

2000 ANNUAL REPORT
~~and~~
2001 STATE WATER PLAN



South Dakota

Board of
Water And Natural Resources

Governor William J. Janklow
and Members of the Seventy-Sixth
Legislative Session

Transmitted herewith is the 2000 Annual Report/2001 State Water Plan of the Board of Water and Natural Resources. The Annual Report describes the board's water development and waste management activities during the past year. The State Water Plan outlines the projects on the State Water Facilities Plan and State Water Resources Management System. Additionally, the report provides the board's Water and Environment Fund appropriation recommendations to the Governor and Legislature for fiscal year 2002.

Throughout this document you will see the state has provided significant assistance to a number of water, wastewater, and solid waste projects. Over the past year, the board awarded more than \$27.9 million in grant and loan funds for construction of municipal drinking water systems, wastewater facilities, lake/watershed projects, rural water systems, solid waste disposal, waste tire, and recycling projects. These awards resulted in more than \$107.7 million for environmental projects taking place across the state.

The department continues to work with local sponsors on "Spruce Up South Dakota" project. Appropriations of \$1 million in 1999, and \$1.5 million in 2000 have allowed the department to collect nearly one million waste tires from 47 counties and five reservations in 2000. Additionally, the department has assisted with the clean up and removal of an additional 1,615,000 stockpiled tires to date. The department intends to complete its waste tire collection efforts in the remaining South Dakota counties by the end of 2001.

The department will continue to work with the Board of Water and Natural Resources, local project sponsors, and the general public to coordinate spruce up activities and to continue protecting South Dakota's tomorrow...today.

Sincerely,

Steven M. Pirner
Secretary

BOARD OF WATER AND NATURAL RESOURCES

Gregg Greenfield, Chairman
Steven W. Lowrie, Vice Chairman
Dale Kennedy, Secretary
Don Bollweg
John Loucks
Roger D. Larsen
Jerry Kleinsasser

Sioux Falls
Watertown
Beresford
Harrold
Rapid City
Sioux Falls
Frankfort

2000 LEGISLATIVE OVERSIGHT COMMITTEE

Senator Marguerite Kleven
Senator Frank J. Kloucek
Representative William F. Cerny, Jr.
Representative Larry W. Diedrich

Sturgis
Scotland
Burke
Elkton

**To
Governor William J. Janklow
and the
Seventy-Sixth Session, Legislative Assembly
2001**

**2000 ANNUAL REPORT
~~and~~
2001 STATE WATER PLAN**

Board of Water and Natural Resources

January 2001

TABLE OF CONTENTS

LIST OF TABLES	ii
LIST OF APPENDICES	ii
PREFACE.....	iii

2000 ANNUAL REPORT

◆ Overview	1
◆ State Water Resources Management System	1
◆ Clean Water State Revolving Fund Loan Program.....	2
◆ Drinking Water State Revolving Fund Loan Program.....	3
◆ Watershed Protection - EPA Section 319 Grants	4
◆ Solid Waste Management Program	4
◆ Consolidated Water Facilities Construction Program	5
◆ 2000 Federal Water Development Legislation.....	6
◆ 2000 State Water Development Legislation	7

2001 STATE WATER PLAN

◆ Overview	11
◆ State Water Facilities Plan	11
◆ State Water Resources Management System	13
SWRMS Project Status.....	14
Recommendations to the Governor and State Legislature	28

LIST OF TABLES

<u>TABLES</u>	<u>PAGE</u>
1 State Water Resources Management System Funding Awards.....	2
2 2000 Clean Water State Revolving Fund Loans.....	2
3 2000 Drinking Water State Revolving Fund Loans.....	3
4 2000 EPA Section 319 Grant Awards.....	4
5 2000 Solid Waste Management Program Awards.....	5
6 2000 Consolidated Awards.....	6
7 Federal Fiscal Year 2001 Appropriations.....	7
8 2001 State Water Facilities Plan.....	12
9 State Water Resources Management System Projects.....	13
10 State Water Resources Management System Funding Recommendations.....	28

LIST OF APPENDICES

APPENDICES

- A) Water and Environment Fund Special Condition Statement
- B) Board of Water and Natural Resources Resolutions
 - #2000-70 State Water Resources Management System Recommendations
 - #2000-71 Water and Environment Fund Fiscal Year 2002 Recommendations

PREFACE

The purpose of this document is to fulfill the statutory requirements placed on the Board of Water and Natural Resources. These requirements are generally outlined as follows:

**SDCL 46A-2-2 To prepare and submit to the Governor and Legislature a yearly progress report on the State Water Plan*

**SDCL 46A-1-10 To make recommendations to the Governor and Legislature concerning projects for the State Water Resources Management System*

**SDCL 46A-1-14 To make an annual report on all activities during the preceding year and funding recommendations necessary to implement the water plan*

This report consists of two principal sections--the 2000 Annual Report and the 2001 State Water Plan. The annual report provides progress reports on each program and on board activities during 2000. The second section sets forth the projects included on the State Water Facilities Plan and the State Water Resources Management System. It also sets forth recommended funding levels for State Water Resources Management System projects, the Consolidated Water Facilities Construction Program, and the Solid Waste Management Program. A Water and Environment Fund Special Condition Statement that projects the status of the Water and Environment Fund as of the end of fiscal year 2001 is included in Appendix A.

2000 ANNUAL REPORT

Board of Water and Natural Resources

Overview

An annual report of the Board of Water and Natural Resources is required by South Dakota Codified Law 46A-1-14. The report summarizes the board's 2000 activities, including a detailed account of expenditures from the Water and Environment Fund.

In November 1999, the board placed 53 projects on the 2000 State Water Facilities Plan. During the year, the board amended an additional 16 projects onto the plan. This made the projects eligible for financial assistance from a variety of federal and state sources.

The board awarded more than \$27.9 million in grant and loan funds for construction of municipal drinking water systems, wastewater facilities, lake/watershed projects, rural water systems, solid waste disposal projects, waste tire cleanups, and recycling activities. These awards resulted in more than \$107.7 million in total activity. The loan and grant funds helped provide South Dakotans with safe and dependable environmental infrastructure.

State Water Resources Management System

On March 23, 2000, the Governor signed the 2000 Omnibus Bill (Senate Bill 41) which provided an appropriation of \$2.5 million for State Water Resources Management System (SWRMS) projects. During the year, the board placed the \$2.5 million of 2000 appropriations and \$575,000 of prior year appropriations, under agreement with local project sponsors (Table 1).

On July 13, 2000, the Lewis and Clark Rural Water System became federally authorized. As part of that authorization, a federal cost share commitment of \$213,887,700 (in 1993 dollars) was identified resulting in a nonfederal cost share of \$58,912,600 (in 1993 dollars). Additionally, as part of the federal legislation that authorized the Lewis and Clark Rural Water System, \$600,000 was appropriated to support the project. With President Clinton's signature, the Lewis and Clark Rural Water System authorization became Public Law 106-246. The South Dakota Legislature authorized the Lewis and Clark Rural Water System in 1993. To date, \$925,000 of state funding has been provided to the Lewis and Clark Rural Water System to assist with preliminary engineering and congressional authorization activities.

Information on individual SWRMS project accomplishments and activities are summarized on pages 13 through 27 in the State Water Plan section of this document.

Table 1

2000 STATE WATER RESOURCES MANAGEMENT SYSTEM FUNDING AWARDS

<u>Project</u>	<u>Amount</u>	<u>Type</u>
Black Hills Hydrology Study *	\$275,000	Grant
Lewis & Clark Rural Water System	200,000	Grant
Sioux Falls Flood Control Project **	600,000	Grant
Mni-Wiconi Rural Water System	<u>2,000,000</u>	Loan
TOTAL	\$3,075,000	

* Prior Year Funds **\$300,000 of Prior Years Funds

Clean Water State Revolving Fund Loan Program

The Clean Water State Revolving Fund Loan Program, which began in 1988, is designed to provide low-interest loans to governmental entities including municipalities, sanitary districts, and other special districts. The loans are used for construction of wastewater facilities, storm sewers, and non-point source pollution control projects.

During 2000, the board approved nine loans totaling \$11,824,004 (Table 2). The federal fiscal year 2000 interest rates were 4.5 percent for 10 years, 4.75 percent for 15 years, and 5.0 percent for 20 years. To date, 115 loans totaling \$105.04 million have been made from the program.

Table 2

2000 CLEAN WATER STATE REVOLVING FUND LOANS

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Interest Rate</u>
Hartford	Sanitary Sewer Main Replacement	\$504,000	5.0%
Hartford	Wastewater Treatment Facility Improvements	690,804	5.0%
Mobridge	Northwest Storm Sewer Improvements	1,355,000	4.5%
Sturgis	Treated Effluent Irrigation System	2,100,000	5.0%
Beresford	West 13 th Street Utility Improvements	1,150,000	4.5%
Aurora	Wastewater Interceptor Improvements	410,000	5.0%
Sioux Falls	Wastewater Facility Improvements	5,100,000	4.5%
Whitewood	Wastewater Collection System Expansion	275,000	5.0%
Lead	US Highway 85 Utility Improvements	<u>239,200</u>	4.5%
TOTAL		\$11,824,004	

Drinking Water State Revolving Fund Loan Program

The Drinking Water State Revolving Fund (SRF) Loan Program was created under the federal Safe Drinking Water Act Amendments of 1996. The program is designed to provide low-interest loans to non-profit corporations and governmental entities including municipalities, sanitary districts, and water user districts. The loans are used for construction of drinking water facilities.

During 2000, the board approved eight loans totaling \$7,964,800 (Table 3). The federal fiscal year 2000 interest rates were 4.5 percent for 10 years, 4.75 percent for 15 years, and 5.0 percent for 20 years. Communities that meet the disadvantaged community criteria may receive a Drinking Water SRF loan at an interest rate below that for other recipients. Additionally, the maximum allowable repayment period for disadvantaged communities can be extended to 30 years. Community water systems must have a median household income below 80 percent of the statewide non-metropolitan median household income to be eligible for an interest rate two percentage points below that set for other recipients. A median household income less than 60 percent of the statewide non-metropolitan median household income is necessary to be eligible for a loan at zero percent interest. Additionally, residential water bills must be at least \$20 per month per 5,000 gallons usage for municipalities and sanitary districts and \$50 per month per 7,000 gallons usage for rural water systems. To date, 22 loans totaling \$27.76 million have been made from the program.

Table 3

2000 DRINKING WATER STATE REVOLVING FUND LOANS

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Interest Rate</u>
Bryant	Water Distribution Improvements	\$142,000	3.0%
Kingbrook RWS	Rural Water Additions	475,000	0.0%
Hartford	Water Main Replacement	185,000	5.0%
Irene	Main Street Improvements	145,000	5.0%
Lead	US Highway 85 Utility Improvements	192,800	4.5%
Tyndall	Water System Improvements	300,000	2.5%
Harrisburg	Water System Improvements	525,000	5.0%
Mitchell	Rural Water System Hookup	<u>6,000,000</u>	5.0%
TOTAL		\$7,964,800	

Watershed Protection - EPA Section 319 Grants

The South Dakota Watershed Protection Program is designed to assess nonpoint water pollution sources and reduce or eliminate their impact on water quality throughout the state. Nonpoint source refers to the polluted run-off from urban, agriculture, and forest lands. The program provides technical and financial assistance to local watershed project sponsors in the planning and management of assessment and implementation projects. Additionally, the program administers state and federal grants, monitors the effectiveness of implementation projects, provides information and education materials, and develops pollution prevention programs.

Applications for Section 319 grants must be approved by the board prior to submission to EPA. In 2000, \$3,011,897 was awarded to watershed projects (Table 4).

Table 4

2000 EPA SECTION 319 GRANT AWARDS

<u>Sponsor</u>	<u>Project</u>	<u>Grant Amount</u>	<u>Total Project</u>
Dakota Central Cons Assoc	Dakota Central Assessment	\$ 55,320	\$ 87,200
Central Plains Water Dev Dist	Jones/Rosehill Lakes Assessment	74,370	124,916
American Creek Cons Dist	Medicine Creek Assessment	101,796	169,660
East Dakota Water Dev Dist	NC Big Sioux/E Oakwood Lake Assessment	162,153	319,477
South Central Water Dev Dist	South Central Lakes Assessment	113,663	189,438
Marshall Cons Dist	White Lake Dam Assessment	66,786	111,210
Deuel county Cons Dist	Clear Lake Watershed	623,354	1,890,100
Day County Cons Dist	Blue Dog Lake Watershed	375,000	1,083,544
Faulk Cons Dist	Lake Faulkton Watershed	673,710	2,176,500
Lake County Cons Dist	Lake Herman/Madison/Brant Watershed	<u>765,745</u>	<u>1,588,900</u>
TOTAL		\$3,011,897	\$7,740,945

Solid Waste Management Program

The 2000 State Legislature did not appropriate any funding for the Solid Waste Management Program (SWMP) in fiscal year 2001 but did appropriate \$1,500,000 to the department for the statewide cleanup of waste tires and solid waste. The SWMP had available \$1,538,000 of prior year appropriations for project awards. Funds to support these programs are generated from two sources – a \$1.00 per ton landfill surcharge on municipal solid waste and a \$0.25 per tire vehicle registration fee. A minimum of 50 percent of the funds appropriated to the SWMP are reserved for recycling activities.

The board, at its January and June 2000 meetings, reviewed a total of 10 grant applications and one amendment request. From these, the board awarded six grants and one grant/loan amendment totaling \$440,100 (Table 5). Of these awards, three were for recycling projects; two were for municipal solid waste projects; and two were for

the clean up of waste tires. These awards leveraged more than \$880,000 in total project construction.

Table 5

2000 Solid Waste Management Program Awards
Municipal Solid Waste

<u>Sponsor</u>	<u>Description</u>	<u>Loan Amount</u>	<u>Grant Amount</u>	<u>Total Project</u>
Kennebec	Restricted Use Site		\$55,000	\$136,000
Vermillion Regional Landfill *	Landfill Upgrades	\$50,000	30,000	80,000
TOTAL		\$50,000	\$85,000	\$216,000

*Amendment to 1998 award

Recycling

<u>Sponsor</u>	<u>Description</u>	<u>Grant Amount</u>	<u>Total Project</u>
Bruce Giossi	Recycling Equipment	\$11,700	\$15,600
Rapid City	Recycling Equipment	225,000	452,000
Standing Rock Sanitation	Recycling Equipment	26,800	78,585
TOTAL		\$263,500	\$546,185

Waste Tire Cleanup

<u>Sponsor</u>	<u>Description</u>	<u>Grant Amount</u>	<u>Total Project</u>
Sander Sanitation, Inc.	Waste Tire Equipment	\$17,500	\$84,772
Milton B. Williams	Waste Tire Cleanup	24,100	34,375
TOTAL		\$41,600	\$119,147

**Consolidated
Water Facilities
Construction
Program**

The 2000 State Legislature appropriated \$4.48 million for the Consolidated Water Facilities Construction Program to provide grants and loans for water development projects on the State Water Facilities Plan. Additionally, nearly \$470,000 of prior year funding was available for award in 2000.

The board considered 38 applications for consolidated funding and awarded 22 grants totaling \$4,581,725. The board also awarded one consolidated loan for \$19,445 (Table 6). These 2000 awards leveraged more than \$26.7 million in total project activities.

Table 6

2000 Consolidated Awards

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
Aurora	Wastewater Collection Improvements	\$ 100,000	\$ 660,000
BDM RWS	Expansion of Rural Water Service	250,000	4,575,000
Beresford	West 13 th Street Utility Improvements	200,000	1,353,600
Big Sioux CWS	Water Distribution System Improvements	125,000	1,072,000
Big Stone City	Wastewater and Water System Improvement	250,000	833,000
Black Hawk Sanitary Dist	Regionalization of Wastewater Treatment	500,000	954,000
Bristol	Water System Improvements	135,000	270,000
Canistota	Water System Improvements	150,000	1,576,300
Centerville	Water and Wastewater Improvements	325,000	871,675
Chester Sanitary District	Wastewater Treatment Improvements	100,000	774,000
Doland	U.S. Hwy 212 Utilities Replacement	50,000	94,700
Elkton	Water Storage Improvements	100,000	569,800
Faulk Conservation Dist	Lake Faulkton Watershed Restoration	235,000	435,200
Freeman	Wastewater Collection Improvements	25,000	108,000
Harrisburg	Water System Improvements	300,000	1,142,500
Hartford	Water and Sewer Main Replacement	400,000	1,188,600
Kingbrook RWS	Rural Water System Hookup of Carthage	175,000	1,561,400
Mesa View Water Users	Water System Improvements (Loan)	19,445	41,170
Mesa View Water Users	Water System Improvements (Grant)	21,725	
Randall CWD	Expansion of Rural Water Service	750,000	4,750,000
Sturgis	Treated Effluent Irrigation System	100,000	2,406,000
Tri-County Water Assn.	Rural Water Hookup of Isabel	250,000	1,460,000
Wagner	Main Street Utility Replacement	<u>40,000</u>	<u>80,000</u>
TOTAL		\$4,601,170	\$26,776,945

2000 Federal Water Development Legislation

Federal Authorization

During the second session of the 106th Congress, legislation was passed to federally authorize construction of the Lewis and Clark Rural Water System.

The Military Spending Bill (Public Law 106-246) authorized construction of the Lewis and Clark project and provided an appropriation of \$600,000. The bill was signed by the President on July 13, 2000.

Federal Appropriations

The federal fiscal year 2001 appropriation bill containing the Energy and Water Development titles was signed by the President on October 27, 2000 (Public Law 106-377). The funding levels for South Dakota water projects are listed in Table 7.

Table 7

FEDERAL FISCAL YEAR 2001 APPROPRIATIONS

Bureau of Reclamation

Facility Operation, Maintenance & Rehab

Mid-Dakota (Wetlands Enhancement O&M)	\$ 40,000
Mni Wiconi Rural Water System O&M	6,165,000
Rapid Valley Project O&M	30,000

Resources Management & Development

Black Hills Water Management Study*	\$ 360,000
Mid-Dakota Rural Water System	8,000,000
Mni Wiconi Rural Water System	27,570,000
Lewis and Clark Rural Water System	1,000,000

*Line item under Dakota Investigation Program, ND

Corps of Engineers

Operation and Maintenance

Big Bend Dam/Lake Sharpe	\$ 6,502,000
Fort Randall Dam/Francis Case	8,942,000
Gavins Point/Lewis & Clark	6,241,000
Oahe Dam/Lake Oahe	11,282,000
Cold Brook Lake	496,000
Cottonwood Springs Lake	172,000
Lake Traverse, SD & MN	580,000

Construction, General

Missouri National Recreational River, NE & SD	\$ 1,800,000
Pierre/Ft. Pierre Flood Buy Out	6,000,000
Sioux Falls Flood Control	1,500,000
Cheyenne River Sioux Tribe/Lower Brule Sioux Tribe/State of South Dakota (land transfer)	4,000,000

General Investigations

James River, SD	\$ 500,000
-----------------	------------

2000 State Water Development Legislation Appropriations

On March 23, 2000, the Governor signed Senate Bill 41, the Omnibus Water Funding Bill, authorizing the following appropriations from the Water and Environment Fund:

- Consolidated Water Facilities Construction Program -- \$4,480,000 to provide grants and loans for community drinking water, wastewater, and lake improvement projects;
- Mni Wiconi Rural Water System -- \$2,000,000 loan to the West River/Lyman Jones Rural Water System to provide nonfederal cost

share for the engineering design, preconstruction activities, and construction of facilities;

- Lewis and Clark Rural Water System -- \$200,000 grant to provide for engineering design and construction of the rural water system;
- Sioux Falls Flood Control Project -- \$300,000 grant to provide a portion of the nonfederal cost share for the engineering design, easement and right-of-way acquisition, and construction of flood control facilities;
- Department of Environment and Natural Resources -- \$1,500,000 to provide for the statewide clean up of waste tires and solid waste.

Additionally, the bill removed the Belle Fourche Irrigation Project, the Fall River County Rural Water System Project, the Mid-Dakota Rural Water System Project, and the Perkins County Rural Water System Project from the State Water Resources Management Systems (SWRMS) list.

2001 STATE WATER PLAN

2001 State Water Plan

Overview

The 1972 State Legislature established the State Water Plan to ensure the optimum overall benefits of the state's water resources for the general health, welfare, safety, and economic well-being of the people of South Dakota through the conservation, development, management, and use of those resources. The Legislature placed the responsibility for this plan with the Board of Water and Natural Resources.

The State Water Plan, as established in SDCL 46A-1-2, consists of two components - the State Water Facilities Plan and the State Water Resources Management System. To be considered for the State Water Plan, projects must meet certain criteria established by the board. These eligibility criteria are used as guidelines for the board, the department, and the water development districts when considering a project for inclusion on the State Water Plan.

State Water Facilities Plan

The State Water Facilities Plan (facilities plan) is a listing of potential water related projects. The facilities plan includes projects such as rural, municipal, and industrial water supply; wastewater facilities; storm sewers; water conservation; watershed management and restoration; and pollution prevention or remediation. The board is responsible for approving the placement of projects on the facilities plan. Once a project is placed on the facilities plan it remains on the plan for two years. If a project will be requesting funds after this two-year period, it must submit a new facilities plan application.

In November 2000, the board approved 35 projects for placement on the facilities plan, bringing the total number of projects on the 2001 State Water Facilities Plan to 84 (Table 8). Projects on the facilities plan are eligible to seek state and federal financial assistance. The board can provide direct assistance to projects on the plan and can influence federal categorical grant decisions and funding decisions from other state agencies.

Projects that have received full or partial funding, but have not been completed, are not included in Table 8. These projects technically remain on the facilities plan until completed so that supplementary funding requests may be considered by funding agencies.

Additional projects may be placed on the facilities plan during the year. Projects placed on the facilities plan through the amendment process remain on the plan for the balance of the calendar year and the following year.

Table 8

2001 STATE WATER FACILITIES PLAN

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan</u>	<u>Proposed Funding Source*</u>			<u>Total Project</u>
		<u>Through</u>	<u>CWFCP</u>	<u>CWSRF</u>	<u>DWSRF</u>	
Aberdeen	Water Treatment Improvements	2002	2,346,030		12,225,572	14,571,602
Alcester	Wastewater System Improvements	2001	300,000			2,216,000
Alpena	Pre-Treatment and Wastewater Treatment	2002	200,000			1,704,100
Aurora-Brule RWS	Plant Pumping Upgrade	2001				125,000
Badger	Wastewater Treatment Plant	2002	185,000			390,000
Bison	Total Retention Wastewater Ponds	2001		180,000		180,000
Black Hills RC&D	Eastridge Acres Water System	2002	100,000			130,000
Britton	Water Main Improvements	2002			364,000	648,000
B-Y Water Users Dist.	Bon Homme County Expansion	2002	100,000			3,100,000
B-Y Water Users Dist.	Northwest Hutchinson Expansion	2002				1,900,000
B-Y Water Users Dist.	Treatment Plan Expansion	2002	250,000		2,000,000	12,000,000
B-Y Water Users Dist.	Treatment Plan Improvements	2002	200,000			1,206,000
Castlewood	Water and Sewer Improvements	2002	250,000	250,000	300,000	1,317,000
Centerville	Water and Sewer System Improvements	2001	400,000			3,726,000
Chamberlain	Water Treatment Plant Upgrade	2001	400,000		700,000	1,500,000
Clark RWS	Reservoir and Control Improvement	2001	95,000			520,000
Clay RWS	System Expansion	2001				617,000
Colman	Wastewater Treatment Improvement	2001	150,000			825,000
Colton	Connect to Rural Water	2002	490,000		326,230	816,230
Corsica	Wastewater Treatment Improvements	2001	89,000			148,940
Cresbard	Wastewater Collection System	2002	61,468	92,201		153,669
Custer	Water and Wastewater Improvement	2001	200,000		500,000	1,100,000
Davison County	Kibbee Ditch Drainage	2001	100,000			385,000
Day Conservation District	Blue Dog Lake Watershed Improvement	2001	90,000			1,083,544
Dell Rapids	Water System Improvements	2001	300,000		900,000	1,629,600
Eagle Butte	Wastewater Treatment Improvement	2001				653,000
Egan	Water System Improvements	2002	100,000			295,000
Elk Point	Heritage Park Storm Sewer Improvement	2001	100,000	184,000		284,000
Elk Point	Pearl Street Utility Improvement	2001	500,000	460,000	100,000	1,360,000
Elk Point	Wastewater Treatment Improvements	2002	100,000	76,200		176,200
Flandreau	Rural Water Connection	2001	50,000			1,250,000
Garretson	Water System Improvement	2001	300,000			2,837,920
Garretson	Connect to Rural Water	2002	936,200		625,835	1,562,035
Gettysburg	Waterline Replacement	2001	100,500			670,000
Hamlin Conservation District	Lake Poinsett Watershed	2001	110,000			390,500
Harrold	Wastewater Treatment Facility Expansion	2001	59,875			239,500
Hecla	Wastewater Treatment Facility	2001	104,800			468,550
Highmore	Water Supply Improvement	2001	150,000			195,030
Highmore	Wastewater Treatment Improvements	2002	290,000			310,000
Hill City	Municipal Wastewater Improvement	2001	200,000	800,000		1,500,000
Irene	Main Street Utility Improvements	2002	220,000	83,000	195,000	498,000
Lake Andes	Water Meter Installation	2001	37,500			62,667
Lake Byron Watershed	Dredging	2002	450,000			900,000
Lake County Cons. Dist.	Lakes Herman/Madison/Brant Watershed	2001	135,000			1,588,900
Lake County Cons. Dist.	Lakes Herman/Madison/Brant Watershed	2002	135,000			1,358,399
Lake Pelican WP District	Lake Pelican Dredging	2001	400,000			1,128,200
Lake Preston	Water/Sanitary Sewer Improvement	2001	63,000			290,710
Lennox	Water and Sewer System Improvement	2001	300,000	342,500	342,500	1,360,000
Letcher	Force Main Improvement	2001	24,000			48,000
Lower Brule Sioux Tribe	Lagoon System Relocation and Expansion	2001	195,000			1,100,000
McLaughlin	Main Street Utility Improvements	2002				508,300
Menno	Water and Sewer Main Expansion	2001	10,000			27,000
Minnehaha Community Water	Rural Water System Expansion	2002			3,832,200	3,832,200
Mitchell	Connect to Rural Water	2002			6,000,000	17,316,200
Nisland	Water Distribution Improvement	2001	450,000		300,000	750,000
Northville	Wastewater Treatment Improvements	2002	215,000			650,000
Parkston	Storm Water Drainage	2002	100,000			250,185
Perkins County RWS	Final Engineering	2001	200,000			250,000
Randall CWD	Water Distribution	2001				360,395
Rapid City	Wastewater Treatment Plant Upgrade	2001		20,500,000		21,000,000

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan</u>	<u>Proposed Funding Source*</u>			<u>Total Project</u>
		<u>Through</u>	<u>CWFCP</u>	<u>CWSRF</u>	<u>DWSRF</u>	
Rapid Valley San. Dist.	Water Storage Improvements	2001			200,000	200,000
Redfield	Water and Sewer Rehabilitation	2002	100,000			237,000
Scotland/Lake Henry Dam	Lake Henry Dam Reconstruction	2002	200,000			1,740,000
Sioux Falls	Drinking Water Facility Improvements	2001			3,000,000	3,000,000
Skyline Heights	Water and Sewer Improvements	2002	457,000			881,952
South Lincoln RWS	System Expansion	2001	250,000			1,660,700
Spink Conservation District	Turtle Creek/Redfield Watershed Project	2001	20,000			152,000
Springfield	Lime Sludge Lagoon	2002	75,000			150,650
Summit	Wastewater Treatment Improvements	2001	50,000			155,000
Summit	Water System Improvements	2001	150,000			900,000
Tea	Brian Street Utility Improvement	2001	100,000	105,000	105,000	310,000
Tyndall	Main Street Utility Improvements	2001	100,000	220,000		940,000
Wall Lake San. Dist.	Sewer Improvements	2002	100,000			181,800
Waubay	Wastewater Treatment Facility Upgrade	2001	300,000			940,000
Waverly San. Dist.	Wastewater Collection and Treatment	2001	86,000			485,000
Wentworth	Water Distribution Improvement	2001	100,000			242,500
Wessington	Waterline Replacement	2002	123,000			205,000
Wessington Springs	Water and Sewer Improvements	2002		120,000		270,000
Winner	Wastewater Treatment Improvements	2002	100,000			359,000
Yankton	Wastewater Collection	2001		800,000		2,200,000
Yankton	Wastewater Treatment Plant	2001	400,000	6,230,000		6,630,000
Yankton	23 rd Street Utility Improvements	2002	30,000			66,000
Yankton	Broadway Water Main	2002	178,000		1,000,000	1,178,000
Yankton County	Gayville Storm Drainage	2002	100,000			169,800
TOTALS			\$15,361,373	\$30,442,901	\$33,016,337	\$140,717,978

* CWFCP - Consolidated Water Facilities Construction Program
CWSRF - Clean Water State Revolving Fund Loan Program
DWSRF - Drinking Water State Revolving Fund Loan Program

State Water Resources Management System

The State Water Resources Management System (SWRMS) identifies large, costly water projects that require specific state or federal authorization and financing. These projects are placed on the list when recommended by the board and approved by the Governor and the Legislature. The SWRMS (Table 9) serves as the preferred priority list to accomplish optimum water resources management in the state. Once a project is placed on the list, it remains until it is removed by legislative action.

Table 9

STATE WATER RESOURCES MANAGEMENT SYSTEM PROJECTS

<u>Project</u>	<u>Description</u>
Bad River Watershed Project	Rehabilitation of the Bad River Watershed
Big Sioux Flood Control Study	Watertown Flood Control Dam
Black Hills Hydrology & Water Management Study	Study of the Black Hills Water Resources
Brennan Reservoir	Proposed Reservoir Near Rapid City
CENDAK Irrigation Project	Irrigation Project in Central SD
Gregory County Rural Water System	Multi-Purpose Water Utilization
James River Improvement Program	Watershed/Channel Improvement Projects
Lake Andes-Wagner/Marty II Irrigation Unit	Irrigation in Charles Mix County

Lewis & Clark Rural Water System
Mni Wiconi Rural Water System
Pick-Sloan Riverside Irrigation
Sioux Falls Flood Control Project
Slip-Up Creek
Vermillion Basin Flood Control Project

Water Supply System in Southeastern SD
Rural Water System in Western SD
Pick-Sloan Integration of Irrigation
Increased Flood Protection
Proposed Reservoir near Sioux Falls
Flood Control Study on Vermillion River

SWRMS Project Status

A brief summary of each project and its status is presented below. The year in the title indicates when the project was placed on the State Water Resources Management System.

Bad River Watershed Project – 1994

- The Bad River drains 3,209 square miles from the Badlands between Wall and Kadoka to the Missouri River at Fort Pierre. The Bad River annually delivers about 3.25 million tons of sediment into Lake Sharpe, primarily from eroding gullies and stream banks. The sediment negatively impacts fishing and other recreation in the Pierre-Fort Pierre area.
- Increased ground water elevations caused by the sediment-induced river elevation contribute to flooding in the Pierre-Fort Pierre area during winter peak power releases from the Oahe Dam when ice cover restricts downstream flow. To reduce flooding, power generation from the dam must be reduced during the coldest days of the year. Estimated economic losses from decreased power and recreation are about \$15 million annually.
- The U.S. Army Corps of Engineers had proposed building levees in the Pierre-Fort Pierre area to allow greater releases and maximize power generation. Many local interests believe that a combination of watershed treatment and localized dredging in Lake Sharpe will be a more acceptable and effective solution than levees. Congress is also working on a plan to relocate a portion of the Pierre residential area which is most affected.
- State authorization of the \$21 million project was approved in 1995; this included a state cost share commitment of \$875,000 in grants. State appropriations total \$875,000 from 1995 to 1999.
- In December 2000, the remaining state cost share of \$525,000 was placed under agreement by the Board of Water and Natural Resources.

Big Sioux Flood Control Study – 1989

- The proposed \$16 million project would provide flood protection for Watertown, Lake Kampeska, and Pelican Lake through the construction of a dry dam on the Big Sioux River at the Mahoney Creek site.
- A feasibility study was initiated in 1988 by the Corps of Engineers in cooperation with the city of Watertown, East Dakota Water Development District, Codington County, Lake Kampeska Water Project District, and Department of Environment and Natural Resources. State legislative appropriations of \$150,000 were provided to assist local sponsors in meeting the nonfederal cost share.
- The final draft feasibility report was distributed in June 1994 for public review and comment. A public hearing was held in July in Watertown to present the findings of the feasibility report and gather comments. City and county elections were held with residents voting against further local participation in the flood control project.
- The project regained momentum after severe spring flooding in 1997 forced 5,000 residents from their homes. The Watertown City Council scheduled an election on February 24, 1998, calling for a citywide vote on the proposed Mahoney Creek Dam. The record turnout of voters again rejected the proposed dam.

Black Hills Hydrology and Water Management Study - 1982

- The hydrology study will compile water resource data to make informed management decisions concerning the development of water resources in the Black Hills area related to the expansion of mining, municipal, recreational, and urban water development needs. The U.S. Geological Survey has provided a total of \$3.1 million from federal fiscal year 1988 through federal fiscal year 1999 to establish the hydrologic monitoring system and collect data.
- The hydrology study entered Phase II during federal fiscal year 1997. The emphasis of the study during Phase I was data collection and has now shifted to analytical activities during Phase II. Phase II of the hydrology study is expected to be completed by

March 2001.

- Products resulting from Phase II of the hydrology study were defined in the "Updated Plan of Study for Phase II of the Black

Hills Hydrology Study" (USGS, 1998) and include the following maps and reports:

Selected Hydrologic data through water year 1998, Black Hills Hydrology Study, South Dakota

Hydrologic conditions and budgets for the Black Hills of South Dakota

Estimated recharge to the Madison and Minnelusa aquifers

Water-quality characteristics for the Black Hills area

Geochemistry of the Madison and Minnelusa aquifers

Map Series:

Hydrogeologic maps and cross sections

Structure maps

Potentiometric maps

Final technical report

Hydrologic atlas

- The water management study will provide local project sponsors with tools to assist them in making water development and water management decisions. Data gathered during the hydrology study will be utilized in the water management study. Congress appropriated funds in federal fiscal year 1991 to initiate a federal Black Hills Water Management Study by the Bureau of Reclamation. Federal appropriations total \$1,175,000 through federal fiscal year 2000.
- The Water Management Study is scheduled to be completed by the end of federal fiscal year 2001. The focus for the remaining years will be on the water needs assessment, development of an Integrated Groundwater/Surface Water Model, and development of alternatives and final reports.
- A Black Hills Hydrology and Water Management Study Steering Committee was established in 1991 to provide local input into the development of the hydrology and water management studies. Membership is comprised of individuals from the Black Hills and from adjacent areas in Wyoming.
- The State Legislature authorized the project in 1992 with a state cost share commitment of \$2.5 million. State legislative appropriations to the local project sponsors total \$1,555,000 from

1988 through 1999. Additionally, the Department of Environment and Natural Resources received \$505,000 in state legislative appropriations to drill monitoring wells and establish and operate a stream gauging system to assist the hydrologic evaluations.

- During federal fiscal year 2000 the U.S. Geological Survey made significant progress on several Phase II products resulting from the Black Hills Hydrology Study. Publications during federal fiscal 2000 included the following: "Episodic sediment-discharge events in Cascade Springs, southern Black Hills, South Dakota", "Potentiometric surface of the (Inyan Kara, Minnekahta, Minnelusa, Madison, and Deadwood) aquifer in the Black Hills area, South Dakota", "Distribution of hydrogeologic units in the Black Hills area, South Dakota", "Altitude of the top of the (Inyan Kara, Minnekahta, Minnelusa, Madison, and Deadwood) Formation in the Black Hills area, South Dakota", and "Selected hydrologic data through water year 1998, Black Hills Hydrology Study, South Dakota". Progress was also made on the remaining Hydrology Study publications that will be released during federal fiscal year 2001.
- During federal fiscal year 2000 the U.S. Bureau of Reclamation continued progress on a number of tasks for the Black Hills Water Management Study. Major work elements for the Water Management Study during federal fiscal year 2000 included the following: 1) compilation and evaluation of ground water database, 2) compilation, verification, development, and analysis of water quality database, 3) socio-economic and water needs analysis, and 4) water management alternatives development and analysis.

Brennan Reservoir – 1991

- The purpose of the Brennan Reservoir/Rapid City Wastewater Recycling project is to determine feasibility of constructing wetlands at the upper end of a proposed reservoir to provide tertiary wastewater treatment for Rapid City. The proposed area for Brennan Reservoir and the wetlands lies across Dry Creek southeast of Rapid City.
- Water stored in the reservoir could also be used to irrigate about 5,000 acres located in the Rapid Valley Water Conservancy District. This would meet more than half of the current demands for the Rapid Valley District.

- The 1990 State Legislature provided \$25,000 to assist local sponsors in an engineering study of the Brennan Reservoir site. The Brennan Reservoir Preliminary Project Plan report was completed in July 1992 by the Alliance and HDR Engineering. The Legislature provided \$25,000 in 1993 and \$25,000 in 1998 to conduct additional Brennan Reservoir studies.
- In October 2000, the Bureau of Reclamation completed the “Rapid City Wastewater Reclamation and Reuse: Concluding Report” for the project. The city of Rapid City will pursue alternative wastewater treatment process improvements that will does not include the development of the Brennan Reservoir and associated wetlands.

CENDAK Irrigation Project – 1982

- This proposed irrigation project would supply Missouri River water to 474,000 acres in Hughes, Hyde, Hand, Spink, Beadle, and Faulk Counties in central South Dakota. South Dakota will pursue development of the project when federal policies are more supportive of large-scale irrigation projects. No activity occurred on the project in 2000.

Gregory County Pumped Storage Project - 1981

- Hydroelectric Component – The Gregory County Pumped Storage Project is a proposed peak generation hydroelectric facility located in northern Gregory County. In 1988, the Federal Energy Regulatory Commission issued to the board the preliminary permit for development of the project. The state's preliminary permit expired in August 1991.
- Water Supply Component – The project has the potential to provide water for irrigation and municipal, rural, and industrial purposes using the hydroelectric project's upper bay as a water supply source. Reclamation completed a Special Report on the Gregory Unit of the Pick-Sloan Missouri Basin Program, South Dakota in 1992.
- The Water Resources Development Act of 1986 (Public Law 99-662) authorized the construction of a \$1.3 billion hydroelectric pumped storage facility by the Corps of Engineers. The Act also authorized up to \$100 million for construction of the associated Gregory Unit of the Pick-Sloan Missouri Basin Program. No

activity occurred on the project in 2000.

James River Improvement Program – 1984

- This program has been designed to provide flood control as well as municipal, industrial, agricultural, recreational, and wildlife benefits.
- The Water Resources Development Act of 1986 (Public Law 99-662) authorized \$20 million for flood control and stream flow improvements. A draft Environmental Impact Statement was completed in 1987.
- The James River Water Development District has completed a number of improvement projects. Projects have included channel clean out of trees and other debris, tributary drainage control through tree plantings and other watershed improvements including the construction and repair of small dams, and bank stabilization.
- A Corps of Engineers' 1989 reconnaissance report established federal interest in conducting feasibility studies for flood protection in the lower Elm River/Moccasin Creek basins and the Dry Run Creek basin. Project funding has been provided to assist the city of Aberdeen and Brown County in meeting cost share requirements for a Corps of Engineers' flood control feasibility study.
- The State Legislature authorized the project in 1992 with a state cost share commitment of \$2.5 million. State legislative appropriations to the district total \$1,660,000 from 1988 through 1998 for restoration and study activities.
- A hazard mitigation plan was developed to recommend mitigation efforts on the James River to present to Congress for federal assistance. As a result of the severe spring flooding in 1997 and having the plan in place, a \$5 million federal appropriation was approved through the Corps of Engineers budget in the 1997 Disaster Relief Bill. The James River WDD will utilize these funds to remove dead timber and debris under an approved plan by the Corps of Engineers.
- The James River WDD selected 11 bridge sites for debris removal along the river. In 1998, work started on four of the sites. As of the end of October, more than 6,755 tons of debris was removed

and stockpiled away from the river.

- In 1999, the James River WDD completed debris removal at seven bridge sites removing 25,000 tons of debris. Work on three additional bridge sites are 20 percent to 90 percent complete; and the last bridge site will be started by January 2000.
- The James River Water Development District completed the debris removal project in March 2000. The project was completed eight months ahead of schedule and removed more debris than originally estimated. There are a total of 35 sites along the James River in Spink County that are in need of bank stabilization and channel restoration work. As a result of consultation and review with the Corps of Engineers, the JRWDD has agreed to monitor three sites where some channel restoration/debris removal is accomplished and three control sites where no work will be completed. Contrasting and comparing these sites over a three year period will provide the basis to determine if additional channel restoration/debris removal is feasible.

Lake Andes-Wagner/Marty II Irrigation Unit - 1975

- The 45,000-acre Lake Andes-Wagner Irrigation project and 3,000-acre Marty II Irrigation project are federally authorized Pick-Sloan Missouri Basin Units in Charles-Mix County (Public Law 102-575). Estimated construction costs are \$175 million and \$24 million, respectively.
- In 1992, the State Legislature authorized the construction of the Lake Andes-Wagner/Marty II project and provided a state cost share commitment of \$7 million. Both the state and federal project authorizations are contingent upon the successful completion of the research demonstration program.
- In 1990, a plan of study was prepared for a 5,000-acre research demonstration program to determine best management practices for irrigating glacial till soils containing selenium. Congress approved \$250,000 in federal fiscal year 1995 funds for the research program.
- In 1995, state and federal agencies revised the 1990 plan of study. The revised plan of study re-scoped the demonstration program to identify the specific issues and research components that are of national significance. A nine-year, \$11.3 million effort has been projected. No significant activity occurred on this project

in 1998.

- In 1999, the Bureau of Reclamation (BoR) received \$150,000 for federal fiscal year 2000 work on the demonstration project. The BoR will prepare an environmental assessment to be used to determine if an Environmental Impact Statement must be prepared.
- In 2000, the BoR completed the environmental assessment and issued a Finding of No Significant Impact for the demonstration program. Significant federal funding must be secured before the demonstration program can proceed.

Lewis and Clark Rural Water System - 1989

- The proposed Lewis and Clark RWS will be a bulk delivery system providing treated Missouri River water to communities and existing rural water systems in southeastern South Dakota, northwestern Iowa, and southwestern Minnesota. South Dakota membership includes eight communities and three rural water systems. About 133,000 South Dakotans would receive water from Lewis and Clark.
- Iowa and Minnesota project sponsors have provided funding support for project development proportionate to their respective service capacity needs. Iowa and Minnesota have authorized the project for construction.
- The 1993 State Legislature authorized Lewis and Clark's South Dakota project features (\$200 million) and authorized the Governor and local project sponsors to negotiate a nonfederal matching agreement with Congress. The state's cost share may not exceed 50 percent of the nonfederal match requirement. State legislative appropriations have totaled \$675,000 from 1990 through 1998.
- Congress provided \$350,000 from federal fiscal year 1991 to 1994 for the Bureau of Reclamation's technical assistance on the feasibility study and project development.
- The Lewis and Clark federal authorizing legislation was introduced during the 103rd Congress, 104th Congress, and 105th Congress. The Senate Subcommittee on Water and Power conducted a hearing on the proposed Lewis and Clark project in 1994, 1996, 1997, and 1998. The House Subcommittee on Water

and Power held its first hearing on the Lewis and Clark federal legislation in 1998. The federal legislation provides for a federal cost share of 80 percent and nonfederal cost share of 20 percent. The city of Sioux Falls' share is to be 50 percent of the incremental cost to the city for participation in the project.

- During the 106th Congress, the Senate Subcommittee on Water and Power held a hearing on May 27, 1999. The bill was passed out of the Committee on Energy and Natural Resources in July 1999, and was reported to the full Senate where it was passed with unanimous consent on November 19, 1999. There were minor revisions in the legislation, but no changes to the cost share language. The legislation on the House of Representative side remains in subcommittee.
- On July 13, 2000, the President signed Public Law 106-246 that authorized the federal construction of the Lewis and Clark Rural Water System. Additionally, the same legislation that authorized the project went on to approve an initial federal appropriation of \$600,000 for project engineering and construction. The Board of Water and Natural Resources also placed \$200,000 of state funding under agreement with the project to assist with these same project activities.

Mni Wiconi Rural Water System – 1989

- Public Law 100-516, as amended in 1994, authorizes a \$263 million federal project to provide high quality Missouri River water to 50,000 western South Dakota citizens in a 10-county area extending south and west of Fort Pierre through the Pine Ridge Indian Reservation.
- The Oglala Water Supply System component encompasses the distribution facilities on the Pine Ridge Indian Reservation and the off-reservation core system facilities including the Missouri River intake and water treatment plant. The Rosebud and Lower Brule components include the delivery and distribution facilities associated with service to their respective reservations. About \$200 million of the project costs are allocated to the tribal systems as non-reimbursable federal costs. Operation and maintenance for the tribal systems are a federal trust responsibility.
- West River/Lyman-Jones Rural Water System, Inc. (WR/LJ) is the non-Indian distribution component. The cost share for construction is 80 percent federal and 20 percent nonfederal. WR/LJ is

responsible for its operation and maintenance costs.

- The 1992 State Legislature authorized the construction of the Mni Wiconi project. The 1995 Legislature amended the authorization to reflect the \$263 million project, and the state cost share commitment was revised to \$12.9 million. To date, nearly \$9.2 million in state loans have been authorized by the State Legislature.
- Federal appropriations for planning and construction activities total nearly \$139 million through federal fiscal year 1999. The Bureau of Reclamation has also reprogrammed a total of \$4.5 million to the Mni Wiconi project through federal fiscal year 1999. Congress also approved a federal fiscal year 2000 appropriation level of \$23.873 million for construction and \$5.527 million for operation and maintenance.
- WR/LJ initiated construction of advance features in 1993. These features are distribution systems that have access to interim ground water supplies.
- In June 1993, the Oglala Sioux Water Supply System initiated construction of advanced features in White Clay and Wakpamni districts of the Pine Ridge Reservation. In 1996, the Oglala Sioux Water Supply System approved two contracts for construction on the main intake facility to be located at Echo Point near Fort Pierre and the site preparation and sludge lagoon construction contract at the water treatment plant.
- In July 1996, the Oglala Sioux Water Supply System along with the West River/Lyman-Jones, Rosebud, and Lower Brule rural water systems had the Mni Wiconi core facilities groundbreaking ceremonies at Echo Point near Fort Pierre.
- During federal fiscal year 1997, the Oglala Sioux Water Supply System bid and awarded a \$16.4 million contract for the construction of the water treatment plant near Fort Pierre. Construction activities began in 1997 and are anticipated to be complete in early 2000.
- The WR/LJ Rural Water System has constructed over 1,500 miles of main transmission and distribution pipelines in western South Dakota and provides quality drinking water to over 850 rural taps and the communities of Draper and White River. WR/LJ has used interim water sources to include groundwater from a Pennington County well, the city of Presho, and the Rosebud Sioux Tribe, and

Missouri River water from the Lower Brule Sioux Tribe as sources to feed its distribution system. Additionally, WR/LJ has constructed distribution pipelines in Stanley County and in the Vivian and Presho areas in anticipation of the completion of the Mni Wiconi Water Treatment Plant near Ft. Pierre. In 1999 WR/LJ awarded three additional system contracts. The first was for the construction of a new distribution system for the small community of Draper and the other two were for the construction of four elevated water storage towers near the communities of Wall, Kennebec, Murdo, and Presho. These tanks were constructed in 2000 and are being cost shared with the local communities to enhance water service to the individual communities.

- In anticipation of the completion of the Missouri River water Treatment Plant located near Ft. Pierre, the Oglala Sioux Tribe has completed nearly 30 miles of main transmission pipeline features of the Mni Wiconi Rural Water Supply System. Main transmission pipelines from just south of Ft. Pierre to the Vivian/I-90 junction have been completed and contracts for the construction of the main transmission pipeline from the Water Treatment Plant through Ft. Pierre and construction of the main transmission pipeline from a point approximately 15 miles south of Ft. Pierre to Draper were bid in federal fiscal year 2000 and construction initiated.
- In addition all three tribal members of the Mni Wiconi Rural Water Supply System have continued to develop on-reservation systems. The tribes are developing the supplemental water supplies identified in the final engineering report. The Lower Brule Sioux Tribe upgraded its Missouri River water treatment plant in late 1999 and began providing water to on-reservation and WR/LJ customers in the Reliance service, including the community of Reliance, in February 2000. The Rosebud Sioux Tribe has developed local groundwater resources enabling them to serve tribal customers and construct a main core transmission pipeline segment from the reservation to White River. Rosebud also provides water to WR/LJ for a portion of its customers in Mellette County to include White River. The Oglala Sioux Tribe has developed local groundwater resources enabling it to provide water to tribal member on the reservation and continues to design and construct both on-reservation distribution and Mni Wiconi main core transmission pipelines.

Pick-Sloan Riverside Irrigation – 1987

- This proposal is an attempt to integrate existing irrigators along the Missouri River corridor into the Pick-Sloan Missouri Basin Program. The project would provide irrigators with an opportunity to utilize Pick-Sloan power and the potential to obtain power revenue assistance. No significant activity occurred on this project in 2000 and future activities are uncertain.

Sioux Falls Flood Control Project – 1989

- In 1961, the Corps of Engineers completed a channelization, levee, and diversion system to provide 30-year flood protection on the Big Sioux River and 20-year flood protection on Skunk Creek.
- The Corps of Engineers completed a feasibility study in 1993 that recommended upgrading the existing project to provide Sioux Falls with 100-year flood protection on the Big Sioux River and Skunk Creek. Plans to upgrade the project include raising the levees above and along the diversion channel, modifying the spillway chute, replacing the stilling basin, and modifying some bridges.
- Federal appropriations for Corps of Engineers project planning total \$1.99 million from federal fiscal year 1990 through 1996. The city used \$120,000 in state funding for the feasibility report. A public hearing was held in August 1993 to gather comments on the proposed project.
- In 1992, the State Legislature authorized the \$26.9 million project and included a state cost share commitment of \$4.55 million in grants.
- The 1998 State Legislature appropriated \$600,000 for the engineering design, pre-construction activities, and construction of the flood control project.
- The Sioux Falls Flood Control Project was authorized by the passage of the 1996 Water Resources Development Act that was signed by the President on October 12, 1996 (Public Law 104-303). The Act authorizes the construction of the \$34.6 million project under the Corps of Engineers.
- In 1999, a \$2.2 million federal appropriation was provided to the Corps of Engineers. A Project Cooperation Agreement between the Department of the Army and the city of Sioux Falls, for final design work is being prepared.

- In October 2000, bids were accepted on Phase 1A of the Big Sioux River/Skunk Creek Flood Control Project. Phase 1A addresses the spillway and stilling basin area at the outfall of the diversion channel. The estimated cost for this construction was more than \$3.5 million from the Corps of Engineers. The apparent low bidder provided a bid of \$2,834,800.

Slip-Up Creek – 1981

- This project includes a dam, reservoir, and pumping plant on Slip-Up Creek; a pumping plant on the Big Sioux River; and pipelines connecting the river pumping plant to the reservoir and the city's water treatment plant. The purpose of the project is to store Big Sioux River waters for municipal use by Sioux Falls and for recreation and fish and wildlife activities. No significant action took place on the project in 2000.

Vermillion Basin Flood Control Project – 1987

- The project objective is to address the severe flooding problems in the Vermillion River Basin. The basin is a spindle-shaped watershed covering 2,697 square miles that includes parts of 14 counties, and is about 150 miles long with an average width of about 20 miles.
- The 1988 State Legislature provided \$50,000 to study the feasibility of flood control structures. Congress appropriated \$362,000 from federal fiscal year 1991 through 1993 for the study efforts.
- The Vermillion Basin Flood Control Reconnaissance Report completed by the Corps of Engineers in 1993 did not identify a feasible federal project. The project sponsors re-evaluated project alternatives for nonfederal development.
- Local project sponsors submitted a pre-application notification for a Federal Emergency Management Agency hazard mitigation grant for a Feasibility Study of Flood Control Alternatives for the basin. In June 1994, more than 70 technical experts met to develop a multi-objective plan to reduce the impacts of flooding in the Vermillion River Basin. The National Park Service compiled the group's issues and suggestions and formulated a multi-objective hazard mitigation management plan.

- The Turner Lincoln Clay (TLC) Water Project District held a public meeting in July 1995 to discuss a proposal to construct a dam on the East Fork of the Vermillion River for flood control.
- The Vermillion River Watershed Authority was incorporated in December 1997 and is composed of representatives from Clay, Miner, Turner, McCook, and Lake counties' commissions.
- The Authority is proposing to use Federal Emergency Management Agency (FEMA) Hazard Mitigation grant funds to widen the channel at the outlet of Lake Thompson and construct a control structure to retain the natural outlet elevation; channel maintenance along 19 miles of the Vermillion River and its tributaries; and wetland restoration and development throughout the basin.
- The cost benefit ratio for the outlet of lake Thompson was found to be in error. The ratio is actually less than one. All FEMA Hazard Mitigation funds have been withdrawn. The Authority has withdrawn the request to set the outlet elevation on Lake Thompson. The Authority has moved to dissolve after financial records are completed.

**Recommendations
to the Governor
and State
Legislature**

In November 2000, the board conducted a public meeting on the funding needs of the State Water Resources Management System (SWRMS) projects. The board adopted Resolution #2000-70 recommending that all the projects currently on the SWRMS list be retained. The board also adopted Resolution #2000-71 providing its funding recommendations to the Governor and the Legislature for Water and Environment Fund fiscal year 2002 expenditure authorization levels. A summary of the board's recommendations is provided below (Table 10). The full resolutions are in Appendix B.

Table 10

STATE WATER RESOURCES MANAGEMENT SYSTEM FUNDING RECOMMENDATIONS

Lewis and Clark Rural Water System	200,000
Mni Wiconi Rural Water System (Loan)	<u>1,700,000</u>
Total	\$1,900,000
Consolidated Water Facilities Construction Program	\$4,500,000
Statewide Clean Up of Waste Tires and Solid Waste	\$1,500,000

APPENDIX A

WATER AND ENVIRONMENT FUND

Special Condition Statement

WATER AND ENVIRONMENT FUND Special Condition Statement

Cash Balance from MSA - 6-30-00		\$12,903,577
Projected FY2001 Revenues		
Capital Construction Fund	\$5,250,000	
Contractor's Excise Tax	\$550,000	
Investment Interest (Earned '00 deposited '01)	\$619,810	
Loan Principal & Interest Payments	\$245,847	
Solid Waste Fees	<u>\$1,350,000</u>	
Subtotal	\$8,015,657	
Projected FY2001 Expenditures (Authorized in General Bill)		
Administrative Fee Fund	<u>\$400,000</u>	
Subtotal	\$400,000	
Revenues Less Expenditures		<u>\$7,615,657</u>
Projected Fund Balance Available for Expenditure		\$20,519,234
Obligations (Signed contract by 9/1/00)	Unexpended	
	<u>Balance</u>¹	
Prior Year		
Consolidated Water Facilities Construction Program	\$3,420,316	
SWRMS - Major Projects	\$4,013,099	
Solid Waste Grants - Disposal	\$590,777	
Solid Waste Grants - Recycling	\$763,874	
Solid Waste Grants - Waste Tires	\$24,754	
Waste Tire 2000	\$427,253	
Groundwater Monitoring GS	\$0	
Current Year - 00 Omnibus (2001 Authority)		
Big Sioux Flood Control SF	\$300,000	
Lewis & Clark RWS Grant	\$200,000	
Mni Wiconi (WR/LJ RWS)	\$2,000,000	
Consolidated Grant or Loan	\$3,735,000	
Solid Waste Waste Tire Appropriation	\$1,500,000	
Solid Waste Grant or Loan	<u>\$0</u>	
Subtotal		<u>\$16,975,071</u>
Ending Unobligated Fund Balance		<u>\$3,544,163</u>

¹Unexpended Balance as of 6/30/00.

WATER AND ENVIRONMENT FUND
Special Condition Statement

Continued

Ending Unobligated Fund Balance (from previous page) **\$3,544,163**

Project Expenditures Authorized by the Legislature - No agreement signed

Bad River Watershed Project	\$525,000	
West Dakota - Brennan Reservoir Grant (1999 Authority)	\$0	
James River Restoration Grant (2000 Authority)	\$100,000	
James River Restoration Grant (1999 Authority)	<u>\$250,000</u>	
Subtotal		\$875,000

Program Expenditures Authorized by the Legislature - No agreement signed

Consolidated Program Authority	\$977,217	
Solid Waste Program Authority - Prior Year	\$992,105	
Solid Waste Program Authority - Current Year	<u>\$0</u>	
		\$1,969,322

Program Authorized by the Legislature - No authority provided

Water Rights - Well Plugging	<u>\$2,098</u>	
Subtotal		<u>\$2,098</u>

Surplus/(Deficit) Funds Available (as of 6/30/01) **\$697,743**

APPENDIX B

BOARD OF WATER AND NATURAL RESOURCES

RESOLUTIONS

400 copies of this document were printed on recycled paper by the Department of Environment and Natural Resources at a cost of \$2.32 per copy.