

2001 ANNUAL REPORT
~~and~~
2002 STATE WATER PLAN



South Dakota

Board of
Water And Natural Resources



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

As required by state law, transmitted herewith is the 2001 Annual Report/2002 State Water Plan of the Board of Water and Natural Resources. The Annual Report describes 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 Governor Janklow and the Legislature for fiscal year 2003.

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, Governor Janklow recommended and the board awarded more than \$37.5 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 approximately \$130 million for environmental projects taking place across the state.

The department continues to work with local sponsors on Governor Janklow's "Spruce Up South Dakota" project. Appropriations in 1999, 2000, and 2001, have totaled \$4.0 million and have allowed the department to collect and remove 3.4 million waste tires from across the state. The department intends to revisit the South Dakota East River counties in 2002 to complete additional waste tire collection and spruce up efforts.

The department will continue to work with Governor Janklow, 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,

\\Signed//

Steven M. Pirner
Secretary

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**To
Governor William J. Janklow
and the
Seventy-Seventh Session, Legislative Assembly
2002**

**2001 ANNUAL REPORT
~~and~~
2002 STATE WATER PLAN**

Board of Water and Natural Resources

January 2002

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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 2001 Annual Report and the 2002 State Water Plan. The annual report provides progress reports on each program and on board activities during 2001. 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 2002 is included in Appendix A.

2001 ANNUAL REPORT

Board of Water and Natural Resources

Overview

South Dakota Codified Law 46A-1-14 requires an annual report of the Board of Water and Natural Resources. The report summarizes the board's 2001 activities, including a detailed account of expenditures from the Water and Environment Fund.

In November 2000, the board placed 35 projects on the 2001 State Water Facilities Plan. During the year, the board amended an additional 22 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 \$37.5 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 approximately \$130 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 February 27, 2001, Governor Janklow signed the 2001 Omnibus Bill (House Bill 1231) which provided an appropriation of \$1.9 million for State Water Resources Management System (SWRMS) projects. During the year, the board placed the \$2.425 million of 2000 and 2001 appropriations under agreement with local project sponsors (Table 1).

As part of the 2001 Omnibus Bill, the Lewis and Clark Rural Water System's state cost share commitment was finalized. South Dakota's cost share commitment was established at \$18,585,540 in 1993 dollars. To date, \$1,125,000 of state funding has been appropriated and placed under agreement with the Lewis and Clark Rural Water System to assist with preliminary engineering and congressional authorization activities.

Finally, the 2001 Omnibus Bill provided the final required state cost share appropriation for the federally authorized Mni Wiconi project. The bill provided \$1.7 million of state funding that was placed under agreement with the West River/Lyman-Jones Rural Water System, bringing the total provided to date to \$12.9 million, the state's cost share commitment amount.

Information on individual SWRMS project accomplishments and activities is summarized on pages 14 through 29 in the State Water Plan section of this document.

Table 1

2001 State Water Resources Management System Funding Awards

<u>Project</u>	<u>Amount</u>	<u>Type</u>
Lewis & Clark Rural Water System	\$200,000	Grant
Mni-Wiconi Rural Water System	1,700,000	Loan
Bad River Restoration Project *	<u>525,000</u>	Grant
TOTAL	\$2,425,000	

*State Fiscal Year 2000 appropriation.

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 nonpoint source pollution control projects. To date, 117 loans totaling \$124.31 million have been made from the program.

During 2001, the board approved two loans totaling \$20.13 million (Table 2). In December 2000, the board adjusted the 2001 program interest rates to 4.5 percent for up to 20 years. In July 2001, the board further reduced the program's interest rates to 3.5 percent for up to 20 years.

Table 2

2001 Clean Water State Revolving Fund Loans

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Interest Rate</u>
Rapid City	Wastewater Treatment Improvements	\$14,000,000	4.5%
Yankton	Wastewater Treatment Improvements	<u>6,130,000</u>	3.5%
TOTAL		\$20,130,000	

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. To date, 33 loans totaling \$36.46 million have been made from the program.

During 2001, the board approved eleven loans totaling \$9,348,450 (Table 3). In December 2000, the board adjusted the program's 2001 interest rates to 4.5 percent for up to 20 years. In July 2001,

the board further reduced the program's interest rates to 3.5 percent for up to 20 years, and in November 2001, expanded the definition of a disadvantaged community for the 2002 program year.

Communities meeting the disadvantaged criteria are allowed to extend the maximum allowable repayment period to 30 years and may receive a loan at an interest rate below that for other recipients. 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.

Community water systems must have a median household income below the statewide non-metropolitan median household income to be eligible for the extended 30-year repayment period. Systems that have an income of less than 80 percent but greater than 60 percent of the statewide non-metropolitan median household income are eligible to receive an interest rate reduction of up to 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. In July 2001, as part of the board's reduction of the base program's interest rate, the board elected to limit the interest reduction to one percent below the base rate or 2.5 percent for up to 30 years for those disadvantaged communities meeting 80 percent of the median household level.

Table 3

2001 Drinking Water State Revolving Fund Loans

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Interest Rate</u>
Bristol	Water System Improvements	\$139,000	4.5%
Britton	Water System Improvements	320,000	4.5%
Fall River WUD	Rural Water System Construction	400,000	2.5%
Gettysburg	Waterline Replacement	565,000	4.5%
Redfield	Waterline Replacement	85,000	4.5%
Sioux Falls	Water System Improvements	2,750,000	4.5%
Tripp	Water System Improvements	291,000	2.5%
Tyndall	Rural Water System Hookup	861,000	2.5%
WEB WDA	Glenham Water System Upgrade	137,450	2.5%
West River/Lyman-Jones	Reliance Water System Upgrade	340,000	2.5%
Yankton	Water System Improvements	<u>3,460,000</u>	3.5%
	TOTAL	\$9,348,450	

Watershed Protection - EPA

The South Dakota Watershed Protection Program is designed to assess nonpoint water pollution sources and reduce or eliminate their

Section 319 Grants

impact on water quality throughout the state. Nonpoint source refers to the polluted run-off from urban, agriculture, and forestlands. 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 2001, \$2,883,589 was awarded to watershed projects (Table 4).

Table 4

2001 EPA Section 319 Grant Awards

<u>Sponsor</u>	<u>Project</u>	<u>Grant Amount</u>	<u>Total Project</u>
Belle Fourche Partnership	Belle Fourche River Watershed Assessment	\$226,742	\$377,904
Day Conservation District	Enemy Swim Lake Watershed Assessment	184,542	329,111
Kingsbury Conservation District	Kingsbury County Lake Assessments	250,480	417,243
Minnehaha Conservation District	Wall Lake Post-Implementation	38,000	63,333
Moody Conservation District	Bachelor Creek Implementation	200,000	593,500
SD Grasslands Coalition	Grasslands Management	150,000	250,000
SD Assoc. Conservation Districts	Animal Waste Design IV	592,275	4,131,250
SD Assoc. Conservation Districts	Buffer Planning and Assistance	241,550	429,050
Watertown	Upper Big Sioux Watershed Phase III	<u>1,000,000</u>	<u>1,666,667</u>
	TOTAL	\$2,883,589	\$8,258,058

Solid Waste Management Program

The 2001 State Legislature did not appropriate any funding for the Solid Waste Management Program (SWMP) for fiscal year 2002 but did appropriate \$1,500,000 to the department for the statewide cleanup of waste tires and solid waste. As of July 1, 2001, the SWMP had \$503,788 available 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 is reserved for recycling activities.

The board, at its December 2000 and June 2001 meetings, reviewed a total of 12 grant applications and one amendment request. From these, the board awarded seven grants totaling \$665,170 (Table 5). Of these awards, four were for recycling projects and three were for municipal solid waste projects. These awards leveraged more than \$1,374,600 in total project construction.

Table 5

2001 Solid Waste Management Program Awards

Municipal Solid Waste

<u>Sponsor</u>	<u>Description</u>	<u>Grant Amount</u>	<u>Total Project</u>
Pierre	Alternative Cover Machine	\$20,000	\$40,000
Solid Waste Management Association	Landfill Operations Training	31,050	41,400
Walworth County	Alternative Cover Machine	<u>20,000</u>	<u>41,500</u>
TOTAL		\$71,050	\$122,900

Recycling

<u>Sponsor</u>	<u>Description</u>	<u>Grant Amount</u>	<u>Total Project</u>
Anti Freeze Recycling Inc.	Anti-Freeze Recycling Equipment	\$40,000	\$80,000
Huron	Yard Waste Grinder	29,120	58,000
Madison	Recycling Center Equipment	75,000	113,700
Rapid City	Composting Equipment	<u>440,000</u>	<u>1,000,000</u>
TOTAL		\$584,120	\$1,251,700

Consolidated Water Facilities Construction Program

The 2001 State Legislature appropriated \$4.5 million for the Consolidated Water Facilities Construction Program to provide grants and loans for water development projects on the State Water Facilities Plan. Additionally, \$382,700 of prior year funding was available for award in 2001.

The board considered 43 applications for consolidated funding and awarded 29 grants totaling \$4,757,000. The board also awarded two consolidated loans totaling \$200,000 (Table 6). The 2001 awards leveraged more than \$30.2 million in total project activities.

Table 6

2001 Consolidated Awards

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
Alcester	Wastewater System Improvements	\$250,000	\$1,565,000
Alpena	Wastewater Treatment Improvements	400,000	953,600
B-Y Water District	Water Treatment Plant Expansion	700,000	2,600,000
BDM Rural Water System	Britton Hookup	250,000	886,000
Castlewood	Water and Wastewater Improvements	250,000	1,317,000
Colton	Minnehaha Community Water Hookup	325,000	914,900
Custer	Water and Wastewater Improvements	100,000	1,065,000
Deuel Conservation District	Watershed Restoration	95,000	255,900
Elk Point	Water and Wastewater Improvements	50,000	365,000
Ethan	Wastewater Treatment Improvements	100,000	400,000
Garretson	Minnehaha Community Water Hookup	300,000	1,558,200
Gettysburg	Water Distribution Replacement	25,000	678,000

Gregory	Water Storage Improvements	25,000	406,000
Hecla	Wastewater Treatment Improvements	100,000	807,000
Highmore	Wastewater Treatment Improvements	50,000	335,325
Lake Conservation District	Watershed Improvements	135,000	370,000
Murdo *	Wastewater Collection Improvements	50,000 **	95,000
New Underwood	Water Storage Improvements	25,000 **	260,000
Nisland	Water Distribution Improvements	300,000	650,000
Northville	Wastewater Treatment Construction	225,000	650,000
Perkins Co. Rural Water System *	Final Engineering Report	150,000	160,000
Philip	Water Distribution Improvements	150,000	1,328,300
Pringle	Water Distribution Construction	27,000	200,000
Reliance	West River/Lyman-Jones RWS Hookup	150,000	400,000
Spink Conservation District	Watershed Restoration	25,000	50,000
TM Rural Water District	Water Distribution System Expansion	100,000	1,640,000
Tripp	Water Distribution Improvements	25,000	348,200
Tyndall	B-Y RWS Hookup	75,000	1,000,000
WEB Rural Water System	Glenham Hookup	100,000	237,000
Webster	Water and Wastewater Improvements	200,000	490,000
Yankton	Wastewater Treatment Improvements	<u>200,000</u>	<u>8,250,000</u>
	TOTAL	\$4,957,000	\$30,235,425

* Loan

** Award Rescinded

2001 Federal Water Development Legislation

Federal Appropriations

The President signed the federal fiscal year 2002 appropriation bill containing the Energy and Water Development titles on November 12, 2001 (Public Law 107-66). The funding levels for South Dakota water projects are listed in Table 7.

Table 7

FEDERAL FISCAL YEAR 2002 APPROPRIATIONS

Bureau of Reclamation

Facility Operation, Maintenance & Rehab

Mid-Dakota (Wetlands Enhancement O&M)	\$ 40,000
Mni Wiconi Rural Water System O&M	7,489,000
Rapid Valley Project O&M	30,000

Resources Management & Development

Black Hills Water Management Study ¹	\$ 100,000
Crow Creek Tribe Reservation M&I Water Supply	100,000
Mid-Dakota Rural Water System	15,000,000
Mni Wiconi Rural Water System	30,000,000
Lewis and Clark Rural Water System	2,000,000
Perkins County Rural Water System	3,400,000

¹ Line item under Dakota Investigation Program, ND

Corps of Engineers

Operation and Maintenance

Big Bend Dam/Lake Sharpe	\$ 6,386,000
Bigstone Lake Wheaton River, MN & SD ²	217,000
Fort Randall Dam/Francis Case	8,294,000
Gavins Point/Lewis & Clark ³	6,745,000
Oahe Dam/Lake Oahe	9,730,000
Cold Brook Lake	433,000
Cottonwood Springs Lake	197,000
Lake Traverse, SD & MN	531,000
Missouri River Between Fort Peck Dam and Gavins Pt.	625,000
Scheduling Reservoir Operations, SD	306,000

² Line item under Minnesota COE O&M Appropriations

³ Line item under Nebraska COE O&M Appropriations

Construction, General

Missouri National Recreational River, NE & SD ⁴	\$ 1,800,000
Missouri River Restoration	750,000
Pierre/Ft. Pierre Flood Buy Out	6,000,000
Sioux Falls Flood Control	6,000,000
Cheyenne River Sioux Tribe/Lower Brule Sioux Tribe/State of South Dakota (land transfer)	7,000,000

⁴ Line item under Nebraska COE Construction, General Appropriations

2001 State Water Appropriations Development Legislation

On February 27, 2001, Governor Janklow signed House Bill 1231, the Omnibus Water Funding Bill, authorizing the following appropriations from the Water and Environment Fund:

- Consolidated Water Facilities Construction Program -- \$4,500,000 to provide grants and loans for community drinking water, wastewater, and lake improvement projects;
- Mni Wiconi Rural Water System -- \$1,700,000 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. This appropriation completed the state's cost share commitment to the project;
- Lewis and Clark Rural Water System -- \$200,000 grant to provide for engineering design and construction of the rural water system;
- Department of Environment and Natural Resources -- \$1,500,000 to provide for the statewide cleanup of waste tires and solid waste.

Additionally, the bill appropriated \$300,000 to the Department of Environment and Natural Resources from the Environment and Natural Resources Fee Fund for the determination of selected total maximum daily load limits as required pursuant to the 1998 South Dakota 303(d) waterbody list.

Finally, the bill established South Dakota's state cost share commitment of \$18,585,540 in 1993 dollars for the construction of the Lewis and Clark Rural Water System.

2002 STATE WATER PLAN

2002 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 Facilities 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 Facilities Plan. Addition or deletion from the State Water Resources Management System can only be accomplished by the State Legislature.

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, groundwater protection, and watershed restoration. 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 2001, the board approved 19 projects for placement on the Facilities Plan, bringing the total number of projects on the 2002 State Water Facilities Plan to 68 (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

2002 STATE WATER FACILITIES PLAN

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Proposed Funding Source*</u>			<u>Total Project</u>
			<u>CWFCP</u>	<u>CWSRF</u>	<u>DWSRF</u>	
Aberdeen	Water Treatment Plant Improvements	2002	\$2,346,030		\$12,225,572	\$14,571,602
Aurora-Brule RWS	Treatment Plant Upgrades	2003	200,000			735,470
Badger	Wastewater Collection Project	2002	185,000			390,000
Baltic	Water Distribution System Improvements	2003	230,000		120,000	450,000
Baltic	Wastewater Collection Improvements	2003	300,000	265,000		615,000
Big Stone City	Watermain Improvements	2003	200,000		240,000	650,000
Black Hills RC&D	Eastridge Acres Water System	2002	100,000			130,000
Blunt	Storm Water Improvements	2002	400,000	405,700		805,700
Britton	Sanitary Sewer Improvements	2003	238,500	159,000		397,500
B-Y Water District	Bon Homme County Expansion	2002	100,000			3,100,000
B-Y Water District	Northwest Hutchinson County Expansion	2002				1,900,000
B-Y Water District	Water Treatment Plant Improvements	2002	200,000			1,206,000
Canton	Water and Storm Sewer Improvements	2002	400,000	304,868	269,232	1,194,050
Clark	Water and Wastewater Improvements	2002	200,000	214,200	143,500	887,700
Colonial Pine Hills Sanitary	Water Distribution System Improvements	2002	200,000		335,000	535,000
Core Heights Association	Igloo Wastewater Treatment Project	2002	21,631			21,631
Cresbard	Wastewater Collection System	2002	61,468	92,201		153,669
Dakota Dunes	Drinking Water Capacity Upgrade	2003			853,000	853,000
Davis	Water Distribution and Storm Sewer	2002	174,000		100,000	274,000
Davison RWS	Distribution System Improvements	2003	100,000			1,450,100
Dell Rapids	Water System Improvements	2003	300,000		320,000	1,620,000
Deuel Conservation District	Lake Cochrane/Lake Oliver Watershed	2003	20,000			126,900
East Custer Sanitary District	Sewer Lift Station Improvements	2002	60,000			100,000
Egan	Water System Improvements	2002	100,000			295,000
Elk Point	Wastewater Treatment Improvements	2002	100,000	76,200		176,200
Fall River Water Users District	Rural Water System Construction	2002	300,000		332,000	2,132,000
Fort Pierre	Water and Wastewater Improvements	2002	900,000	2,052,082		6,452,082
Fulton	Storm Drainage Project	2003	12,600			21,000
Groton	Main Street Utility Replacement	2003	500,000	440,000	440,000	1,780,000
Hand Conservation District	Cottonwood Lake/Lake Louise Watershed	2002	225,506			2,339,941
Highmore	Wastewater Treatment Improvements	2002	290,000			310,000
Huron	Water Treatment Plant Construction	2003	500,000			9,893,579
Irene	Main Street Utility Replacement	2002	220,000	83,000	195,000	498,000
Lake Byron Watershed District	Lake Byron Dredging	2002	450,000			900,000
Lake Norden	Water Supply Project	2002	52,500			105,000
Lincoln County RWS	Water Storage Improvements	2002			1,125,000	1,125,000
McLaughlin	Main Street Utility Replacement	2002				508,300
Minnehaha CWC	Water Supply and Treatment Expansion	2002			3,832,200	3,832,200
Mission Hill	Lagoon Discharge Extension	2003	50,900			50,900
Mitchell	B-Y RWS Hookup	2002			6,000,000	17,316,200
Moody Conservation District	Bachelor Creek Hydrologic Unit Project	2002	85,000			160,000
Parkston	Storm Water Drainage Project	2002	100,000			250,185
Philip	Water Distribution System Improvements	2002	400,000			1,328,300
Pierre	Water Distribution System Improvements	2002			1,803,410	1,803,410
Pierre	Wellfield Expansion	2002			1,094,200	1,094,200
Prairiewood Township	Water Storage Improvements	2002	200,000		186,200	396,200
Pringle	Water Distribution System Expansion	2002	100,000		90,000	190,000
Randall CWD	Aurora County Expansion Project	2003	2,250,000			13,436,880
Rapid Valley Sanitary District	Water Treatment Plant Construction	2003			1,968,750	2,018,750
Roscoe	Wastewater Collection Improvements	2002	20,680			51,700
Scotland – Lake Henry Assoc.	Lake Henry Dam Relocation	2002	200,000			1,740,000
Sioux Falls	Drinking Water System Improvements	2003			12,500,000	12,500,000
Sioux Falls	Wastewater System Improvements	2003		3,060,000		3,060,000
Skyline Heights	Water and Sewer Improvements	2002	457,000			881,952
Springfield	Lime Sludge Lagoon Project	2002	75,000			150,650
Sturgis	I-90 Service Road Utilities	2002	278,000			750,000
Summit	Water and Sewer Improvements	2002	100,000			270,000
Tripp County WUD	Gregory County Expansion Project	2002	1,000,000			5,892,100

<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>	
Tripp County WUD	Individual Service in Wood	2002	88,000			148,000
Vermillion	Water Treatment Improvements	2003	400,000		1,110,000	1,510,000
Wall Lake Sanitary District	Sanitary Sewer Improvements	2002	100,000			181,800
Waverly Sanitary District	Wastewater Collection and Treatment	2003	186,000			486,000
Wessington Springs	Water and Sewer System Extension	2002		120,000		270,000
Wessington	Waterline Replacement	2002	123,000			205,000
Winner	Wastewater System Improvements	2002	100,000			359,000
Yankton	23 rd Street Watermain	2002	30,000			66,000
Yankton	Broadway Watermain	2002	178,000		1,000,000	1,178,000
Yankton County	Gayville Storm Drainage	2002	100,000			169,800
TOTALS			\$16,308,815	\$7,272,251	\$46,283,064	\$130,450,651

* 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	Water Supply System in Southeastern SD
Mni Wiconi Rural Water System	Rural Water System in Western SD
Pick-Sloan Riverside Irrigation	Pick-Sloan Integration of Irrigation
Sioux Falls Flood Control Project	Increased Flood Protection
Slip-Up Creek	Proposed Reservoir near Sioux Falls
Vermillion Basin Flood Control Project	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 millions of 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 that 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 Board of Water and Natural Resources placed the remaining state cost share of \$525,000 under agreement.
- Studies determined that two-thirds of the sediment in the Bad River discharge to Lake Sharpe originated in the lower one-third of the basin. Land management efforts now focus on ranches in the lower basin.
- As of September 2001, the Bad River Watershed Project had more than 267,000 acres under improved management for sediment reduction using a suite of 21 Best Management Practices. State expenditures were being matched by federal and

local expenditures at a 4.7:1 ratio.

- US Geological Survey records since 1948 have shown the annual sediment delivery from the Bad River to Lake Sharpe to be 3.25 million tons. The Corps of Engineers in their "Missouri River Oahe Dam to Lake Sharpe Sedimentation Study" released in 2001 state that that delivery rate has now dropped to 1.95 million tons per year. This is a reduction of 1.3 million tons per year or 40%.

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.
- The Corps of Engineers initiated a feasibility study in 1988 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 1994 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.
- In June 2001, the residents of Watertown again called for a citywide vote on the proposed Mahoney Creek Dam project. The voters approved the project. City officials will now proceed with obtaining support and financing for the proposed dam project.

Black Hills Hydrology and Water Management Study – 1982

- The hydrology study has compiled water resource data to assess the quantity, quality, and distribution of the surface and ground water resources in the Black Hills area. These resources have been stressed by increasing population, periodic drought, and

developments related to expansion of mineral, timber, agricultural, recreational, municipal and urban needs. The U.S. Geological Survey has provided a total of \$3.4 million from Federal Fiscal Year 1988 through Federal Fiscal Year 2001 to establish the hydrologic monitoring system, accomplish collection of the data, and complete analysis of the data.

- The hydrology study entered Phase II during Federal Fiscal Year 1997. The emphasis of the Study during Phase I was data collection, and the emphasis shifted to analytical activities and publication of maps and reports during Phase II. Phase II of the hydrology study is expected to be completed during Federal Fiscal Year 2002.
- Products resulting from Phase II of the hydrology study 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
 - Summary of Precipitation Data Compiled for the Black Hills Area
 - Hydrologic Budgets for the Madison and Minnelusa Aquifers
 - Map Series:
 - ✓ Hydrogeologic maps and cross sections
 - ✓ Structure maps
 - ✓ Potentiometric maps
 - Final Technical Report
 - Hydrologic Atlas of Water Resources in the Black Hills (a Lay Reader Summary)
- The water management study will provide local project sponsors with tools to assist them in making informed management decisions concerning the development of water resources as applied to the expansion or competing water development needs. 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 \$1,870,000 through Federal Fiscal Year 2002.
- The water management study is scheduled to be completed by the end of Federal Fiscal Year 2002. The focus for the remainder of the Study will be on the water needs assessment, water management alternatives and development of final reports.

- A Black Hills Hydrology and Water Management Study Steering Committee was established in 1991 to provide local oversight and input into the development of the hydrology and water management studies. Membership is comprised of individuals and water users from the Black Hills area in South Dakota 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 2001, the U.S. Geological Survey made significant progress on the remaining Phase II products resulting from the Black Hills Hydrology Study. Publications during Federal Fiscal Year 2001 included the following: *Summary of Precipitation Data for the Black Hills Area of South Dakota*, *Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area* and *Hydrology Budgets for the Madison and Minnelusa Aquifers*. Three additional reports are at press, and the *Final Technical Report* is nearing completion.
- During Federal Fiscal Year 2001, the U.S. Bureau of Reclamation continued progress on a number of significant elements of the Black Hills Water Management Study, including the following major topics:
 - Regional Water Planning Issues
 - Black Hills Demographics - Revised based on 2000 Census
 - Water Supply Reliability Assessment
 - Analysis and Prediction of Existing and Future Water Demands
 - Summary of Problems, Needs and Opportunities
 - Evaluation of Water Supply and Demand Management Alternatives

Brennan Reservoir – 1991

- The purpose of the Brennan Reservoir/Rapid City Wastewater Recycling project is to determine the 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 Alliance and HDR Engineering completed *The Brennan Reservoir Preliminary Project Plan Report* in July 1992. 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 not include the development of the Brennan Reservoir and associated wetlands. No activity occurred on the project in 2001.

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 2001.

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 (FERC) issued the preliminary permit for development of the project to the board. 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. The Bureau of 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.

- On June 20, 2001, a Minnesota corporation, Dakota Pumped Storage, LLC, filed an application for a FERC Preliminary Permit for a pumped storage hydroelectric facility at the Gregory County site.
- South Dakota filed a Motion to Intervene in the Dakota Pumped Storage Proceeding and a Notice of Intent to File Competing Application for Preliminary Permit by the State of South Dakota. Both actions were dated September 25, 2001.
- An Application for Preliminary Permit for the Gregory County Pumped Storage Hydroelectric Facility in Gregory County, South Dakota was filed with FERC by the South Dakota Conservancy District on October 12, 2001.

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 totaled \$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 1998, more than 6,755 tons of debris was removed and stockpiled away from the river. In 1999, debris removal at seven bridge sites removing 25,000 tons of debris was completed and work on three additional sites was between 20 percent to 90 percent complete. The James River WDD completed the debris removal project in March 2000. The project was completed eight months ahead of schedule and removed more debris than originally estimated.
- James River WDD had identified a total of 35 sites along the James River in Spink County in need of bank stabilization and channel restoration work. As a result of consultation and review with the Corps of Engineers, the James River WDD has agreed to monitor three sites where some channel restoration/debris removal was accomplished and three control sites where no work was 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 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.
- 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 1995, Congress approved \$250,000 for the research program. State and federal agencies revised the 1990 plan of study to re-scope the demonstration program and identify the specific issues and research components that are of national significance. A nine-year, \$11.3 million effort has been projected.
- 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. No significant activity occurred on the project in 2001.

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 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.

- 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 also approved 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.
- In 2001, the project received an additional \$1.0 million of federal appropriation. Additionally, as part of the 2002 federal water and energy budget, the Lewis and Clark Rural Water System received an additional \$2.0 million towards the completion of the Final Engineering Report, National Environmental Protection Act compliance, and for the drilling of test wells along the Missouri River to assist with the final design of the intake system.
- The Governor's 2001 Omnibus Bill (House Bill 1231) established the state cost share commitment to the Lewis and Clark Rural Water System as \$18,585,540 in 1993 dollars. The legislation also provided an additional \$200,000 state appropriation to assist with the completion of the Final Engineering Report, National Environmental Protection Act compliance, and the drilling of test wells along the Missouri River to assist with the final design of the intake system.

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.
- Federal appropriations for planning and construction activities total nearly \$139 million through federal fiscal year 1999. The Bureau of Reclamation 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 also 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 were originally scheduled 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 2000 WR/LJ constructed a new distribution system for the community of Draper and four elevated water storage towers near the communities of Wall, Kennebec, Murdo, and Presho.

- 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. Contracts for the construction of the main transmission pipeline from the Water Treatment Plant through Ft. Pierre and the main transmission pipeline from approximately 15 miles south of Ft. Pierre to Draper were bid in federal fiscal year 2000 and construction initiated.
- 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 area, 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, including 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.
- The Governor's 2001 Omnibus Bill (House Bill 1231) appropriated a \$1.7 million loan for the continued construction of the Mni Wiconi Rural Water System. This appropriation was placed under agreement with the WR/LJ Rural Water System in June 2001. The WR/LJ Rural Water System continues to construct distribution pipelines in municipal and rural service areas. In 2001, the WR/LJ RWS agreed to help replace the Reliance water system and take over its operation and maintenance. To help accomplish this, the rural water system also secured an additional \$340,000 loan from the Drinking Water State Revolving Fund loan program. Replacement of the Reliance distribution system is scheduled to be completed in 2002.

- Included as part of the 2002 federal water and energy appropriation, was \$4.0 million to WR/LJ for the construction of a \$5.1 million water transmission pipeline to provide service to Philip and the drilling of two additional groundwater wells in the Creighton and Quinn areas. The construction of the pipeline to Philip was required because of Philip's deteriorating water quality.

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 activity occurred on this project in 2001, 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 2001, construction of Phase 1A of the Big Sioux River/Skunk Creek Flood Control Project was completed. Phase 1A addressed the spillway and stilling basin area at the outfall of the diversion channel.
- In October 2001, bids were accepted on Phase 1B of the Big Sioux River/Skunk Creek Flood Control Project. Phase 1B addresses the levies adjacent to Morrell's downstream to Cliff Avenue. The two bids received on Phase 1B were approximately \$400,000 above the engineer's estimate. The Corps of Engineers has re-advertised the project with a completion date extended into 2002.

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 activity took place on the project in 2001.

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 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 the Clay, Miner, Turner, McCook, and Lake county commissions.
- The Vermillion River Watershed Authority proposed 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 was actually less than one, consequently, all FEMA Hazard Mitigation funds were withdrawn. The Authority has withdrawn its request to set the outlet elevation on Lake Thompson and has moved to dissolve after financial records are completed. No significant activity occurred on the project in 2001.

**Recommendations
to the Governor
and State
Legislature**

In November 2001, the board conducted a public meeting on the funding needs of the State Water Resources Management System (SWRMS) projects. The board adopted Resolution #2001-176 recommending that all the projects currently on the SWRMS list be retained. The board also adopted Resolution #2001-177 providing its funding recommendations to the Governor and the Legislature for Water and Environment Fund fiscal year 2003 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

Gregory County Pumped Storage	\$100,000
Lake Andes-Wagner/Marty II Irrigation (Loan)	15,000
Lewis and Clark Rural Water System	750,000
Sioux Falls Flood Control	<u>2,000,000</u>
Total	\$2,865,000
Consolidated Water Facilities Construction Program	\$4,500,000
Statewide Clean Up of Waste Tires and Solid Waste	\$1,000,000
Solid Waste Management Program	\$750,000

APPENDIX A

WATER AND ENVIRONMENT FUND

Special Condition Statement

WATER AND ENVIRONMENT FUND Special Condition Statement

Cash Balance from MSA - 6-30-01	\$12,658,780
Projected FY2002 Revenues	
Capital Construction Fund	\$5,500,000
Contractor's Excise Tax	\$550,000
Investment Interest (Earned '01 deposited '02)	\$450,000
Loan Principal & Interest Payments	\$315,000
Solid Waste Fees	\$1,350,000
Subtotal	\$8,165,000
Projected FY2002 Expenditures (Authorized in General Bill)	
Administrative Fee Fund	\$400,000
Subtotal	\$400,000
Revenues Less Expenditures	\$7,765,000
Projected Fund Balance Available for Expenditure	\$20,423,780
Obligations (Signed contract by 7/1, Reserve for bonds)	
Prior Year	
Consolidated	\$5,526,091
SWRMS Grants - Major Projects	\$1,972,111
SWRMS Loans - Major Projects	\$1,348,282
Solid Waste Grants/Loans - Disposal	\$63,054
Solid Waste Grants/Loans - Recycling	\$543,693
Solid Waste Grants/Loans - Waste Tires	\$0
Waste Tire 2000 (SFY 2000)	\$111,664
Waste Tire 2000 (SFY 2001)	\$5,086
Current Year - 01 Omnibus (2002 authority)	
Mni Wiconi (WR/LJ RWS)	\$1,700,000
Consolidated Grant or Loan	\$2,335,000
Waste Tire 2000	\$1,440,725
Solid Waste Grants/Loans - Total	\$0
Subtotal	\$15,045,706
Ending Unobligated Fund Balance	\$5,378,074

WATER AND ENVIRONMENT FUND
Special Condition Statement

Continued

Ending Unobligated Fund Balance (from previous page) **\$5,378,074**

Project Expenditures Authorized by the Legislature - No agreement signed

Current Year (SFY 2002) Authority

Lewis & Clark RWS Grant \$200,000

Subtotal **\$200,000**

Prior Year Authority

James River Restoration Grant (2000 Authority) \$100,000

James River Restoration Grant (1999 Authority) \$250,000

Subtotal **\$350,000** **\$550,000**

Program Expenditures Authorized by the Legislature - No agreement signed

Consolidated Program Authority - Current Year \$2,165,000

Consolidated Program Authority - Prior Year \$232,704

Solid Waste Program Authority – Current Year \$0

Solid Waste Program Authority – Prior Year \$499,854

\$2,897,558

Program Authorized by the Legislature – No authority provided

Water Rights - Well Plugging \$2,098

Subtotal **\$2,098**

Surplus/(Deficit) Funds Available (as of 6/30/02) **\$1,928,417**

APPENDIX B

BOARD OF WATER AND NATURAL
RESOURCES

RESOLUTIONS

STATE OF SOUTH DAKOTA
BOARD OF WATER AND NATURAL RESOURCES
RESOLUTION # 2001 – 176

PROVIDING TO THE SOUTH DAKOTA LEGISLATURE AND GOVERNOR THE BOARD OF WATER AND NATURAL RESOURCES RECOMMENDATIONS FOR STATE WATER RESOURCES MANAGEMENT SYSTEM DESIGNATION.

WHEREAS, the board pursuant to SDCL 46A-1-2 annually provides recommendations to the State Legislature and Governor regarding deletions and additions to the State Water Resources Management System component of the State Water Plan; and,

WHEREAS, SDCL 46A-1-2.1 provides the list of water resources projects included on the State Water Resources Management System component of the State Water Plan and that serve as the preferred, priority objectives of the State; and,

WHEREAS, the board has reviewed the applications submitted from various South Dakota water resource projects for inclusion onto the State Water Plan.

NOW THEREFORE BE IT RESOLVED, that the board recommends to the Governor and the State Legislature that all water resource projects currently on the State Water Resources Management System be retained as preferred, priority objectives of the State.

Dated this 9th day of November, 2001.

BY: \\Signed//
Chairman, Board of Water and
Natural Resources

(SEAL)

ATTEST:

BY: \\Signed//
Secretary, Board of Water and
Natural Resources

STATE OF SOUTH DAKOTA
BOARD OF WATER AND NATURAL RESOURCES
RESOLUTION # 2001 - 177

PROVIDING TO THE SOUTH DAKOTA LEGISLATURE AND GOVERNOR THE BOARD OF WATER AND NATURAL RESOURCES RECOMMENDATIONS FOR WATER AND ENVIRONMENT FUND FISCAL YEAR 2003 EXPENDITURE AUTHORIZATION LEVELS.

WHEREAS, pursuant to the authority provided in SDCL 46A-1-2, the Board of Water and Natural Resources (the board) annually provides recommendations to the Governor and the State Legislature regarding deletions and additions to the State Water Resources Management System component of the State Water Plan; and,

WHEREAS, pursuant to the authority provided in SDCL 46A-1-7, the board is responsible for approving all projects placed onto the State Water Facilities Plan, an annual listing of potential water related projects; and,

WHEREAS, pursuant to the authority provided in SDCL 46A-1-12 and 46A-1-13, the board may recommend state funding levels to the Governor and the State Legislature; and,

WHEREAS, the board has reviewed the projected funding needs of projects on the State Water Resources Management System component of the State Water Plan; and,

WHEREAS, the board has reviewed the projected funding needs of projects on the State Water Facilities Plan component of the State Water Plan; and,

WHEREAS, the board has reviewed potential funding needs of solid waste disposal, recycling, and waste tire projects that may require funding from fees deposited in the Water and Environment Fund; and,

WHEREAS, the board conducted a public meeting on November 9, 2001, to take statements from all interested parties regarding water development and solid waste funding needs.

NOW THEREFORE BE IT RESOLVED, that the board recommends to the Governor and the State Legislature the Water and Environment Fund fiscal year 2003 expenditure authorization level of four million five hundred thousand dollars (\$4,500,000) for the Consolidated Water Facilities Construction Program; and,

IT IS FURTHER RESOLVED, that the board recommends to the Governor and the State Legislature the following Water and Environment Fund fiscal

year 2003 line-item expenditure authorization levels for projects on the State Water Resources Management System:

Gregory County Pumped Storage	\$ 100,000
Lake Andes Research Demonstration	\$ 15,000
Lewis and Clark RWS	\$ 750,000
Sioux Falls Big Sioux Flood Control	<u>\$ 2,000,000</u>
SWRMS Total	\$ 2,865,000

IT IS FURTHER RESOLVED, that the board recommends to the Governor and the State Legislature the Water and Environment Fund fiscal year 2003 expenditure authorization level of one million dollars (\$1,000,000) to the Department of Environment and Natural Resources for the statewide cleanup of waste tires and solid waste: and,

IT IS FURTHER RESOLVED, that the board recommends to the Governor and the State Legislature the Water and Environment Fund fiscal year 2003 expenditure authorization level of seven hundred fifty thousand dollars (\$750,000) for the Solid Waste Management Program.

Dated this 9th day of November, 2001.

BY:  \\Signed//
Chairman, Board of Water and
Natural Resources

(SEAL)

ATTEST:

BY:  \\Signed//
Secretary, Board of Water and
Natural Resources

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