilities, the Director has adopted appropriate rules and regulations, evaluation standards, specifications, and guidelines for implementation. The Director and his staff, along with personnel from other state agencies as

appropriate, review each application and the Director must find that a project is economically, financially and technically feasible as well as environmentally acceptable in order for it to be eligible for assistance through the Fund.

The Commission reviews project proposals and, after receiving recommendations from the Director, advises project sponsors whether to proceed with an application and feasibility report. The Commission's primary administrative functions begin once the Director has reviewed the application, determined eligibility, and referred those projects eligible to the Commission. Determination of funding priorities for eligible programs or projects is a sole responsibility of the Commission. Prior to any allocation of funds, the Commission must enter into an agreement and negotiate other necessary documents to be assured that the state investment is protected. Once this is accomplished, the Commission has responsibility for administering the grant and/or loan and the payment provisions of a loan.

The application procedure established jointly by the Director and the Commission is a two-step process. The first step involves the submittal of a project proposal by a sponsor, and the second step is a project application. A sponsor may bypass the project proposal and



Long Branch Site 21 is located in southeastern Nebraska in Richardson County

initiate the request by submitting an application; however, in such case the sponsor forfeits the possibility of cost-sharing on the cost of preparation of the application and accompanying feasibility study.

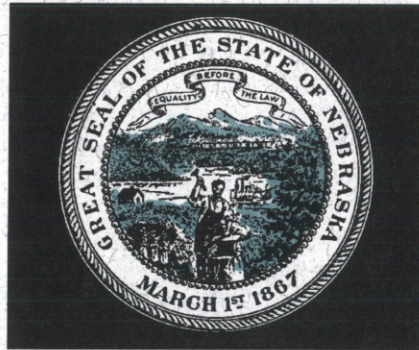
A set of "Guidelines" has been distributed for use by project sponsors in fulfilling the requirements of the "Project Proposal" and the "Project Application and Feasibility Report." The "Project Proposal" is a brief document which outlines the nature of the project, includes a preliminary estimate of project costs, and gives an indication of the sponsor's plans for the project. The Director, after reviewing the project proposal, recommends to the Commission whether the sponsor should proceed with an application and indicates the likely range of NRDF assistance if the project is later found to be eligible. The Commission may provide the sponsor with additional guidance regarding the contents of the application. This process helps ensure that a sponsor covers all areas of concern to the Director and Commission and prevents the inclusion and preparation of unnecessary material.

The application is to include the necessary project description, cost estimates, preliminary design information, description of the manner in which the project will be operated, as well as the statutorily required information to determine whether the project is financially, economically, and technically feasible and environmentally acceptable. If the Director determines a given project is financially, economically, and technically feasible and environmentally acceptable, as well as being an eligible project under the law, he submits a recommendation, containing those findings, to the Commission. That recommendation also stipulates the type of assistance (grant and/or loan) and the amount of assistance.

The Commission, at its first regularly scheduled meeting after the Director's recommendation is received, is briefed on all aspects of the project by the project sponsor and Commission staff members. Commission policy then provides that the project be automatically referred to its Program Committee for preparation of a recommendation to the Commission in regard to approval and obligation of funds, with such recommendation to be submitted at the subsequent Commission meeting. A delegation of Commission members must visit the project area before the Commission takes action.

Approval of any project by the Commission constitutes only acceptance or endorsement of the project and does not entitle the sponsor of that project to receive any money from the Development Fund. However, the obligation of funds does set aside a given amount of money for a project. After approving a project, the Commission may take action on "obligating" or "setting aside" funds for that project if funds are

available. Such obligation may be for the entire project or only for an independent or separable component of a project. Additionally, separable components of larger projects may be designated even if the components are not independent of each other, if the project sponsor agrees to such designation. Commission rules and regulations also establish a priority setting system to allocate available funds among the eligible projects on an annual basis.



Members of the NEBRASKA NATURAL RESOURCES COMMISSION

Robert Bell, *Chairperson*

Roy Stewart, *Vice-Chairperson*

Frank Bartak

Wayne Davis

Robert Gifford

Joseph Hergott

Richard Jiskra

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Glen Kroese

Don Larson

Richard Mercer

Wilbur Nelson

Donald Roberts

Mike Shaughnessy

Dale Watermeier

Clifford Welsh

PROJECT REVIEW

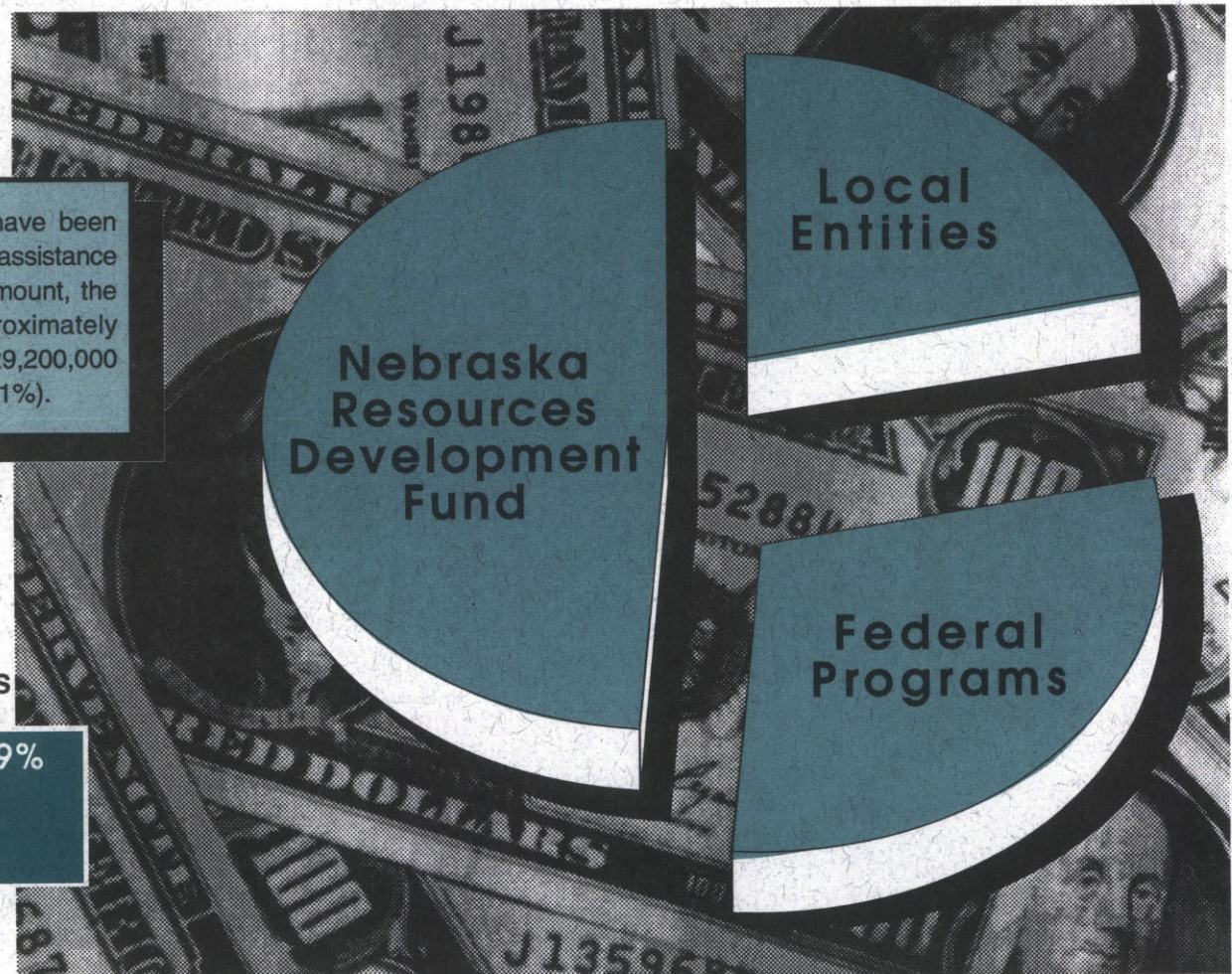
As of June 30, 1996, **54 water resources projects** have been approved for financial assistance from the Resources Development Fund. The total allocation for these projects is **\$48,426,776.68**. The majority of the projects funded provide for the storage of water and the beneficial use(s) of that water. Flood control, sediment and erosion control, ground water recharge, fish and wildlife enhancement, and recreation, including fishing, boating, and swimming, have been the primary benefits that have resulted. Several of the funded projects were planned through the Soil Conservation Service's P.L. 566 Watershed Program, its Resource Conservation and Development (RC&D) Program, or the Corps of Engineers Section 205 Flood Control Program. **During fiscal years 1995 and 1996, five projects were completed and three project proposals were received.**

The total cost of the **54 projects** that have been approved for Resources Development Fund assistance is approximately **\$98,000,000**. Of this amount, the Development Fund has provided approximately \$48,400,000 (49%), federal programs \$29,200,000 (30%) and local entities \$21,500,000 (or 21%).

Figures have been rounded off

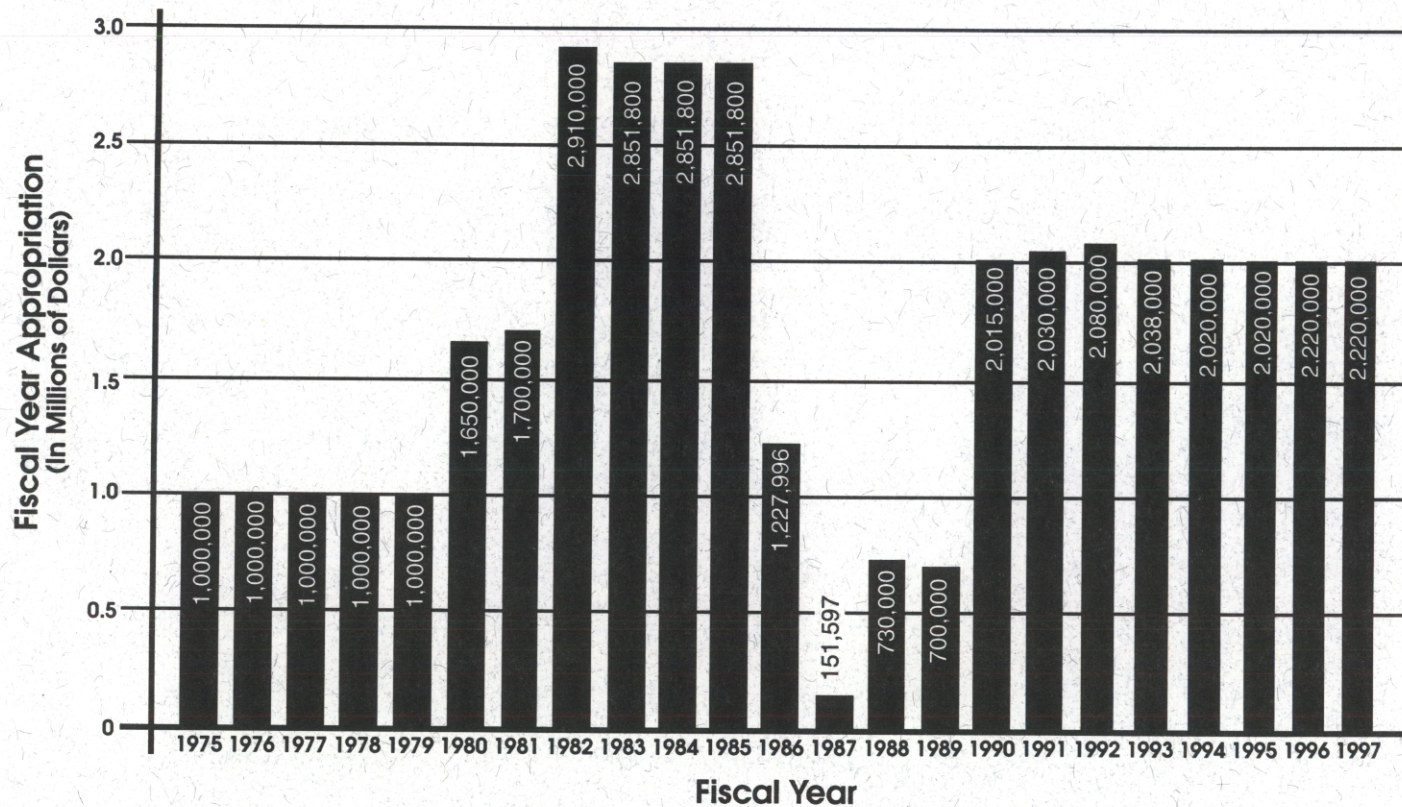
BREAKDOWN OF TOTAL COSTS FOR RESOURCES DEVELOPMENT FUND PROJECTS

Resources Development Fund 49%
 Federal Programs 30%
 Local Entities 21%



RESOURCES DEVELOPMENT FUND FINANCIAL HISTORY

From its inception, the Resources Development Fund has depended upon general fund appropriations to provide state financial assistance to local project sponsors. The annual appropriations have been:



Fiscal Year	Annual Appropriation (in Millions Dollars)
1975	1,000,000.00
1976	1,000,000.00
1977	1,000,000.00
1978	1,000,000.00
1979	1,000,000.00
1980	1,650,000.00
1981	1,700,000.00
1982	2,910,000.00
1983	2,851,800.00 1/
1984	2,851,800.00
1985	2,851,800.00
1986	1,227,996.73 2/
1987	151,597.00 3/
1988	730,000.00 4/
1989	700,000.00
1990	2,015,000.00 5/
1991	2,030,000.00 6/
1992	2,080,000.00 7/
1993	2,038,000.00 8/
1994	2,020,000.00 9/
1995	2,020,000.00 10/
1996	2,220,000.00 11/
1997	2,220,000.00 12/

1/ Includes \$100,000.00 cash funds
 2/ Includes \$69,000.00 transferred from Water Management Fund plus \$1,232.73 in operating funds
 3/ Includes \$50,000.00 cash funds
 4/ Includes \$30,000.00 cash funds
 5/ Includes \$15,000.00 cash funds
 6/ Includes \$30,000.00 cash funds
 7/ Includes \$80,000.00 cash funds
 8/ Includes \$38,000.00 cash funds
 9/ Includes \$50,000.00 cash funds
 10/ Includes \$50,000.00 cash funds
 11/ Includes \$50,000.00 cash funds
 12/ Includes \$50,000.00 cash funds

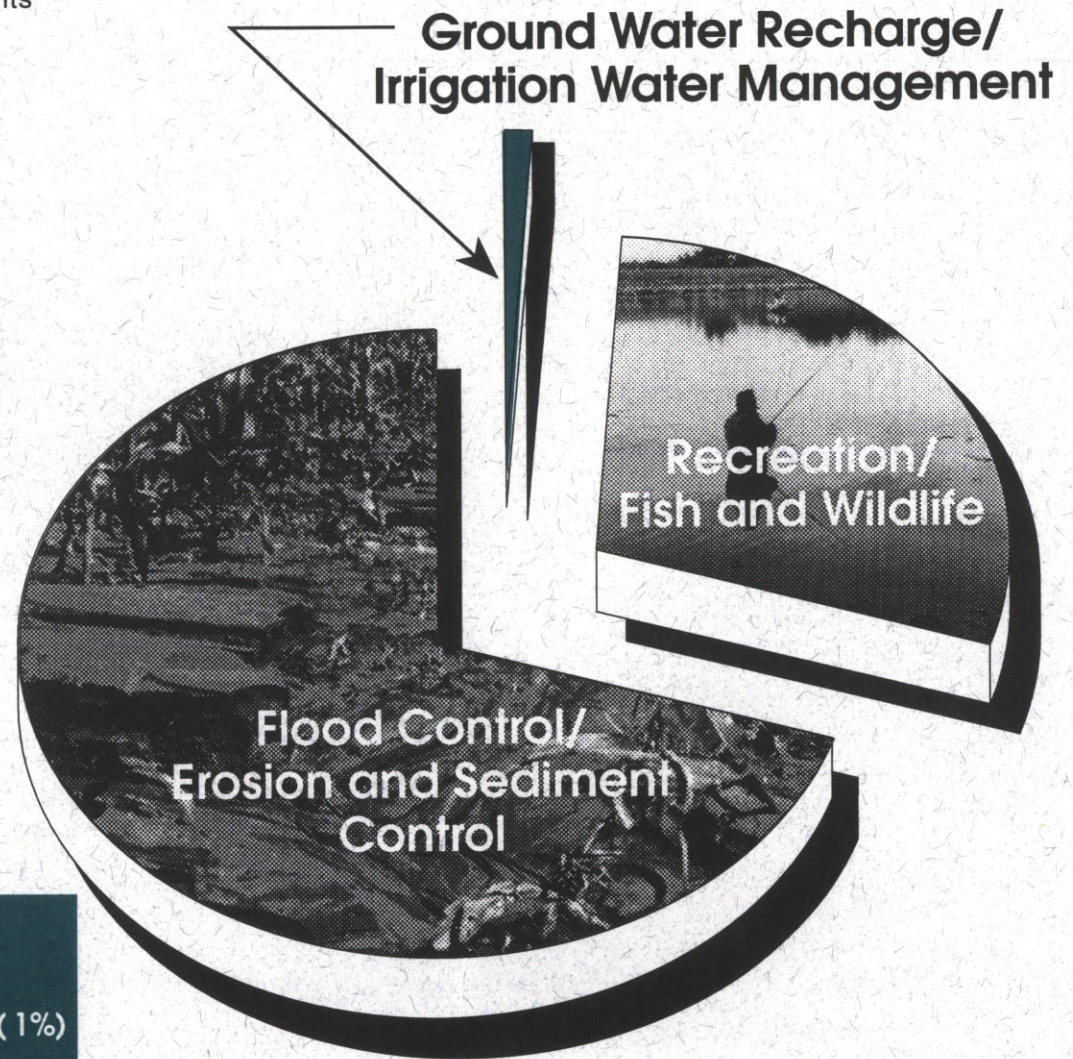


Total Annual Appropriations for the Resources Development Fund from 1975-1997 equals \$39,352,993.73

Project Status

As of June 30, 1996, a total of **42 projects** that received financial assistance from the Resources Development Fund have been completed. Two other funded projects (School Creek and Deshler) were terminated by their sponsor prior to land rights acquisition due to unanticipated cost increases.

It is estimated that approximately **\$417,939,000 in benefits** will accrue from the funded projects during their project life periods (generally 50 years). These benefits can be separated into three categories:



**BREAKDOWN OF BENEFITS
FOR RESOURCES DEVELOPMENT FUND PROJECTS**

- Flood Control/Erosion and Sediment Control (70%)
- Recreation/Fish and Wildlife (29%)
- Groundwater Recharge/Irrigation Water Management (1%)

A brief descriptions of the completed and currently approved Resources Development Fund projects follows:

COMPLETED RESOURCES DEVELOPMENT FUND PROJECTS

Numbers correspond with project numbers found on Project Location Map on page 17 of this publication

1 AINSWORTH RESERVOIR

Sponsor: Ainsworth Irrigation District

Ainsworth Reservoir was constructed approximately four miles southwest of Johnstown as an additional feature of the Ainsworth Irrigation Project. The reservoir serves as a secondary storage reservoir for irrigation water in the Ainsworth Canal that is not needed following unexpected rainfall events. Principally funded by the Rural Clean Water Program (RCWP), the project provides for improved water management and results in reduced pumping costs for district cooperators. Improved water quality is also expected in Long Pine Creek, Plum Creek, and Sand Draw. Completed in 1987, this project was awarded a NRDF grant of \$30,862.50.



Aowwa Creek is a multi-purpose structure located in Dixon County with a 75 acre lake offering recreation opportunities.

2 ANTELOPE CREEK

Sponsor: Lewis & Clark NRD

The Antelope Creek Project involved the construction of an earthen dam on Antelope Creek in northwestern Cedar County. The structure has a permanent pool of 44 acres and provides both flood protection and recreational benefits. Due to Antelope Creek's excellent water quality and its perennial flow, the reservoir supports a fine sport fishery. This project was completed in 1987 and received a NRDF grant of \$377,578.72.

3 AOWA CREEK (Buckskin Hills)

Sponsor: Lewis & Clark NRD

This project involved structure 6-7A of the Aowwa Creek P.L. 566 Watershed Project, which was planned as a multi-purpose structure and includes provisions for flood control, grade stabilization, and fish and wildlife. The structure is located about four miles southwest of Newcastle and has a conservation pool of 75 acres. This project utilized a NRDF grant of \$144,650.00 and was completed in 1979.

4 AURORA 35-11-6

Sponsor: Upper Big Blue NRD

This project involved the construction of a dam on a tributary of Lincoln Creek northeast of Aurora.

The resulting reservoir has a conservation pool of approximately 40 acres and provides both recreation and groundwater recharge benefits. A NRDF grant of \$335,364.17 was awarded to this project and it was completed in 1987.

5 BIG PAPIO CHANNEL

Sponsor: Papio-Missouri River NRD

The Big Papio Channel Project is a Corps of Engineers Section 205 flood control project in Omaha along Big Papillion Creek between Center and "L" Streets. The project included channel improvement work, improvement work at a Union Pacific Railroad bridge, and construction of a flood warning system. The project was completed in 1995 and received a NRDF grant of \$2,224,677.53.

6 BIG SANDY #1

Sponsor: Little Blue NRD

Big Sandy #1 is the first of seven potential structures to be constructed in 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. Groundwater recharge has been monitored at the reservoir. A NRDF grant of \$396,573.82 was used in the construction of this project which was completed in 1982.

7 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. Its reservoir has a conservation pool of 250 acres and a flood pool of 560 acres. This project utilized a NRDF grant of \$864,603.43 and was completed in 1985. In 1988 the project sponsor expanded the project by making it a public use area.

8 BUFFALO CREEK

Sponsor: Central Platte NRD

The Buffalo Creek Watershed Project consists of several flood water retarding structures in the uplands north of Lexington. The major purpose of the project is to provide flood protection for the lowland areas of the watershed. The structures 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 its groundwater recharge capability. Completed in 1991, the project received a NRDF grant of \$2,145,637.80.

9 BUFFALO CREEK

Sponsor: Papio-Missouri River NRD

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

purposes. The project was awarded a NRDF grant of \$628,712.63 and was completed in 1991.

**10 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 included the construction of two earthen dams, the construction and improvement of drainage ditches, and the installation of certain storm sewers in David City. Completed in 1986, the project utilized a NRDF grant of \$446,604.45.

11 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 at a Soil Conservation Service P.L. 566 Watershed multi-purpose structure. The resulting reservoir has a surface area of approximately 46 acres. NRDF assistance was in the form of a grant for \$162,750.00 and the project was completed in 1981.

12 CLEAR CREEK WATERSHED

Sponsor: Central Platte NRD

Completed in 1981, 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.

13 CRYSTAL LAKE

Sponsor: Adams County

This project, which was completed in 1980, consisted of the renovation of an existing public recreation area along the Little Blue River near Ayr. The deepening and enlargement of an oxbow was the major feature of the project. NRDF assistance was \$67,806.83 in the form of a grant.

14 CUB CREEK

Sponsor: Middle Niobrara NRD

This project, completed in 1979, 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 \$87,489.83 in the form of a grant.

Cub Creek offers local residents recreational opportunities in Keye Paha County.





Davis Creek Reservoir, located in Valley and Greeley counties, is very unique in that the water surface elevation can vary by 56 feet during the year.

15 CZECHLAND LAKE

Sponsor: Lower Platte North NRD

The Czechland Lake Project provided for recreation facility development at a P.L. 566 watershed flood control structure near Prague. Designed and principally funded by the Soil Conservation Service, the structure resulted in a 85-acre reservoir. The Project was completed in 1993 and utilized a NRDF grant of \$172,990.57.

16 DAVIS CREEK

Sponsor: Lower Loup NRD

The Davis Creek Reservoir Project consisted of the development of recreation facilities at a U.S. Bureau of Reclamation reservoir. Located southwest of Scotia, the Davis Creek Reservoir stores water for the lower portion of the North Loup Irrigation Project. Facility development include a boat ramp and fishing pier, both designed to operate with the fluctuating nature of the reservoir, along with a picnic shelter, water well, rest rooms, and parking areas. A NRDF grant of \$96,038.86 was awarded to this project.

17 DESHLER

Sponsor: Little Blue NRD

The Deshler Flood Control Project called for the construction of an earthen dam just west of Deshler. The structure was to provide flood control benefits to the southern part of the community and the resulting reservoir was to provide various recreational opportunities. The reservoir was planned to have a conservation pool of 122 acres and a flood pool of 333 acres. The project was suspended in 1985 due to an unanticipated increase in estimated project costs. A total of \$21,639.75 in NRDF funds was expended for engineering and land rights appraisals.

18 ELKHORN RIVER BANK STABILIZATION

Sponsor: Papio-Missouri River NRD

The Elkhorn River Bank Stabilization Project involves a channel cut-off and the placement of rock revetment at severely eroding sites along the seven-mile reach between King Lake and Highway 36 north of Waterloo. The project was designed to control rapidly advancing meanders, thereby preventing the erosion of cropland, woodland, and some residential property. NRDF funding was contingent upon acceptance of the assessment schedule for the Improvement Project Area (IPA) by the involved landowners. The project was completed in 1988 and utilized a NRDF grant of \$1,164,964.66 and a loan of \$135,741.15.

19 LIBERTY CREEK

Sponsor: Little Blue NRD

The Liberty Creek Project is a recreation and flood control project located southwest of Lawrence. The 36-acre reservoir provides for various recreation activities, including swimming and fishing. The structure also provides some flood protection to downstream roads and bridges and to agricultural land. Completed in 1991, this project received a NRDF grant of \$223,162.50.

20 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 511 acres located approximately two and one half miles northwest of Humboldt. The structure was constructed on Kirkham Creek and the resulting reservoir has a permanent pool of 160 acres. The project provides flood control, grade stabilization, recreation, and fish and wildlife habitat benefits. The project utilized a NRDF grant of \$441,379.33 and was completed in 1988.

21 LOOMIS PIPELINE

Sponsor: Central Nebraska Public Power and Irrigation District & 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 NRDF grant for \$33,750.00 was utilized and the project was completed in 1981.

22 LOST CREEK

Sponsor: City of Columbus

Completed in 1986 the Lost Creek Flood Control Project consists of an excavated floodway and a training levee that intercept storm runoff west and north of Columbus and convey it to the Loup Power Canal. The project, which will handle a 100-year flood, was designed and primarily funded by the Corps of Engineers. The NRDF provided a grant of \$465,823.57 and a loan of \$155,274.48 to the project. In 1995 the City of Columbus retired the NRDF loan for the project.

23 MASKENTHINE

Sponsor: Lower Elkhorn NRD

This project, the first to be funded through the Nebraska Resources Development Fund, is located approximately one mile north of Stanton on Maskenthine Creek. The resulting 94 acre reservoir provides flood control, fish and wildlife habitat, sediment control, and recreational opportunities. Financial assistance in the form of a grant of \$269,978.98 was provided by the NRDF. The project was completed in 1976.

24 McCOOK (Kelley Canyon)

Sponsor: Middle Republican NRD

The NRDF provided a grant of \$512,000.00 for this flood control project in the northern part of McCook. The construction of a floodwater retarding structure, drainage way improvement, and bridge replacement are the main features in this project that was completed in 1981.

25 MILL CREEK

Sponsor: Lower Platte South NRD

The Mill Creek Project is a flood control project in Louisville that involved the construction of a bypass for Mill Creek flood flows along Highway 50, bridge clean-out work, and the enlargement of an existing berm. The project was completed in 1990 and was awarded a NRDF grant of \$66,850.03.

26 MIRA CREEK

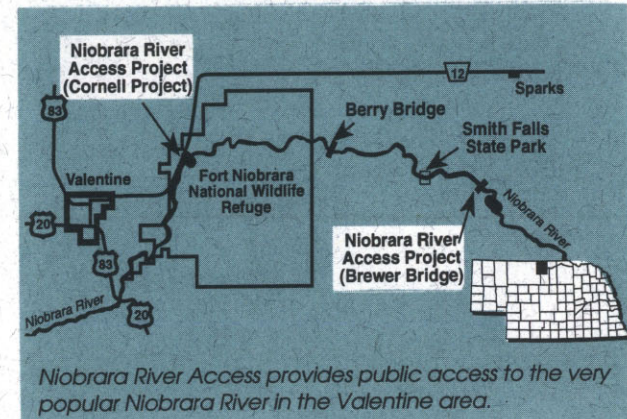
Sponsor: Lower Loup NRD

This clearing and snagging project was carried out to improve the channel capacity of Mira Creek adjacent to the Village of North Loup in order to reduce flooding in that community. The project also included the replacement of an irrigation lateral flume with a siphon. A NRDF grant of \$68,952.41 was awarded and the project was completed in 1985.

27 MOORES CREEK

Sponsor: Central Platte NRD

The Moores Creek Project is a flood control project near Grand Island that consisted of channel improvement work and the development of small flood water retention/detention cells along the stream. The project utilized a large (400 Acre-Feet) detention cell constructed by the Nebraska Department of Roads in its Highway 281 improvement project. Construction of the project was completed in 1995 with NRDF grant assistance totaling \$1,931,670.22.

**28 NIOBRARA RIVER ACCESS**

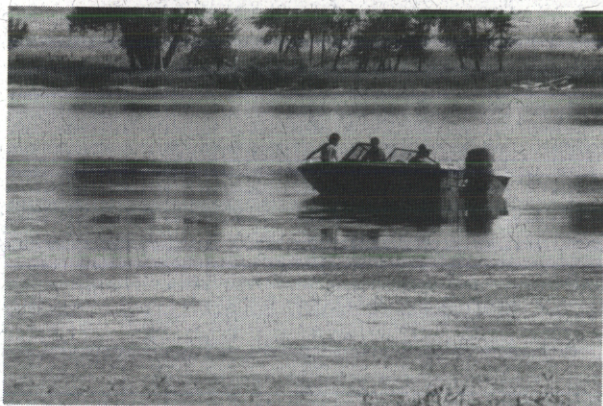
Sponsor: Middle Niobrara NRD

The Niobrara River Access Project provided for the development of two public access sites along the Niobrara River east of Valentine. The sites include a restroom, a well, picnic tables, trash receptacles, a parking area, and a canoe access point. One site is located at Cornell Bridge and the other at Brewer Bridge. Completed in 1991, the project received a NRDF grant of \$25,274.51.

29 OGALLALA

Sponsor: City of Ogallala

The Ogallala Project consisted 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 were also constructed in order to attain comprehensive control of stormwater in the city. The project was awarded a NRDF grant of \$600,793.23 and was completed in 1990.



Oliver Reservoir, originally used to store water for irrigation now provides a 280 acre reservoir providing recreation and flood control benefits.

30 OLIVER RESERVOIR

Sponsor: South Platte NRD

The Oliver Reservoir Project involved the reconstruction of an existing dam on Lodgepole Creek that originally was used to store water for irrigation. The project, located west of Kimball, includes extensive recreational development around the 280-acre reservoir and the structure and also provides flood control benefits. Completed in 1985, the project utilized a NRDF grant of \$1,008,476.54.

31 PRAIRIE CREEK

Sponsor: Central Platte NRD

This project involved snagging and clearing operations to provide a more open floodway along the 42-mile reach of Prairie Creek in Hall County. The project utilized a NRDF grant of \$243,975.00 and was completed in 1980.

32 RAWHIDE CREEK

Sponsor: Lower Platte North NRD

The Rawhide Creek Flood Control Project, located north and west of Fremont was designed to reduce flood problems in that city. The project consisted of (1) the construction of a flood control structure on Trouble Creek, (2) the construction of three channels to divert flood water from Rawhide Creek, and (3) improvement of an existing drainage ditch to convey flood water to the Elkhorn River. The project was completed in 1994 and received a NRDF grant of \$2,251,337.08.

33 SCHOOL CREEK

Sponsor: Upper Big Blue NRD

The School Creek Project was proposed 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 constructed in the School Creek Watershed. It was to have a permanent pool of 160 acres but was suspended by the project sponsor in 1982 due to unanticipated costs that made the project economically infeasible. A total of \$45,724.71 in NRDF funds were expended for engineering and land rights appraisals.

34 SCRIBNER LEVEE

Sponsor: City of Scribner

The Scribner Levee Project consisted of the construction of a levee on the northwest, west, south, and southeast sides of Scribner to protect the city from Pebble Creek flooding. The project,

designed and primarily funded by the Corps of Engineers as a Section 205 project, will provide 100-year flood protection to Scribner. The project, as originally designed, has been completed and an additional levee was constructed on the east side of the city to protect Scribner from the 100-year flood of the Elkhorn River. A NRDF grant of \$426,433.81 was awarded and the project was completed in 1995.

35 SILVER CREEK

Sponsor: Central Platte NRD

The Silver Creek Flood Control Project consists of an excavated floodway along Silver Creek and Clarks Drain in Merrick County. The project is designed to convey runoff water from agricultural land in the area. Reduced flooding and improved crop production have resulted from the project. Completed in 1987 the project received a NRDF grant of \$2,307,175.53.

36 SOUTH FORK 2-A

Sponsor: Nemaha NRD

Structure 2-A of the P.L. 566 South Fork Watershed Project is the designated multi-purpose structure in the watershed. The project provides flood control, sediment and erosion control, wildlife habitat and recreation benefits. The site consists of 360 acres and the structure has 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. The project was awarded a NRDF grant of \$266,632.71 and was completed in 1986.

37 SUMMIT LAKE

Sponsor: Papio-Missouri River NRD

Summit Lake (Structure 5-A) of the P.L. 566 Tekamah-Mud Creek Watershed Project is the designated multi-purpose structure in the watershed. The project provides flood control benefits to the City of Tekamah and to agricultural land and also water-based recreation to a region of the state that includes the Omaha metropolitan area. The project, which utilized a NRDF grant of \$329,191.05, encompasses 400 acres including the reservoir's conservation pool of 190 acres. The project was completed in 1982.

38 THOMPSON CREEK

Sponsor: City of LaVista

This project resulted in the construction of a floodwater retarding structure in the City of LaVista that provides flood protection to homes that were constructed prior to the adoption of the city's floodplain ordinance. The structure, which is designed to drain down slowly after storm events, was completed in 1986. A NRDF grant of \$240,581.72 was provided to this project.

39 UNION IRRIGATION DISTRICT REHABILITATION

Sponsor: Union Irrigation District & North Platte NRD

The Union Irrigation District Rehabilitation Project provided for the rehabilitation of the irrigation district's water delivery system as earthen laterals were replaced with PVC pipe. Planned and designed by the SCS as a RC&D project, the project was completed in 1989 and was awarded a NRDF loan of \$82,500.00.

40 WALNUT CREEK

Sponsor: Lower Big Blue NRD

The Walnut Creek Flood Control Project 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 and the project was completed in 1982. NRDF assistance totalled \$264,225.00 in the form of a grant.

41 WARM SLOUGH/TROUBLE CREEK

Sponsor: Central Platte NRD

The Warm Slough/Trouble Creek Project is a flood control project that will provide 100-year flood protection to Central City. The project consists of a diversion structure and channel that will intercept flood flows in Warm Slough and in Trouble Creek above Central City and convey them to the Platte River. The project was awarded a NRDF grant of \$1,535,417.70 and was completed in 1994.

42 WAUNETA

Sponsor: Village of Wauneta/
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 provides flood control benefits to the Village of Wauneta and as constructed is a revision of the originally planned project that consisted of the construction of flood control structures on selected tributaries of Frenchman Creek above Wauneta. High land rights and



Walnut Creek Site #2 is located in Saline County.

construction costs necessitated modification of the original plan. The project was completed in 1986 and involved a NRDF grant of \$556,084.19.

43 WEST SAND DRAW

Sponsor: Middle Niobrara NRD

This project, which was completed in 1981, involved the construction of an earthen dam on Brown County road right-of-way northwest of Ainsworth. The structure traps sediment which otherwise would be carried down to Plum Creek, a cold water tributary of the Niobrara River. The project, which also provides grade stabilization and an improved road crossing, utilized a NRDF grant of \$36,364.91.

44 WILLOW CREEK

Sponsor: Lower Elkhorn NRD

The Willow Creek Project, located southwest of Pierce, is primarily a water storage, recreation, and fish and wildlife enhancement project. The project area includes approximately 1,700 acres and the 700-acre reservoir provides a variety of water-based recreation opportunities. The project, which was completed in 1986, also provides limited flood control benefits. The project was awarded a NRDF grant of \$3,828,455.53.

APPROVED PROJECTS**45 CHALCO HILLS RECREATION AREA**

Sponsor: Papio-Missouri River NRD

The Chalco Hills Recreation Area (Papio Site #20) Project provided for outdoor recreation facility development and limited land acquisition at the Corps of Engineers' structure site located along I-80 in Sarpy County. The recreation facility development work is completed and the facility was opened to the public on August 1, 1988. The Commission approved funding for the project over a 10-year period with the sponsor to request funds each fiscal year.

46 GERING CANAL

Sponsor: Gering Irrigation District & North Platte NRD

The Gering Canal Project consists of two phases to rehabilitate and improve the Gering Irrigation District's facilities. Phase One consists of realigning the main canal to avoid canyon head-cutting while Phase Two involves construction of a new spillway. Phase Two will also reduce the potential for flooding in the City of Gering. The project was awarded a partial NRDF grant and a partial NRDF low interest rate loan for irrigation facility rehabilitation projects. Design of Phase One and Phase Two has been completed by the NRCS and construction may take place this fall.

47 HOWELLS LEVEE

Sponsor: Village of Howells

This project, planned, designed, and principally funded by the Corps of Engineers under Section 205, will provide the Village of Howells with 500-year flood protection along the East Fork of Maple Creek. The project consists of the improvement of an existing levee on the north side of town and construction of a new levee on the east side of town and is nearly completed.

48 LODGEPOLE CREEK AT SIDNEY

Sponsor: City of Sidney

This Corps of Engineers' Section 205 project consists of channel improvement work on Lodgepole Creek and Deadwood Draw in Sidney along with a channel cut-off and an accompanying grade stabilization structure and the replacement/improvement of three city bridges. The project will reduce flooding in Sidney and nearly confine the 100-year flood plain to the improved stream channel. The project was completed in the spring of 1994 but a heavy runoff event necessitated some additional work.

49 LOWER WOOD RIVER/UPPER WARM SLOUGH

Sponsor: Central Platte NRD

Planned, designed, and principally funded by the Corps of Engineers as a general investigation type project, this project provides flood protection against the 100-year flood event along the Wood River at Grand Island. Principal project features include minor levee and channel improvement work, a diversion on Wood River and a floodway to the Platte River.

50 PAPIO SITE 21

Sponsor: Papio-Missouri River NRD

The Papio Site 21 Project is a recreation and flood control project located on Walnut Creek southwest of Papillion. The site was originally identified by the Corps of Engineers in its Papillion Creek Watershed Project. The project consists of an earthen dam that will impound a 70-acre reservoir on a 485-acre tract. Extensive recreation facility development is planned. Construction of the dam and design of recreational facilities are underway.

51 PENDER FLOOD CONTROL

Sponsor: Village of Pender

This project is another Section 205 project planned, designed, and principally funded by the Corps of Engineers. The project will protect Pender from the 385-year flood event on Logan Creek and primarily consists of levee construction, including a floodwall section, and two state highway closure structures. Design work will begin this year.

52 SKULL CREEK WATERSHED

Sponsor: Lower Platte North NRD

This watershed project includes three flood control structures and the construction of dikes along the lower portion of Skull Creek. Located in northeastern Butler and northwestern Saunders counties, the project will be coordinated with a land treatment program. Due to the lack of progress in the installation of land treatment measures above the reservoir sites, the Commission rescinded funding for all work except structure 55 which includes limited recreation facility development. The sponsor has developed a plan to accomplish the necessary land treatment so construction of the project can proceed.

53 UPPER LITTLE NEMAHA WATERSHED

Sponsor: Nemaha NRD

The Upper Little Nemaha Watershed Project is a flood control project that consists of 18 floodwater retarding structures. Originally planned by the Soil Conservation Service as a P.L. 566 project, it is located in the Bennet, Eagle, Palmyra, and Unadilla area. Structure design, land rights acquisition and construction work are all underway and six structures are either completed or nearing completion.



Maskenthine

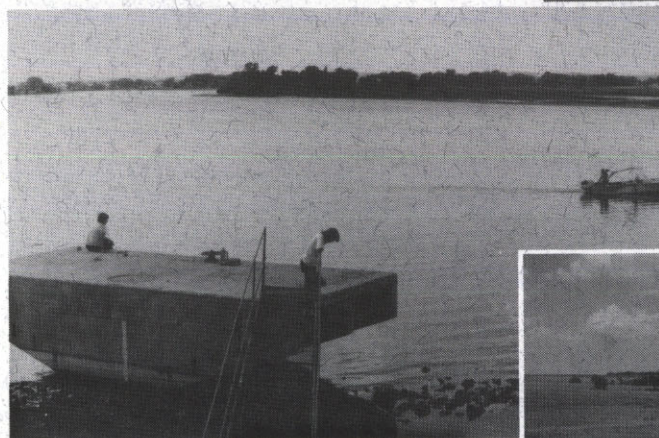
54 WEEPING WATER CREEK WATERSHED

Sponsor: Lower Platte South NRD

The Weeping Water Creek Watershed Project is a flood control project located in Cass County. The project consists of 19 floodwater retarding structures that will serve to reduce flooding in the communities of Weeping Water, Nehawka, and Union, to agricultural land and to roads and bridges. Final design and land rights acquisition for several structures has been completed and 11 structures have been constructed.

A table regarding the financial status of the approved NRDF projects follows:

Czechland Lake



Liberty Creek

Oliver Reservoir



To Assist In The Development
And Wise Use Of
Nebraska's Water And Land Resources

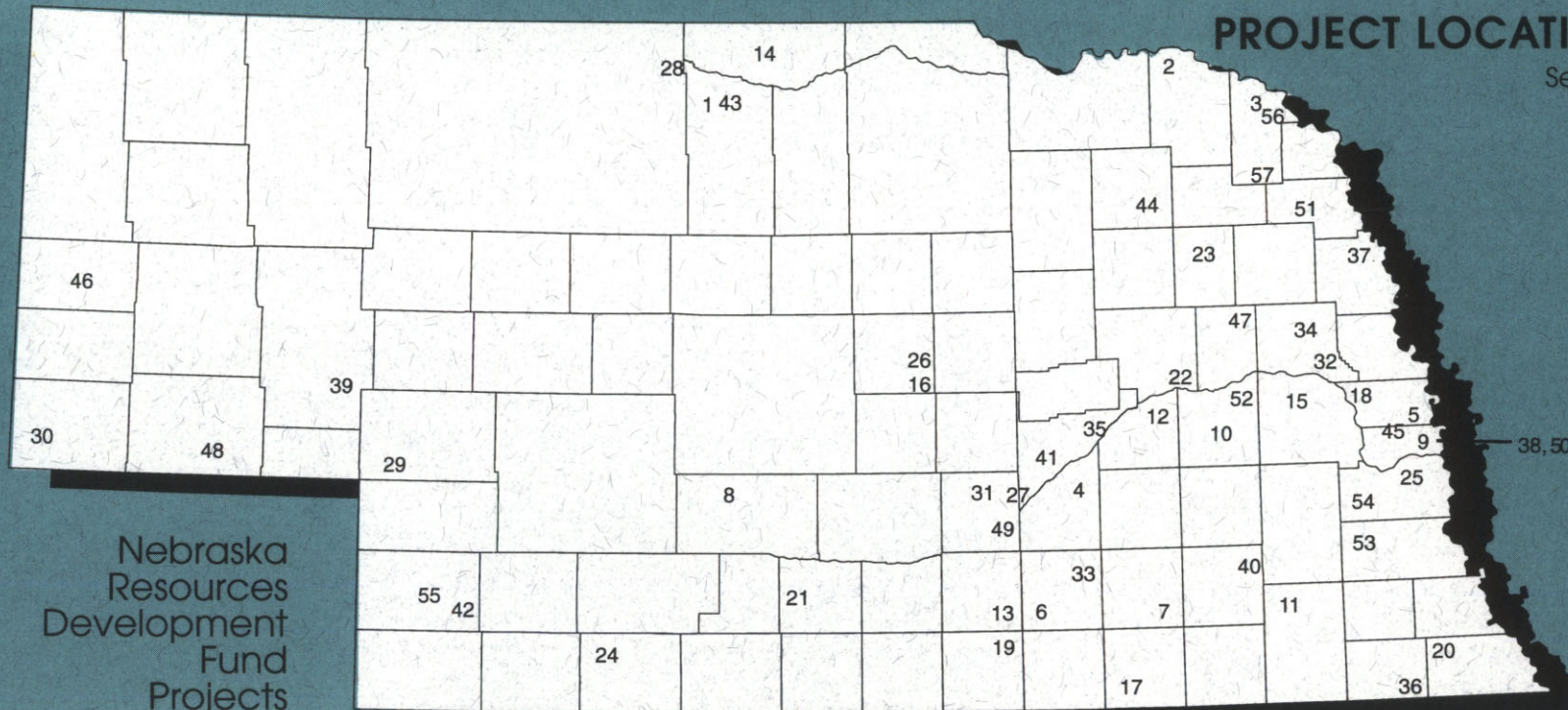
FINANCIAL STATUS OF APPROVED PROJECTS

June 30, 1996

Project Name	Amount Allocated	Amount Obligated	Amount Expended To Date
FULLY FUNDED:			
Lodgepole Creek	\$1,002,862.97	\$1,002,862.97	\$1,002,862.97
PARTIALLY FUNDED:			
Chalco Hills Recreation Area	\$942,358.95	\$848,123.10	\$848,123.10
Gering Canal	295,365.30	0.00	0.00
Howells Levee	137,040.00	50,000.00	0.00
Papio Site 21	4,576,137.92	2,643,765.10	1,861,309.95
Pender Flood Control	823,468.00	0.00	0.00
Upper Little Nemaha	3,825,960.00	1,955,050.00	1,058,415.33
Weeping Water Creek Watershed	4,828,049.00	2,318,225.50	2,195,628.30
APPROVED BUT NOT FUNDED:			
Lower Wood River/ Upper Warm Slough	\$3,191,441.02	\$0.00	\$0.00
Skull Creek	389,517.00	0.00	0.00
COMPLETED PROJECTS	\$28,414,576.52	\$28,414,576.52	\$28,414,576.52
Total	\$48,426,776.68	\$37,232,603.19	\$35,380,916.17

PROJECT LOCATION MAP

September 1996



Nebraska
Resources
Development
Fund
Projects

COMPLETED PROJECTS

- 1. Ainsworth Reservoir
- 2. Antelope Creek
- 3. Aowa Creek (Buckskin Hills)
- 4. Aurora 35-11-6
- 5. Big Papio Channel
- 6. Big Sandy #1
- 7. Big Sandy #2
- 8. Buffalo Creek (Dawson Co.)
- 9. Buffalo Creek (Sarpy Co.)
- 10. Central Butler
- 11. Clatonia Creek
- 12. Clear Creek Watershed
- 13. Crystal Lake
- 14. Cub Creek
- 15. Czechland Lake
- 16. Davis Creek Reservoir
- 17. Deshler
- 18. Elkhorn River Bank Stabilization
- 19. Liberty Creek

- 20. Long Branch
- 21. Loomis Pipeline
- 22. Lost Creek
- 23. Maskenthine Lake
- 24. McCook (Kelley Canyon)
- 25. Mill Creek
- 26. Mira Creek
- 27. Moores Creek
- 28. Niobrara River Access
- 29. Ogallala
- 30. Oliver Reservoir
- 31. Prairie Creek
- 32. Rawhide Creek
- 33. School Creek
- 34. Scribner Levee
- 35. Silver Creek
- 36. South Fork 2-A
- 37. Summit Lake

- 38. Thompson Creek
- 39. Union Irrigation District Rehabilitation
- 40. Walnut Creek
- 41. Warm Slough/Trouble Creek
- 42. Wauneta
- 43. West Sand Draw
- 44. Willow Creek

APPROVED PROJECTS

- 45. Chalco Hills Recreation Area
- 46. Gering Canal
- 47. Howells Levee
- 48. Lodgepole Creek at Sidney
- 49. Lower Wood River/Upper Warm Slough
- 50. Papio Site 21
- 51. Pender Flood Control
- 52. Skull Creek Watershed
- 53. Upper Little Nemaha Watershed
- 54. Weeping Water Creek Watershed

PENDING PROJECTS

- 55. Enders Dam
- 56. Powder Creek
- 57. Wakefield Levee

PROJECTS PENDING

Three projects are currently under review.

The Frenchman Valley and Hitchcock & Red Willow Irrigation Districts have submitted a project application to repair **Enders Dam** near Imperial. This structure was constructed by the Bureau of Reclamation and stores water for the sponsoring irrigation districts along with providing flood control, recreation, and fish and wildlife benefits.

The **Powder Creek Project**, sponsored by the Lewis and Clark NRD, would assist with the construction and development of Site 31-20A, a multi-purpose structure of the Public Law 566 Aowa Creek Watershed. Located near Newcastle, the structure will be designed and primarily funded by the Natural Resources Conservation Service.

The City of Wakefield has submitted a project proposal for the **Wakefield Levee Project**. This project involves the construction of a levee to protect Wakefield from flooding along Logan Creek.



Submitted to the Governor and Legislature

September 1996.

Dayle E. Williamson

Dayle E. Williamson
Director of Natural Resources
Nebraska Natural Resources Commission

LOOKING AHEAD

The Nebraska Resources Development Fund has assisted Nebraskans in the proper development of the State's land and water resources since 1974. Local subdivisions of government throughout the state have demonstrated their capability to develop projects that address local natural resources problems and opportunities. In view of current budget constraints it has become essential for these entities to cooperate with local, state and federal agencies in order to secure adequate funding for their projects.

Flood control and recreation projects are expected to comprise most new applications in the coming years. In addition, increased demand on the Fund to assist with irrigation rehabilitation projects is anticipated. As can be seen in the following table, demands on the Fund are expected to continue to be strong:

NRDF FUNDING NEEDS FOR APPROVED PROJECTS

Fiscal Years 1997-98 and 1998-99

PROJECT	FY 1997-98	FY 1998-99
APPROVED PROJECTS		
Chalco Hills Recreation Area	\$0.00	\$0.00
Gering Canal and Flood Control	242,788.00	0.00
Howells Levee	18,540.00	0.00
Lodgepole Creek at Sidney	0.00	0.00
Lower Wood River/Warm Slough	50,000.00	785,360.00
Papio Site 21	708,218.00	485,697.00
Pender Flood Control	462,500.00	310,968.00
Skull Creek	0.00	194,759.00
Upper Little Nemaha	938,825.00	746,000.00
Weeping Water Creek	866,561.00	618,161.00
SUBTOTAL:	3,287,432.00	3,140,945.00
PENDING PROJECTS		
Enders Dam	\$71,100.00	\$0.00
Powder Creek	0.00	222,500.00
Wakefield Levee	0.00	212,250.00
SUBTOTAL:	\$71,100.00	\$434,750.00
TOTAL:	\$3,358,532.00	\$3,575,695.00

Thomas F. Pesek

Thomas F. Pesek
Administrative Coordinator
Nebraska Resources Development Fund