



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3181

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

Transmitted herewith is the 1996 Annual Report of the Board of Water and Natural Resources and the 1997 State Water Plan. The Annual Report describes the past year's water development activities throughout the state. The State Water Plan outlines the projects on the State Water Facilities Plan and provides recommendations on projects for inclusion on the State Water Resources Management System.

Throughout this document you will see significant progress has been made by the department and the board on a number of water, wastewater, and solid waste programs. Over the past year, the board has awarded more than \$17.1 million in grant and loan funds for construction of municipal drinking water systems, wastewater facilities, lake/watershed projects, rural water systems, irrigation projects, landfill closures, and recycling projects.

The department's mission is: "to provide environmental and natural resources assessment, financial assistance, and regulation in a customer service-oriented manner which protects public health, conserves natural resources, preserves the environment, and promotes economic development." All activities of the Board of Water and Natural Resources help the department strive towards its mission.

The department will continue to work with the various boards and the project sponsors, our customers, to successfully implement and streamline all programs. Together we can continue to "protect South Dakota's tomorrow...today."

Sincerely,

Nettie H. Myers  
Secretary

To  
Governor William J. Janklow  
and the  
Seventy-Second Session, Legislative Assembly  
1997

**1996 ANNUAL REPORT  
and  
1997 STATE WATER PLAN**

**Board of Water and Natural Resources**

January 1997

# TABLE OF CONTENTS

PREFACE .....	iii
1996 ANNUAL REPORT .....	1
◆ Overview .....	1
◆ State Water Resources Management System .....	1
◆ State Revolving Fund Loan Program .....	2
◆ Watershed Protection .....	3
◆ Solid Waste Management Program .....	5
◆ Consolidated Water Facilities Construction Program .....	6
◆ Water Development District Contract Approval .....	8
◆ 1996 Water Development Legislation .....	8
Federal Legislation .....	8
State Legislation .....	9
1997 STATE WATER PLAN .....	13
◆ Overview .....	13
◆ State Water Facilities Plan .....	13
◆ State Water Resources Management System .....	15
SWRMS Project Status .....	16
Recommendation to State Legislature and Governor .....	26
◆ Water and Environment Fund Special Condition Statement .....	27

## LIST OF TABLES

<u>TABLES</u>	<u>PAGE</u>
1 State Water Resources Management System 1996 Funding Award Summary.....	2
2 State Revolving Fund Loans .....	3
3 EPA Implementation Awards.....	3
4 EPA Development Grants.....	4
5 EPA Pollution Prevention Grants.....	4
6 Solid Waste Management Program Grants.....	5
7 Consolidated Awards.....	7
8 Federal Fiscal Year 1997 Appropriations .....	9
9 State Water Facilities Plan .....	14
10 State Water Resources Management System Projects .....	15
11 State Water Resources Management System Funding Recommendations .....	26

## LIST OF APPENDICES

### APPENDIX

- A) Board of Water and Natural Resources Resolutions
  - #96-115 SWRMS Recommendations
  - #96-123 Water and Environment Fund Fiscal Year 1998 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 Legislature and Governor 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 1996 Annual Report and the 1997 State Water Plan. The annual report provides progress reports on each project and on board activities during 1996. The second section sets forth the projects included in the State Water Facilities Plan and the State Water Resources Management System, recommended funding for State Water Resources Management System projects, and a Water and Environment Fund Special Condition Statement.

# 1996 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 (SDCL) 46A-1-14. The report contains all of the board's 1996 activities, including a detailed account of expenditures from the Water and Environment Fund.

In November 1995, the board placed 23 projects onto the 1996 State Water Facilities Plan. During the year, the board amended an additional ten 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 \$17.1 million in grant and loan funds for construction of municipal drinking water systems, wastewater facilities, lake/watershed projects, rural water systems, irrigation projects, landfill closures and recycling projects. These awards resulted in more than \$81.6 million in total construction activity. The loan and grant funds helped provide South Dakotans with safe and dependable environmental infrastructure.

## State Water Resources Management System

In 1996, the board approved \$3,772,500 in state funding for projects on the State Water Resources Management System component of the State Water Plan (Table 1). These awards leveraged more than \$40.3 million in federal funds.

West River/Lyman-Jones Rural Water used \$500,000 in state loan funds for the construction of distribution system facilities as advanced features of the Mni Wiconi project. The advanced features use interim ground water sources for their water supply. In 1996, the Kadoka, Grindstone North, Grindstone South, and Philip service areas completed construction to provide water to approximately 400 service taps. On July 2, 1996, West River/Lyman-Jones along with the Oglala Sioux, Rosebud, and the Lower Brule rural water systems held groundbreaking ceremonies for the Mni Wiconi core facilities at Echo Point near Ft. Pierre.

Mid-Dakota Rural Water System was awarded \$1.0 million in state grant funds for administrative, engineering, and construction efforts. In June 1995, Mid-Dakota had its groundbreaking ceremony. Construction of the \$3.9 million intake facility and the \$1.7 million raw water pipeline projects were completed in 1996. The \$9.9 million water treatment plant contract should be substantially complete by the end of 1996 and will be put into service as soon as financing becomes available to award distribution system pipeline contracts. Three additional contracts totaling more than \$13.1 million were also awarded in 1996. These contracts included the two main pipeline contracts to deliver water to the 1.5 million gallon water storage tank near Highmore.

Perkins County Rural Water System was awarded \$450,000 in state grant funding to provide the state cost share for administrative, engineering, construction, and federal authorization efforts. In May 1996, the system completed and signed a water service agreement with the North Dakota State Water Commission for delivery of water to the Perkins County service area. Construction was also initiated in North Dakota on facilities necessary to bring water to Perkins County. Perkins County is providing the required cost share on these facilities to insure that water service will be provided. The Perkins County Rural Water System's share of construction costs in 1996 were \$284,572. Additional construction contracts in North Dakota are anticipated in 1997. Federal legislation to authorize construction of the rural water system was introduced in Congress on August 2, 1996. The legislation provides for a federal cost share of 75 percent and nonfederal 25 percent.

Table 1

**STATE WATER RESOURCES MANAGEMENT SYSTEM  
1996 FUNDING AWARD SUMMARY**

<u>Project</u>	<u>Amount</u>	<u>Type</u>
Bad River Restoration	\$ 87,500	Grant
Belle Fourche Irrigation	1,500,000	Grant
Black Hills Hydrology & Water Mgmt	110,000 (1)	Grant
James River Restoration	125,000	Grant
Mid-Dakota Rural Water System	1,000,000	Grant
Mni Wiconi Rural Water System	500,000	Loan
Perkins County Rural Water System	450,000	Grant
<b>TOTAL</b>	<b>\$3,772,500</b>	

(1) Appropriation approved by the 1995 State Legislature

**State Revolving  
Fund Loan  
Program**

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

During calendar year 1996, the board approved nine loans totaling \$7.3 million (Table 2). To date, 85 loans have been made from the program totaling \$67.19 million. The 1996 interest rates were 4.5 percent for 10 years, 5.0 percent for 15 years, and 5.25 percent for 20 years. These rates will be retained in 1997.

The board, acting in its capacity as the South Dakota Conservancy District, issued \$2,770,000 in revenue bonds in December 1996. The bonds were issued with an A1 rating by Moody's Investors Service. The Series 1996 bonds were issued to provide matching funds for federal fiscal years 1996-1998.

Table 2

### 1996 STATE REVOLVING FUND LOANS

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Interest Rate</u>
Chamberlain (03)	Treatment Facility Upgrade	\$2,700,000	5.25%
Lennox	New Interceptors	350,000	5.25%
Pickrel Lake Sanitary District	New Treatment/Collection System	850,000	5.0%
Rapid Valley Sanitary District (03)	Sewer Line Rehabilitation	630,000	5.25%
Richmond Lake Sanitary District	New Treatment/Collection System	414,000	5.25%
Roscoe	Treatment Facility Upgrade	358,408	5.25%
Sioux Falls (12)	Sewer Line Rehabilitation	1,300,000	4.5%
Webster	Sewer Line Rehabilitation	400,000	4.5%
Worthing	Treatment Facility Upgrade	<u>315,725</u>	5.25%
<b>TOTAL</b>		<b>\$7,318,133</b>	

### Watershed Protection

The South Dakota Watershed Protection program is designed to assess the status of pollution sources and their subsequent effect on water bodies throughout the state; provide technical assistance to local project sponsors in the design and implementation of individual projects; provide financial support to individual projects through the management of state and federal grants; provide assistance in monitoring the effectiveness of implementation projects; provide assistance in informing and education; and provide assistance in the development of pollution prevention programs.

The board has oversight authority of EPA grants for watershed projects. Applications for EPA implementation grants must be approved by the board prior to submission to EPA (Table 3).

Table 3

### 1996 EPA IMPLEMENTATION GRANT AWARDS

<u>Project</u>	<u>Description</u>	<u>Amount</u>	<u>Project Cost</u>
Bigstone Lake	Watershed Restoration	\$ 93,536	\$ 254,065
Blue Dog Lake	Assessment	70,000	117,530
Clear Lake	Assessment	63,000	105,000
Piedmont	Assessment	84,608	141,158
South Dakota I&E	Information & Education	210,737	488,292
Turtle Creek/Lake Redfield	Lake Restoration	159,379	2,240,135
Upper Big Sioux	Watershed Restoration	<u>331,000</u>	<u>642,235</u>
<b>TOTAL</b>		<b>\$1,012,260</b>	<b>\$3,988,415</b>

**Watershed Protection (continued)**

The Department of Environment and Natural Resources also has oversight of project development grants. These activities are critical for the development of effective implementation projects. Following are the projects funded through the EPA development grants (Table 4).

Table 4

**1996 EPA DEVELOPMENT GRANTS**

<u>Project</u>	<u>Description</u>	<u>Amount</u>	<u>Project Cost</u>
Upper Big Sioux Watershed	AGNPS Data Collection	\$ 5,600	\$42,600
Vermillion River Watershed	NPS Assessment	20,000	20,000
West Yankton Sanitary Survey	Septic Tank Study	5,600	5,600
Whitewood Creek Streambank	Streambank Assessment	<u>4,500</u>	<u>7,500</u>
TOTAL		\$35,700	\$75,700

**Pollution Prevention**

The department has assumed the responsibility for administration and oversight of the Pollution Prevention Program to include pass-through grants and statewide program development. The program is funded through EPA grants and state and local match (Table 5).

Table 5

**1996 EPA POLLUTION PREVENTION GRANTS**

<u>Project</u>	<u>Description</u>	<u>Amount</u>	<u>Project Cost</u>
Belle Fourche River Riparian Project	Poll. Prev. Demonstration	\$10,000	\$ 38,000
Brule-Buffalo Bootstraps Project	Rural Poll. Prev. Strategy	4,400	10,000
City of Huron/Trusbilt Project	Poll. Prev. Demonstration	10,000	34,371
Green & Profitable Printing	Poll. Prev. Training	1,015	1,642
Pollution Prevention for Teachers	Poll. Prev. Training	5,200	11,970
Small Community R3 Program	Source Reduction	15,000	72,875
Urban Sediment Workshop	Poll. Prev. Training	3,234	8,784
Wellhead Protection Evaluation	Poll. Prev. Strategy Devel	25,000	51,000
Western SD Bootstraps Project	Rural Poll. Prev. Strategy	<u>7,000</u>	<u>334,530</u>
TOTAL		\$80,849	\$563,172

**Solid Waste Management Program**

The 1996 State Legislature appropriated an additional \$1.345 million for the Solid Waste Management Grant Program. The Legislature also amended the program so that beginning in fiscal year 1997 waste tire to energy production projects may receive up to \$500,000. The waste tire funding was divided into two categories: waste tire shredding and transporting and waste tire pile cleanups. The Board of Water and Natural Resources was provided up to \$250,000 in each of these categories. Additionally, the Legislature authorized the board to provide loans as well as grants under the program. Funds to support this program 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.

The board's regularly scheduled December 1995 and June 1996 funding rounds along with a special September 1996 waste tire funding round reviewed a total of 44 applications. From these applications, the board awarded 23 new grants totaling \$1,196,350 (Table 6). Of the new awards, four were for landfill closure activities, four were for waste tire pile cleanups, two were for regional landfill construction or upgrades, one was for construction of a restricted use site, one was for waste tire shredding and transporting, and the remaining 11 awards assisted recycling projects.

The board also amended four existing grants resulting in an additional \$276,000 in award obligations. These amendments bring the total amount awarded during the year to \$1,472,350 and awards leveraged approximately \$4.3 million in total project construction.

Table 6

**1996 SOLID WASTE MANAGEMENT PROGRAM**

**Municipal Solid Waste Grants**

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
Gregory County	Closure	\$ 21,000	\$ 40,000
Huron	Closure	40,000	240,000
Menno	Restricted Use	5,000	19,302
Northwest Landfill Assoc.	Regional Landfill	75,000	125,964
Pierre	Regional Landfill	165,000	1,000,000
Presho	Closure	10,000	36,800
Wagner	Closure	<u>35,000</u>	<u>99,400</u>
<b>TOTAL</b>		<b>\$351,000</b>	<b>\$1,561,466</b>

Table 6

**Recycling Grants**

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
Advanced Recycling	Regional Recycling Center	\$ 90,000	\$ 275,000
Freeman	Recycling Center Renovation	17,000	23,614
Lead	Storage Building	5,500	11,000
Madison	Regional Recycling Center	80,000	267,490
Northern Plains Recycling.	Recycling Center Equipment	15,000	84,000
Rapid City	MRF Equipment	90,000	380,000
River City Sanitation	Recycling Center Equipment	12,000	29,900
Sander Sanitation	Recycling Center Equipment	23,000	348,700
Tri-County Environmental	Anti-Freeze Recycling Center	25,000	62,100
Walworth County	Regional Recycling Center	60,000	125,235
Watertown	Compost Pad	72,350	144,700
<b>TOTAL</b>		<b>\$489,850</b>	<b>\$1,751,739</b>

**Waste Tire Shredding and Transporting Grant**

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
New Deal Tire	Tire Processing	\$250,000	\$500,000
<b>TOTAL</b>		<b>\$250,000</b>	<b>\$500,000</b>

**Waste Tire Pile Cleanup Grants**

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
Brown County Landfill	Waste Tire Cleanup	\$ 75,000	\$ 150,000
Humboldt Fire & Ambulance	Waste Tire Cleanup	13,500	18,000
Ipswich	Waste Tire Cleanup	5,000	6,750
Roberts County Landfill	Waste Tire Cleanup	12,000	23,500
<b>TOTAL</b>		<b>\$105,500</b>	<b>\$198,250</b>

**Consolidated  
Water Facilities  
Construction  
Program**

The 1996 State Legislature appropriated \$4.2 million for the Consolidated Water Facilities Construction Program to provide grants and loans for water development projects on the State Water Facilities Plan.

The board awarded 38 new grants totaling \$4,399,500, one loan totaling \$12,000, and amended three previous grants with additional funding totaling \$149,000 (Table 7). The 1996 consolidated awards totaled \$4,560,500 (\$360,500 was from prior year appropriations) and helped leverage more than \$34.0 million in construction activities.

TABLE 7

## 1996 CONSOLIDATED AWARDS

<u>Recipient</u>	<u>Description</u>	<u>Amount</u>	<u>Total</u>	<u>Type</u>
Arlington	Water Distribution Upgrade	\$ 75,000	\$ 885,700	Grant
Beadle Conservation District	Ravine Lake Restoration	50,000	106,160	Grant
Big Sioux Community Water	System Upgrade/Colman Hookup	100,000	1,000,000	Grant
Big Stone City	Water Supply	150,000	660,000	Grant
Buffalo Gap	Water Well And Well House	35,000	63,300	Amend
Chamberlain	Wastewater Treatment Upgrade	350,000	3,200,000	Grant
Claremont	Water Distribution Upgrade	127,500	320,000	Grant
Clay Rural Water System	System Expansion	75,000	888,000	Grant
Davison Rural Water System	System Expansion	100,000	1,009,180	Grant
Edgemont	Water/Sanitary Sewer Rehab	100,000	350,000	Grant
Fairview	Water Tower/Pump Repair	12,000	36,000	Grant
Fairview	Water Tower/Pump Repair	12,000		Loan
Florence	Wastewater Treatment Facility	120,000	330,000	Grant
Gayville	Connection To Clay Rural Water	80,000	346,320	Amend
Groton	Wastewater Treatment Facility	50,000	688,275	Grant
Hartford	Sanitary/Storm Sewer	50,000	562,700	Grant
Highmore	Sanitary/Storm Sewer Separation	200,000	1,750,000	Grant
Hill City	Water Storage	50,000	250,000	Grant
Hitchcock	Water Distribution Upgrade	40,000	87,000	Grant
Hurley	Water Main Improvement	34,000	336,630	Amend
Isabel	Dam Repair	20,000	95,000	Grant
Jefferson	Wastewater Treatment	50,000	426,000	Grant
Lennox	Wastewater Treatment	50,000	400,000	Grant
Milbank	Water/Sanitary Sewer Upgrade	30,000	157,000	Grant
Murdo	Water Distribution Upgrade	35,000	140,000	Grant
Pickereel Lake Sanitary District	Wastewater Collection/Treatment	200,000	1,174,525	Grant
Richmond Lake San. District	Wastewater Collection/Treatment	235,000	924,850	Grant
Roscoe	Wastewater Treatment	150,000	520,000	Grant
Spencer	Water Distribution	125,000	571,000	Grant
Spink County Cons. District	Lake Redfield Restoration	75,000	181,160	Grant
Stratford	Wastewater Collection/Treatment	100,000	307,135	Grant
Swan Lake Improvement Assn	Lake Restoration/Dredge	120,000	275,865	Grant
T-M Rural Water District	System Upgrade	150,000	1,330,000	Grant
Trent	Wastewater Treatment Facility	70,000	150,500	Grant
Tri-County Water Association	Treatment Plant Upgrade	75,000	235,000	Grant
Walworth County Cons. District	Lake Hiddenwood Restoration	25,000	33,350	Grant
Warner Sanitary District	Lift Station Improvements	10,000	65,970	Grant
Watertown	Lake Kampeska Restoration	20,000	169,500	Grant
Watertown	Wastewater Treatment Upgrade	1,000,000	12,635,000	Grant
Webster	Water/Sanitary Sewer Rehab	50,000	897,625	Grant
Worthing	Wastewater Treatment Upgrade	<u>160,000</u>	<u>475,725</u>	Grant
TOTAL		\$4,560,500	\$34,034,470	

**Water  
Development  
District Contract  
Approval**

SDCL 46A-3E-7 states, "Any contract requiring expenditure of more than fifty thousand dollars by a water development district to assist or construct a water resources project is subject to approval by the Board of Water and Natural Resources to ensure that the contract conforms with the provisions of SDCL 46A-2-3." One contract by the West River Water Development District for \$60,000 was presented and approved by the board.

---

**1996 Water  
Development  
Legislation**

**Federal Legislation**

**Authorizations**

The 1996 Water Resources Development Act, the Corps of Engineers authorization bill, was signed into law on October 12, 1996 (Public Law 104-303). The legislation authorizes 44 new water resource development projects under the Corps of Engineers. Included in the bill is the authorization for the \$34.6 million Sioux Falls Flood Control Project with an estimated \$25.9 million federal cost and \$8.7 million nonfederal cost. Additionally, language was included to address the recurring flooding in Pierre and Ft. Pierre caused by sedimentation in Lake Sharpe. The Corps of Engineers is directed to investigate potential solutions including lowering of the lake level and sediment agitation to allow for movement of the sediment. Language was also included regarding the revision to the water control manuals for the Jamestown Dam and Pipestem Dam, North Dakota, to reduce the flooding along the James River in North and South Dakota.

The Safe Drinking Water Act was signed into law on August 6, 1996 (Public Law 104-182). The Act authorizes a drinking water State Revolving Fund that will assist communities by providing low interest loans to upgrade public drinking water facilities. This program is similar to the SRF for upgrades of wastewater treatment facilities that the department administers. The Act authorizes up to \$1 billion annually through 2003. The Act also requires EPA to adopt specific regulatory approaches for arsenic, radon and sulfate; requires more detailed public notification of contaminant levels and provides more flexibility for small systems to meet treatment and monitoring standards.

**Appropriations**

The federal fiscal year 1997 Energy and Water Development Appropriations Bill was signed by the President on September 30, 1996 (Public Law 104-206). The funding levels for South Dakota water projects are listed in Table 8.

Table 8

**1997 FEDERAL FISCAL YEAR APPROPRIATIONS  
Bureau of Reclamation**

<b>General Investigations</b>	
Black Hills Water Management Study	\$ 75,000
Tri-County Rural Water Association	150,000
<b>Construction</b>	
Belle Fourche Unit Rehabilitation	5,100,000
Mni Wiconi Rural Water System	28,350,000
Mid-Dakota Rural Water System	10,000,000
Oahe Unit (Maintenance)	85,000
<b>Operation and Maintenance</b>	
Mni Wiconi Rural Water System	2,903,000
 <b>Corps of Engineers</b>	
<b>Operation and Maintenance</b>	
Big Bend Dam/Lake Sharpe	\$6,457,000
Ft Randall Dam/Francis Case	8,041,000
Gavins Point/Lewis & Clark	6,193,000
Oahe Dam/Lake Oahe	9,911,000
Cold Brook Lake	201,000
Cottonwood Springs Lake	186,000
Lake Traverse, SD & MN	430,000
<b>Construction, General</b>	
Missouri National Recreational River	100,000

---

**1996 Water  
Development  
Legislation**

**State Legislation**

**Appropriations**

The 1996 Legislature adopted House Bill 1029, the Omnibus Water Funding Bill, authorizing the following appropriations from the Water and Environment Fund:

- Consolidated Water Facilities Construction Program -- \$4.2 million to provide grants and loans for community drinking water, wastewater, solid waste, and lake improvement projects;
- Belle Fourche Irrigation Rehabilitation -- \$1.5 million grant to provide for nonfederal cost share for the rehabilitation project facilities;
- Mid-Dakota Rural Water System -- \$1.0 million grant to provide nonfederal cost share for construction;

- Mni Wiconi Rural Water Supply System -- \$500,000 loan to provide nonfederal cost share for project construction;
- Perkins County Rural Water System -- \$450,000 grant to provide for the congressional authorization, preconstruction, and construction activities;
- Black Hills Hydrology and Water Management Study -- \$200,000 grant to local project sponsors to provide for ongoing studies of the Black Hills;
- James River Restoration Project -- \$125,000 grant for restoration activities;
- Bad River Watershed -- \$87,500 grant to provide nonfederal cost share for Bad River watershed activities; and
- Solid Waste Management Program -- \$1.345 million to provide grants for municipal solid waste and recycling projects.

#### **Major Project Authorizations**

Pursuant to SDCL 46A-1-11 through 46A-1-13, House Bill 1029 provided for the legislative authorization of the Perkins County Rural Water System. An \$18 million project was authorized to provide municipal, rural, and industrial water in Perkins County and established a cost share commitment of \$1.0 million.

#### **Solid Waste/Tire Bill**

The State Legislature approved several changes to the Solid Waste Management Program in 1996. Senate Bill 25 altered the eligibility criteria for the program to allow program participation in energy production from waste tires beginning in state fiscal year 1997. The bill went on to provide the Board of Water and Natural Resources with up to \$250,000 for waste tire shredding and transporting projects until there is sufficient capacity in the private sector to fully utilize all new waste tires generated annually in South Dakota and a maximum of \$250,000 for waste tire pile cleanup projects in fiscal years 1997 and 1998. One additional change that was approved for the Solid Waste Management Program was the ability provided to the board to approve loans as well as grants from the program appropriations.

In response to this eligibility change, the board provided a special waste tire funding round in September 1996. As a result of this special funding round, the board has provided \$355,500 for waste tire projects.

### **State Capital Construction Fund**

House Bill 1088 provided for certain revisions regarding the deposits to and transfers from the capital construction fund. Deposits to the fund will come from the Powerball revenues, after the first \$1.4 million, and tank fees from petroleum products. The transfers from the fund will be made on a percentage basis rather than a dollar amount each year. The Water and Environment Fund will receive 75.5 percent, ethanol incentive 20.75 percent and limited public transportation assistance 3.75 percent.

# **1997 STATE WATER PLAN**

# 1997 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. In order 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 is a listing of potential water projects. The facilities plan includes projects such as rural, municipal, and industrial water supply; wastewater facilities; storm sewers; water conservation; watershed management and restoration; solid waste management; groundwater contamination; pollution prevention or remediation; and dam safety. The board is responsible for approving the placement of projects onto the facilities plan. Once a project is placed onto 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 1996, the board reviewed 55 applications and approved placement of 54 projects on the facilities plan, bringing the total number of projects on the 1997 State Water Facilities Plan to 73 (Table 9). Projects on the facilities plan are eligible to seek state and federal financial assistance. The board can provide direct financial assistance and influence federal categorical grant decisions or funding decisions from other state agencies.

Projects that have received full or partial funding but have not been completed are not included in Table 9. These projects technically remain on the facilities plan until completed so that supplementary funding requests may be considered by state and federal 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 9

## 1997 STATE WATER FACILITIES PLAN

Sponsor	Project Description	On Plan Through	Proposed Funding Sources			Project Total
			CWFCP	CDBG	SRF	
Arlington	Water Distribution System Upgrade	1998	\$ 75,000	\$ 200,000	\$	\$ 850,700
Aurora Water Development	Rural Water System Construction	1997	640,000	640,000	350,000	4,180,900
Aurora-Brule RWS	System Expansion	1997	55,000			111,725
BDM Rural Water System	System Expansion	1998	600,000	600,000		15,400,000
B-Y Water District	Treatment Plant Expansion	1998	250,000	200,000		8,350,500
Beadle Conservation District	Ravine Lake Watershed	1998	50,000			662,050
Brandon	Water Supply/Treatment Plant	1998	250,000		600,550	1,100,550
Bridgewater	Storm Sewer Upgrade	1998	100,000		100,000	205,000
Britton	Wastewater Lagoon Expansion	1997	183,500			366,200
Brookings	Westside Sewer Interceptor	1997	830,272			1,092,540
Brookings Cons. District	Lake Hendricks Watershed	1998	72,500			343,740
Brookings-Deuel RWS	System Improvements	1997	165,000	250,000		1,650,000
Butte Electric Water Co.	Rural Water System Construction	1997	125,000			535,000
Campbell Cons. District	Spillway Repair	1998				11,010
Canistota	Sanitary Sewer Improvements	1998	170,000		170,000	340,000
Castlewood	Wastewater Treatment Upgrade	1998		186,000	124,000	310,000
Chamberlain	Water/Wastewater Expansion	1998	130,000	130,000		800,000
Chamberlain	Water/Wastewater Mains	1998	200,000	300,000	811,740	1,811,740
Clay Rural Water System	New Well	1998	25,000			89,200
Corsica	Water Distribution System Upgrade	1998	63,360			105,600
Davison County	Storm Water Drainage	1998				67,500
Dell Rapids	Sewer Interceptor	1998	100,000			215,000
Deuel County Cons. District	Abandoned Well Sealing	1998	7,600			46,000
Eureka	Lake Restoration	1998	20,400			34,000
Fairview	Water Tower Repair/Pump Replace	1997	23,156			23,156
Fort Pierre	Wastewater Treatment Upgrade	1998	282,000	282,000		940,000
Gregory	Water Supply/Storage Improvements	1998	100,000	100,000		440,000
Gregory	Water Distribution/Sanitary Sewer	1998	100,000	100,000		352,465
Groton	Wastewater Treatment Facility	1997	300,000			688,275
Hanson RWS	System Expansion	1998	100,000	200,000		1,268,000
Harrisburg	Wastewater Treatment Facility	1998	300,000		450,000	789,505
Harrisburg	Water Supply (well & rural water)	1998	30,000		43,415	73,415
Hermosa	Water Distribution	1997		130,000		330,000
Lake Cochrane San. Dist.	System Improvements	1997	52,800			88,000
Lake Kampeska SPD	Big Sioux Diversion	1997	200,000			870,000
Lake Poinsett San. District	Wastewater System Expansion	1998	1,424,000			3,560,000
Lane	Water Distribution Upgrade	1998		71,250		118,750
Lennox	Wastewater Upgrade - Phase II	1998	250,000		450,000	701,490
Lesterville	Wastewater Treatment Upgrade	1998	37,000			61,875
Madison	Water/Sewer Expansion	1998	165,600			276,000
McCook Lake Izaak Walton	Lake Restoration	1998	122,500			245,000
Mellette	Sanitary Sewer Improvements	1998	120,000			493,400
Miller	Storm Sewer Improvement	1998	100,000	100,000		425,000
Mitchell	Storm Water Drainage	1998	75,000		1,500,000	1,939,150
New Underwood	Water System Improvement	1997	50,000			400,000
North Sioux City	Water Treatment Expansion	1997	85,000			535,000
Osceola San. Sewer Dist.	Water Distribution	1997	138,000			173,000
Philip	Water And Sanitary/Storm Sewer	1998	120,000	250,000		373,500
Pickrel Lake San. Dist.	Sanitary Sewer System - Phase II	1998	300,000	400,000	500,000	2,068,425
Platte	Water Distribution	1997		44,500		89,000
Platte	Storm Drainage	1997	50,000	200,000		609,000
Richmond Lake San. Dist.	Sanitary Sewer System - Phase II	1998	165,000			734,000
Roberts County	Big Stone Lake Restoration	1998				3,309,636
Sioux Falls	Sanitary/Storm Sewer	1998			2,500,000	2,500,000
Spink County Cons. Dist.	Turtle Creek/Redfield Lake Rehab	1997	530,500			2,129,720
Springfield	Storm Water Drainage	1998		200,000		315,950
Strandburg	Sanitary Sewer System	1998	70,000			348,000
Swan Lake Association	Lake Restoration	1998	120,000			218,796
T-M Rural Water District	System Upgrade	1997	800,000	800,000		4,529,000
Tea	Sanitary Sewer Line	1998			285,000	285,000
Timber Lake	Water Distribution Upgrade	1998	106,840			178,064

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Proposed Funding Sources</u>			<u>Project Total</u>
			<u>CWFCP</u>	<u>CDBG</u>	<u>SRF</u>	
Tulare	Water Distribution Upgrade	1998				497,000
Tyndall	Water Distribution Upgrade	1998	223,000			446,800
Tyndall	Storm Water Collection System	1998	45,000	100,000		249,200
Valley Springs	Wastewater Treatment Expansion	1998	180,000		150,000	360,000
Wagner	Dam Reconstruction	1997	100,000			280,045
Wall	Wastewater Treatment Improvement	1998			750,000	1,158,000
Watertown	Water Distribution Upgrade/Rehab	1997	400,000			1,478,850
Watertown	Sanitary Sewer Improvements	1997	300,000		1,900,000	2,200,000
Watertown	Storm Sewer Improvements	1997	300,000		697,000	1,007,000
Watertown	Upper Big Sioux Watershed	1998	42,500			726,321
Willow Water, Inc.	Storm Water Drainage	1998	50,000			170,000
Yankton	Northwest Interceptor Sewer	1998	100,000		500,000	650,000
<b>TOTAL</b>			<b>\$12,059,728</b>	<b>\$5,083,750</b>	<b>\$12,081,705</b>	<b>\$79,373,318</b>

\* CWFCP - Consolidated Water Facilities Construction Program  
CDBG - Community Development Block Grant Program  
SRF - 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 State Water Resources Management System (Table 10) 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 10

### 1996 STATE WATER RESOURCES MANAGEMENT SYSTEM PROJECTS

<u>Project</u>	<u>Description</u>
Bad River Watershed Project	Rehabilitation Of The Bad River Watershed
Belle Fourche Irrigation Project	Rehabilitation Of Belle Fourche Project
Big Sioux Flood Control Study	Watertown Flood Control Dam
Black Hills Hydrology & Water Management Study	Study Of The Black Hills Water Resources Management Of Water Flows In Rapid Creek
Brennan Reservoir	Irrigation Project In Central SD
CENDAK Irrigation Project	Rural Water System In Fall River County
Fall River County Rural Water System	Multi Purpose Water Utilization
Gregory County Rural Water System	Watershed/Channel Improvement Projects
James River Improvement Program	Irrigation In Charles Mix County
Lake Andes-Wagner/Marty II Irrigation Unit	Water Supply System In Southeastern SD
Lewis & Clark Rural Water System	Rural Water System In Central SD
Mid-Dakota Rural Water System	Rural Water System In Western SD
Mni Wiconi Rural Water System	Rural Water System In Northwestern SD
Perkins County Rural Water System	Pick-Sloan Integration Of Irrigation
Pick-Sloan Riverside Irrigation	Increased Flood Protection
Sioux Falls Flood Control Project	Proposed Reservoir Near Sioux Falls
Slip-Up Creek	Flood Control Study On Vermillion River
Vermillion Basin Flood Control Project	

## **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 Ft. Pierre. The Bad River annually delivers about 3.25 million tons of sediment to Lake Sharpe, primarily from eroding gullies and stream banks.
- The sediment negatively impacts fishing and other recreation in the Pierre-Ft. Pierre area. Sediment deposits contribute to flooding in the Pierre-Ft. 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 \$15.0 million annually.
- The U.S. Army Corps of Engineers has proposed building levees in the Pierre-Ft. Pierre area to allow greater releases and maximize power generation. Local interests believe that a combination of watershed treatment and localized dredging in Lake Sharpe is a more acceptable and effective solution than levees.
- 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 \$175,000 from 1995 to 1996.

### **Belle Fourche Irrigation Project - 1981**

- The original Belle Fourche Irrigation project was authorized by Congress in 1904 and completed in 1914 to deliver irrigation water to 57,000 acres in Butte County.
- Congress authorized a \$42 million rehabilitation project in 1983 to reduce operation and maintenance costs, conserve water, provide safety features, lessen the risk of system failure, reclaim agricultural lands affected by seepage losses, and protect the economic welfare of the area.
- Congress amended the federal authorization in 1994 to raise the construction ceiling by \$14.5 million. The amendment language provided for a federal cost share of \$10.5 million and a state cost share of \$4.0 million.

- The rehabilitation project has received \$60.8 million in federal appropriations through FFY 1997.
- The State Legislature authorized the project in 1995 with a state cost share commitment of \$4.0 million. The U.S. Bureau of Reclamation, Board of Water and Natural Resources, and the Belle Fourche Irrigation District executed a Memorandum of Understanding that outlines the funding commitment. State legislative appropriations total \$2.5 million from 1995 through 1996 toward the state cost share commitment.

#### **Big Sioux Flood Control Study - 1989**

- The proposed \$16 million project will 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 to gather comments.

#### **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 \$2.1 million from 1988 through 1996 to establish the hydrologic monitoring system and to collect data.
- 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 FFY 1991 to initiate a federal Black Hills Water Management Study by the Bureau of Reclamation. Federal appropriations total \$850,000 through FFY 1997.
- A Black Hills Hydrology and Water Management 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.

- State legislative appropriations to the local project sponsors total \$860,000 from 1988 through 1996. 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.

#### **Brennan Reservoir - 1991**

- The proposed Brennan Reservoir would be located on Dry Creek nine miles southeast of Rapid City to store unused Rapid Creek flows and winter releases from Pactola Reservoir. Additionally, limited flood protection may be achieved through the diversion of storm flows into the reservoir.
- 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. The Legislature provided \$25,000 in 1993 to conduct additional Brennan Reservoir studies.

#### **CENDAK Irrigation Project - 1982**

- This irrigation project is to supply Missouri River water to 474,000 acres in Hughes, Hyde, Hand, Spink, Beadle, and Faulk Counties in central South Dakota. No activity occurred on the project in 1996. South Dakota will pursue development of the project when federal policies are more supportive of large-scale irrigation projects.

#### **Fall River County Rural Water System - 1991**

- The proposed \$4.5 million Fall River Rural Water System will provide quality Madison aquifer water to a service area covering the eastern half of the county. A history of poor water quality and droughts has left local residents without a satisfactory water supply for home use and livestock watering.
- State legislative appropriations to the project include a \$50,000 grant in 1992 for planning and a \$500,000 grant in 1993 for construction. The 1993 State Legislature authorized construction of the project. The 1995 State Legislature increased the state cost share commitment to \$800,000 from \$500,000.

- Federal legislation to authorize construction of the rural water system was introduced in Congress on August 2, 1996. The legislation provides for a federal cost share of 80 percent and a nonfederal cost share of 20 percent.

#### **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.

#### **James River Improvement Program - 1984**

- This program has been designed to provide flood control as well as municipal, industrial, agricultural, recreational, and wildlife benefits.
- In 1986, federal legislation (Public Law 99-662) authorized \$20.0 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 significant 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.
- State legislative appropriations have totaled \$1.3 million from 1988 through 1996. These funds have been used by the district for restoration and study activities.

### **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 \$175.0 million and \$24.0 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 \$7.0 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 FFY 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.

### **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 \$200.0 million of Lewis and Clark's South Dakota project features 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 \$575,000 from 1990 through 1995.
- Congress provided \$350,000 from FFY 1991 to 1994 for the Bureau of Reclamation's technical assistance on the feasibility study and project development.

- On May 3, 1994, Lewis and Clark legislation was introduced in Congress to authorize the system. The U.S. Senate conducted a hearing on the proposed Lewis and Clark project on June 28, 1994. Federal authorizing legislation was re-introduced in Congress in 1995. On September 5, 1996, the U.S. Senate held hearings on the federal authorizing legislation.

#### **Mid-Dakota Rural Water System - 1988**

- Mid-Dakota is a federally authorized (Public Law 102-575) rural domestic water system that will provide high quality Missouri River water to 30,000 people in Beadle, Buffalo, Hand, Hughes, Hyde, Jerauld, Potter, Sanborn, Sully, and small portions of Spink, Kingsbury, and Aurora Counties. The cost sharing provisions provide for \$85.0 million in federal grants, \$15.0 million in federal treasury rate loans, and \$8.4 million in state funding.
- The 1992 State Legislature authorized the construction of a \$108.4 million Mid-Dakota project and provided a state cost share commitment of \$8.4 million. Mid-Dakota has received state appropriations totaling \$7.37 million from 1988 through 1996.
- The Mid-Dakota project completed a successful sign-up process in 1993 with 2,400 rural sign-ups generating \$1.2 million in hook-up fees. Negotiation of municipal and special users agreements is on schedule.
- In June 1995, Mid-Dakota had its groundbreaking ceremony.
- By the end of the 1996 construction season, the \$3.9 million intake and the \$1.7 million raw water pipeline contracts should be completed. The \$9.9 million water treatment plant contract should be substantially complete and put into service as soon as financing becomes available to award distribution system pipeline contracts.
- Mid-Dakota awarded three new contracts in 1996 totaling more than \$13.1 million. The new contracts include two main pipeline contracts responsible for delivering water from the water treatment plant, along Highway 14, to the 1.5 million gallon water storage tank being constructed near Highmore.
- Federal appropriations for planning and construction activities total \$27.5 million from FFY 1992 through FFY 1997. In addition to the congressional line-item appropriations, the Bureau of Reclamation re-programmed \$2.323 million in FFY 1996 funds to Mid-Dakota.

### **Mni Wiconi Rural Water System - 1989**

- Public Law 100-516, as amended in 1994, authorizes a \$263.0 million federal project to provide high quality Missouri River water to 50,000 western South Dakota citizens in a ten-county area extending south and west of Ft. 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. is the non-Indian distribution component. The cost share for construction is 80 percent federal and 20 percent nonfederal. West River/Lyman-Jones 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 \$263.0 million project, and the state cost share commitment was revised to \$12.91 million. To date, \$5.8 million in state loans have been authorized by the state Legislature.
- Federal appropriations for planning and construction activities total \$55.95 million through FFY 1996. Congress approved FFY 1997 appropriation levels of \$28.3 million for construction and \$2.9 million for operation and maintenance.
- West River/Lyman-Jones 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 system approved two new contracts for construction on the main intake facility to be located at Echo Point near Ft. Pierre and the initial site preparation and sludge lagoon construction contract at the water treatment plant. Both of these contracts are anticipated to initiate construction before the end of 1996 and complete their construction in 1997.

- On July 2, 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 Ft. Pierre.

### **Perkins County Rural Water System - 1993**

- The proposed Perkins County Rural Water System will provide quality drinking water to the communities of Lemmon, Bison, and Lodgepole. Additionally, the system will provide 185 rural users with domestic and livestock water needs. The distribution system is estimated at \$10 million.
- A feasibility study identified the preferred alternative as hooking up to the Southwest Pipeline Project in North Dakota.
- State legislative appropriations to the project have been \$550,000 from 1993 to 1996 for planning and feasibility study purposes.
- In 1995, water service contract negotiations began between Perkins County and the Southwest Pipeline Project. Construction of the remaining segments of the Southwest Pipeline Project that will provide service to Perkins County is estimated at \$1.0 million. The cost associated with the portion of Southwest Pipeline Project already constructed is being negotiated with North Dakota and is currently estimated at \$4.5 million.
- The 1996 State Legislature authorized the construction of the \$18.0 million Perkins County Rural Water System project and provided a state cost share commitment of \$1.0 million. Perkins County Rural Water System also received an appropriation of \$450,000 towards the state cost share commitment.
- The Perkins County Rural Water System completed negotiations with the North Dakota State Water Commission and signed a water service agreement in May 1996. After the completion of these negotiations, a construction contract was awarded in North Dakota to bring water towards the Perkins County border. Perkins County's share of this contract was \$284,572. Additional construction is anticipated to be awarded next year on a second phase contract to bring water to Perkins County.
- Federal legislation to authorize construction of the rural water system was introduced in Congress on August 2, 1996. The legislation provides for a federal cost share of 75 percent and nonfederal cost share of 25 percent.

### **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 action occurred on this project in 1996 and future activities are uncertain.

### **Sioux Falls Flood Control Project - 1989**

- The proposed project will provide Sioux Falls with 100-year protection from flooding on the Big Sioux River and Skunk Creek through modification of current flood control features.
- The existing flood control features were constructed by the Corps of Engineers in 1965 and provide 30-year flood protection on the Big Sioux River and 20-year protection on Skunk Creek.
- Federal appropriations for Corps of Engineers project planning total \$1.99 million from FFY 1990 through 1996. The city used \$120,000 in state funding for the feasibility report which was completed in June 1993, and a public hearing was held in August 1993.
- The State Legislature authorized the \$26.9 million project in 1992 including a state cost share commitment of \$4.55 million in grants.
- The 1995 State Legislature approved \$300,000 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.

### **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 1996.

### **Vermillion Basin Flood Control Project - 1987**

- The project objective is to address the severe flooding problems in the Vermillion River Basin. The basin is about 120 miles long, 20 miles wide and covers about 2,185 square miles.
- The 1988 State Legislature provided \$50,000 to study the feasibility of flood control structures. Congress appropriated \$362,000 from FFY 1991 through 1993 for the study efforts.
- The Vermillion Basin Flood Control Reconnaissance Report (Corps of Engineers, 1993) and did not identify a feasible federal project. The project sponsors are re-evaluating 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.

**Recommendation  
to the State  
Legislature and  
Governor**

In November 1996, the board conducted a public meeting on the funding needs of the State Water Resources Management System projects and other Water and Environment Fund programs. The board adopted Resolution #96-115 recommending to the Legislature and Governor that all current projects remain on the list and that no new projects be added. In December, the board adopted Resolution #96-123 providing its funding recommendations to the Legislature and Governor for Water and Environment Fund fiscal year 1998 expenditure authorization levels. A summary of the board's recommendations is provided below (Table 11). The full resolutions are in Appendix A.

*Table 11*

**STATE WATER RESOURCES MANAGEMENT SYSTEM FUNDING RECOMMENDATIONS**

Bad River Water Quality Project	\$ 87,500
Belle Fourche Irrigation Project	1,500,000
Black Hills Hydrology and Water Management Study	210,000
James River Improvement Program	100,000
Lewis & Clark RWS	50,000
Mid-Dakota Rural Water System	1,000,000
Mid-Dakota Rural Water System ( <i>Loan</i> )	1,000,000
Mni Wiconi Rural Water System ( <i>Loan</i> )	500,000
Perkins County Rural Water System	550,000
Total	<u>\$4,997,500</u>
Consolidated Water Facilities Construction Program	\$2,600,000
Solid Waste Management Grant Program	\$1,345,000

**WATER AND ENVIRONMENT FUND  
Special Condition Statement**

Cash Balance from MSA -- 30-Jun-96 \$8,129,692

<b>Projected FY97 Revenues</b>	
Capital Construction Fund	\$6,568,500
Contractor's Excise Tax	\$250,000
Investment Interest	\$470,276
Loan Interest Payments	\$115,500
Loan Principal Payments	\$116,775
WDD Loan Fund Transfer	\$247,600
Hydro Upgrade Contribution	\$15,000
Solid Waste Fees	\$1,345,000
<b>Subtotal</b>	<b>\$9,128,651</b>

<b>Projected FY97 Expenditures (Authorized in General Bill)</b>	
Administrative Fee Fund	\$400,000
GPF / Water Rights Other Funds	\$0
Sec. Discretionary Funds (Solid Waste)	\$0
<b>Subtotal</b>	<b>\$400,000</b>

**Revenues Less Expenditures** **\$8,728,651**

**Projected Fund Balance Available for Expenditure** **\$16,858,343**

**Obligations (Signed contract by 1-Sep-96, Unexpended Balance)**

<b>Prior Year</b>	
Consolidated (FY 1996 authority)	\$1,808,986
Consolidated (FY 1995 authority)	\$1,517,040
Consolidated (FY 1994 authority)	\$173,422
Consolidated (FY 1993 authority)	\$39,859
SWRMS - Major Projects	\$608,608
Solid Waste Grants - Disposal	\$840,932
Solid Waste Grants - Recycling	\$830,418
Groundwater Monitoring - SDGS	\$131,772
Groundwater Grants	\$5,739
<b>Current Year - 1996 Omnibus (FY 1996 authority)</b>	
Consolidated	\$4,103,823
Mni Wiconi RWS	\$500,000
Mid Dakota RWS	\$1,000,000
Belle Fourche Irrigation	\$750,000
Bad River Watershed Project	\$87,500
James River Restoration	\$125,000
Perkins County RWS	\$450,000

**Subtotal** **\$12,973,098**

**Funds Not Under Contract** **\$3,885,244**

(Statement continued on next page)

**WATER AND ENVIRONMENT FUND**  
**Special Condition Statement**  
Continued

<b>Funds Not Under Contract</b>	<b><u><u>\$3,885,244</u></u></b>
---------------------------------	----------------------------------

**Project Expenditures Authorized by the Legislature - No agreement signed**

**Current Year Authority**

Black Hills Hydrology and Water Mngt.	\$200,000	
---------------------------------------	-----------	--

**Prior Year Authority**

Fall River Rural Water System	\$500,000	
Sioux Falls Flood Control	\$300,000	
Lake Andes/Wagner Irrigation	\$75,000	
Brennan Reservoir	\$25,000	

<b>Subtotal</b>	<b>\$1,100,000</b>	
-----------------	--------------------	--

**Program Expenditures Authorized by the Legislature - No agreement signed**

Consolidated Grants Authority - Prior Year	\$42,867	
Consolidated Grants Authority - Current Year	\$8,500	

Solid Waste Recycling Grants - Prior Year	\$819,629	
Solid Waste Disposal Grants - Prior Year		

Solid Waste Grants - Current Year	\$1,345,000	
-----------------------------------	-------------	--

<b>Subtotal</b>	<b>\$2,215,996</b>	
-----------------	--------------------	--

<b>Ending Unobligated Fund Balance</b>	<b><u><u>\$569,248</u></u></b>
--	--------------------------------

**Appendix A**  
**Board of Water and Natural Resources**  
**Resolutions**

STATE OF SOUTH DAKOTA  
BOARD OF WATER AND NATURAL RESOURCES  
RESOLUTION #96 - 115

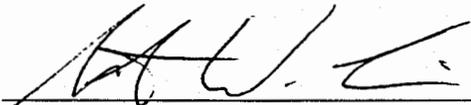
PROVIDING TO THE SOUTH DAKOTA LEGISLATURE AND GOVERNOR THE BOARD OF WATER AND NATURAL RESOURCES RECOMMENDATIONS FOR STATE WATER RESOURCES MANAGEMENT SYSTEM DESIGNATION.

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, the board has reviewed the State Water Plan applications of various South Dakota water resource projects.

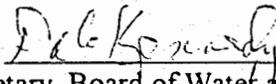
NOW THEREFORE BE IT RESOLVED, that the board recommends to the State Legislature and Governor that all water resource projects currently on the State Water Resources Management System be retained as preferred, priority objectives of the State.

Dated this 13th day of November, 1996.

BY:   
Chairman, Board of Water and Natural Resources

(SEAL)

ATTEST:

BY:   
Secretary, Board of Water and Natural Resources

STATE OF SOUTH DAKOTA  
BOARD OF WATER AND NATURAL RESOURCES  
RESOLUTION #96 - 123

PROVIDING TO THE SOUTH DAKOTA LEGISLATURE AND GOVERNOR THE BOARD OF WATER AND NATURAL RESOURCES RECOMMENDATIONS FOR WATER AND ENVIRONMENT FUND FISCAL YEAR 1998 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 State Legislature and Governor 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 which are 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 Legislature; and,

WHEREAS, the Board has reviewed the State Water Plan applications of the projects currently on the State Water Facilities Plan; and,

WHEREAS, the Board has reviewed the Projected Funding Need forms submitted by projects on the State Water Resources Management System; and,

WHEREAS, the Board has conducted a public meeting on November 13, 1996, to take the statements of all interested parties regarding water development funding needs; and,

WHEREAS, on November 13, 1996, the Board passed Resolution #96-116 making state funding recommendations for projects on the State Water Resources Management System, but the Board has since determined that additional funding needs should be recommended to the Governor and Legislature.

NOW THEREFORE BE IT RESOLVED, that the Board rescinds Resolution #96-116; and,

IT IS FURTHER RESOLVED, that the Board recommends to the State Legislature and Governor the following Water and Environment Fund fiscal year 1998 line-item expenditure authorization levels for projects on the State Water Resources Management System:

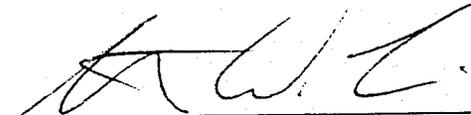
Bad River Watershed Project	\$ 87,500
Belle Fourche Irrigation Rehabilitation	\$1,500,000
Black Hills Hydrology & Water Mgmt	\$ 210,000
James River Restoration	\$ 100,000
Lewis & Clark RWS	\$ 50,000
Mid-Dakota RWS	\$1,000,000
Mid-Dakota RWS	\$1,000,000 *
Mni Wiconi RWS	\$ 500,000 *
Perkins County RWS	<u>\$ 550,000</u>
SWRMS Total	\$4,997,500

\* Loans

IT IS FURTHER RESOLVED, that the Board recommends to the State Legislature and Governor the Water and Environment Fund fiscal year 1998 expenditure authorization level of \$2,600,000 for the Consolidated Water Facilities Construction Program; and,

IT IS FURTHER RESOLVED, that the Board recommends to the State Legislature and Governor the Water and Environment Fund fiscal year 1998 expenditure authorization level of \$1,345,000 for the Solid Waste Management Program.

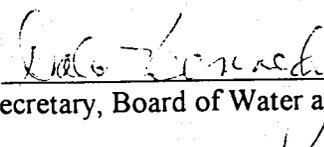
Dated this 11th day of December, 1996.

BY: 

Chairman, Board of Water and Natural Resources

(SEAL)

ATTEST:

BY: 

Secretary, Board of Water and Natural Resources