

**1999 ANNUAL REPORT**  
~~and~~  
**2000 STATE WATER PLAN**



*South Dakota*

Board of  
Water And Natural Resources

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and Members of the Seventy-Fifth  
Legislative Session

Transmitted herewith is the 1999 Annual Report/2000 State Water Plan of the Board of Water and Natural Resources. The Annual Report describes the board's water development and waste management activities during the past year. The State Water Plan outlines the projects on the State Water Facilities Plan and State Water Resources Management System. Additionally, the report provides the board's Water and Environment Fund funding recommendations to the Governor and Legislature for fiscal year 2001.

Throughout this document you will see the department and the board have provided significant assistance to a number of water, wastewater, and solid waste projects. Over the past year, the board awarded more than \$18.6 million in grant and loan funds for construction of municipal drinking water systems, wastewater facilities, lake/watershed projects, rural water systems, solid waste disposal, waste tire, and recycling projects. These awards resulted in more than \$95.6 million in total construction activity.

I would like to take this opportunity to highlight a related water quality priority of the department. I am referring to the Total Maximum Daily Load (TMDL) program. Department staff is working to complete TMDLs for the 171 waterbodies on the state's current list of impaired waterbodies. The TMDL process identifies the sources of pollution and the reductions needed so that water quality can be improved. EPA section 319 funding is utilized to support the development of TMDLs. The board's grant and loan programs provide significant financial assistance to watershed and wastewater projects that target these pollution sources.

The department will continue to work with the Board of Water and Natural Resources, the project sponsors, and the public 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-Fifth Session, Legislative Assembly  
2000**

**1999 ANNUAL REPORT  
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**Board of Water and Natural Resources**

**January 2000**

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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 1999 Annual Report and the 2000 State Water Plan. The annual report provides progress reports on each program and on board activities during 1999. 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 2000 is included in Appendix A.

# 1999 ANNUAL REPORT

# Board of Water and Natural Resources

## Overview

An annual report of the Board of Water and Natural Resources is required by South Dakota Codified Law 46A-1-14. The report summarizes the board's 1999 activities, including a detailed account of expenditures from the Water and Environment Fund.

In November 1998, the board placed 40 projects on the 1999 State Water Facilities Plan. During the year, the board amended an additional 20 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 \$18.6 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 clean-ups, and recycling activities. These awards resulted in more than \$95.6 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

The Omnibus Bill approved by the 1999 Legislature and signed by the Governor on March 6, 1999, followed the Board of Water and Natural Resources funding recommendations and appropriated \$3.25 million for State Water Resources Management System (SWRMS) projects. The funding appropriated in 1999 completed the state cost share commitments to three projects -- the Bad River Watershed Project, the Fall River Rural Water System, and the hydrology component of the Black Hills Hydrology and Water Management Study. The state cost share commitments for the Perkins County Rural Water System and the Mid-Dakota Rural Water System were met in 1997 and 1998, respectively. During the year the board placed \$2.86 million of 1999 and prior year appropriations under agreement with local project sponsors (Table 1).

Three SWRMS projects also received significant federal action in 1999. Federal funding for new project starts has been difficult to get approved by Congress. However in 1999, the Sioux Falls Flood Control Project received \$2.2 million through the Corps of Engineers for design and construction. This marks the first time direct funding has been appropriated for the design and construction of this project.

On November 19, 1999, the Perkins County and Lewis and Clark Rural Water Systems received Senate approval. For Perkins County, the approval by the Senate was the final hurdle required before the authorization could be sent to the President. On December 7, 1999, President Clinton signed Public Law Number 106-136 officially

authorizing the construction of the Perkins County Rural Water System. South Dakota legislatively authorized the Perkins County Rural Water System in 1996 and by 1997 appropriated the \$1.0 million cost share commitment made to the project. To date, state funding has been used to provide Perkins County's cost share on construction of pipelines in North Dakota to ensure water service capacities for Perkins County. For the Lewis and Clark Rural Water System, Senate approval was an important first step in getting the project federally authorized. The legislation will now be sent on to the House for federal authorization in 2000. The South Dakota Legislature authorized the Lewis and Clark project in 1993.

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

Table 1

### 1999 STATE WATER RESOURCES MANAGEMENT SYSTEM FUNDING AWARDS

<u>Project</u>	<u>Amount</u>	<u>Type</u>
Black Hills Hydrology Study	\$210,000	Grant
Fall River Rural Water System	800,000	Grant
Lewis & Clark Rural Water System	50,000	Grant
Sioux Falls Flood Control Project	300,000	Grant
Mni-Wiconi Rural Water System	<u>1,500,000</u>	Loan
	<b>\$2,860,000</b>	

#### **Clean Water State Revolving Fund Loan Program**

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

During 1999, the board approved five loans totaling \$8,567,195 (Table 2). The FFY 1999 interest rates were 4.5 percent for 10 years, 4.75 percent for 15 years, and 5.0 percent for 20 years. To date, 106 loans have been made from the program totaling \$93.96 million.

Table 2

**1999 CLEAN WATER STATE REVOLVING FUND LOANS**

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	Interest <u>Rate</u>
Britton	Wastewater treatment facility improvements	\$509,935	4.5%
Harrisburg	Wastewater treatment facility improvements	520,000	5.0%
Pierre	Wastewater treatment facility improvements	5,391,260	5.0%
Platte	Sanitary sewer system renovation	1,000,000	5.0%
Wall	Wastewater treatment facility improvements	<u>1,146,000</u>	5.0%
<b>TOTAL</b>		<b>\$8,567,195</b>	

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**Drinking Water State Revolving Fund Loan Program**

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

During 1999, the board approved two loans totaling \$1,701,000 (Table 3). The FFY 1999 interest rates were 4.5 percent for 10 years, 4.75 percent for 15 years, and 5.0 percent for 20 years. A 3.0 percent, 30-year loan is available to communities meeting criteria for disadvantaged status. To date, 14 loans have been made from the program totaling \$19.97 million.

Table 3

**1999 DRINKING WATER STATE REVOLVING FUND LOANS**

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	Interest <u>Rate</u>
Fall River Water User Dist.	Rural water system construction	\$759,000	3.0%
Vermillion	Lime sludge disposal	<u>942,000</u>	5.0%
<b>TOTAL</b>		<b>\$1,701,000</b>	

**Watershed**

The South Dakota Watershed Protection Program is designed to

**Protection - EPA  
Section 319  
Grants**

assess nonpoint pollution sources and their impact on water quality throughout the state. Nonpoint source refers to the polluted run-off from urban, agriculture, and forest lands. The program provides technical and financial assistance to local watershed project sponsors in the planning and management of assessment studies 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 1999, \$2,741,400 was awarded to watershed projects (Table 4).

Table 4

**1999 EPA SECTION 319 GRANT AWARDS**

<u>Sponsor</u>	<u>Project</u>	<u>Grant Amount</u>	<u>Total Project</u>
Central Plains WDD	Cottonwood & Louise TMDL	\$101,921	\$169,032
Davison Conservation Dist.	Firesteel Creek Restoration	738,000	1,230,000
Deuel Conservation Dist.	Cochrane & Oliver TMDL	43,404	71,840
East Dakota WDD	Central Big Sioux River TMDL	371,620	623,634
Hamlin Conservation Dist.	Lake Poinsett Restoration	510,797	851,328
Perkins Conservation Dist.	Grand River TMDL	33,076	55,127
Roberts County	Big Stone Lake Restoration	503,272	838,787
School of Mines	Lower Rapid Creek TMDL	45,855	76,425
School of Mines	Rapid City Stormwater Study	56,965	94,942
South Brown Conservation Dist.	Moccasin Creek TMDL	66,420	109,700
Stanley Conservation Dist.	Lower Bad River Restoration	<u>270,070</u>	
TOTAL		\$2,741,400	<u>450,117</u> \$4,570,932

**Solid Waste  
Management  
Program**

The 1999 State Legislature appropriated \$345,000 for the Solid Waste Management Program and \$1,000,000 to the department for the cleanup of waste tires. 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 Solid Waste Management Program is reserved for recycling activities.

The board, at its regularly scheduled December 1998 and June 1999

funding rounds reviewed a total of 15 new grant applications and three amendment requests. From these, the board made 13 grant awards totaling \$1,044,015 and four loan awards totaling \$604,935 (Table 5). Of these awards, two were for recycling projects; three were for municipal solid waste projects; and nine were for the clean up of waste tires.

These awards totaled \$1,648,950 and leveraged approximately \$2.3 million in total project construction.

Table 5

### 1999 Solid Waste Management Program Awards

#### Municipal Solid Waste

<u>Sponsor</u>	<u>Description</u>	<u>Loan Amount</u>	<u>Grant Amount</u>	<u>Total Project</u>
Roberts County Landfill	Landfill waste cell capping	\$	\$60,000	\$94,375
Spearfish	Equipment purchase	41,000		41,000
Tri-County Landfill	Compactor & facility improvements	80,000	55,000	136,000
<b>TOTAL</b>		<b>\$121,000</b>	<b>\$115,000</b>	<b>\$271,375</b>

#### Recycling

<u>Sponsor</u>	<u>Description</u>	<u>Loan Amount</u>	<u>Grant Amount</u>	<u>Total Project</u>
Dependable Sanitation	Aberdeen recycling facility upgrade	\$156,935	\$75,000	\$231,935
Glass Recycling Midwest, Inc.	Glass recycling expansion	327,000	180,000	952,600
<b>TOTAL</b>		<b>\$483,935</b>	<b>\$255,000</b>	<b>\$1,184,535</b>

#### Waste Tire Cleanup

<u>Sponsor</u>	<u>Description</u>	<u>Grant Amount</u>	<u>Total Project</u>
Berscheid, Doris	Waste tire cleanup	\$176,400	\$220,500
Bison	Waste tire cleanup	2,390	3,000
Gregory County	Waste tire cleanup	22,500	30,000
King, Douglas	Waste tire cleanup	12,000	15,000
Martin	Waste tire cleanup	4,875	6,500
Oakleaf Rubber	Waste tire cleanup	352,000	440,000
Onida	Waste tire cleanup	2,250	3,000
Winner *	Waste tire cleanup	16,400	17,800
Walworth County	Waste tire cleanup	85,200	140,000
<b>TOTAL</b>		<b>\$674,015</b>	<b>\$875,800</b>

\*Amendment to 1998 award

#### Consolidated Water Facilities

The 1999 State Legislature appropriated \$2.75 million for the Consolidated Water Facilities Construction Program to provide grants

## Construction Program

and loans for water development projects on the State Water Facilities Plan. Additionally, \$1.16 million of prior year funding was available for award in 1999.

The board considered 27 applications for consolidated funding and awarded 22 new grants and one grant amendment totaling \$3,806,500. The board also awarded a consolidated loan for \$40,000 (Table 6). The 1999 consolidated awards helped leverage more than \$30 million in total project construction activities.

Table 6

### 1999 Consolidated Awards

<u>Sponsor</u>	<u>Description</u>	<u>Amount</u>	<u>Total Project</u>
B-Y Water Dist.	Northwest Hutchinson Co. expansion	\$250,000	\$4,400,000
BDM RWS	System expansion	500,000	7,640,000
Bison	Emergency water tower improvement	16,500	56,500
Bison (loan)	Emergency water tower improvement	40,000	
Bryant	Water distribution system improvements	250,000	450,000
Chamberlain	Utility relocation project	25,000	161,000
Columbia	Wastewater treatment facility	150,000	390,000
Davison Conservation Dist	Firesteel Creek watershed project	125,000	560,000
Dell Rapids	Wastewater treatment facilities	50,000	980,000
Deuel Conservation Dist	Watershed and lake restoration	125,000	250,000
Hamlin Conservation Dist	Lake Poinsett watershed	110,000	275,000
Isabel	Water distribution upgrade system	200,000	318,000
Kingbrook RWS	System expansion	125,000	2,140,000
Lead	Lead/Central City water improvements	115,000	345,000
Lead	US Hwy 85 reconstruction surfacing/utilities	400,000	975,000
Montrose	Main Street water line rehabilitation	25,000	70,000
New Effington	Wastewater collection system improvements	75,000	150,000
Platte	Sanitary sewer system renovation	250,000	1,535,000
Randall CWD	Transmission line and distribution upgrade	500,000	4,690,000
Sioux RWS	System expansion	150,000	2,500,000
Spink Conservation Dist	Turtle Creek/Lake Redfield watershed	150,000	240,000
Veblen *	Water distribution system improvements	100,000	590,000
Volin	Water main improvement project	40,000	150,000
Wall	Wastewater improvement/total retention ponc		
		<u>75,000</u>	<u>1,660,000</u>
TOTAL		\$3,846,500	\$30,525,500

\* Amendment increase

## 1999 Federal Water

## Congressional Hearings

During the first session of the 106<sup>th</sup> Congress, legislation was

## Development Legislation

introduced to federally authorize construction of the Lewis and Clark Rural Water System.

The Senate Subcommittee on Water and Power held hearings on the Lewis and Clark project in May 1999. In July, the bill passed the Committee on Energy and Natural Resources and was reported to the full Senate where it passed unanimously on November 19, 1999. The Lewis and Clark House of Representatives legislation is still in the Subcommittee on Water and Power.

## Federal Authorization

Federal legislation to authorize construction of the Perkins County Rural Water System was again introduced in Congress in 1999. On August 4, 1999, the House Committee on Resources conducted a hearing and amended the preference power language. The amended bill was reported to the House floor and passed by unanimous consent on October 26, 1999. The House bill was reported to the Senate and on November 19, 1999, passed by unanimous consent. The Perkins County Rural Water System Act of 1999 was signed by the President on December 7, 1999 (Public Law 106-136).

## Federal Appropriations

The federal fiscal year 2000 Energy and Water Development Appropriations Bill was signed by the President on September 29, 1999 (Public Law 106-60). The funding levels for South Dakota water projects are listed in Table 7.

Table 7

### FEDERAL FISCAL YEAR 2000 APPROPRIATIONS

#### Bureau of Reclamation

##### Facility Operation, Maintenance & Rehab

Mid-Dakota (Wetlands Enhancement O&M)	\$10,000
Mni Wiconi Rural Water System O&M	5,527,000
Rapid Valley Project O&M	23,000

##### Resources Management & Development

Black Hills Water Management Study*	\$100,000
Lake Andes/ Wagner Irrigation Research Program	150,000
Mid-Dakota Rural Water System	14,000,000
Mni Wiconi Rural Water System	23,873,000

\*Line item under Dakota Investigation Program, ND

#### Corps of Engineers

##### Operation and Maintenance

Big Bend Dam/Lake Sharpe	\$6,853,000
Fort Randall Dam/Francis Case	8,091,000

Gavins Point/Lewis & Clark	7,184,000
Oahe Dam/Lake Oahe	10,812,000
Cold Brook Lake	644,000
Cottonwood Springs Lake	223,000
Lake Traverse, SD & MN	642,000

**Construction, General**

Missouri National Recreational River, NE & SD	\$1,000,000
Pierre/Ft. Pierre Flood Buy Out	7,500,000
Sioux Falls Flood Control	2,200,000
Cheyenne River Sioux Tribe/Lower Brule Sioux Tribe/State of South Dakota (land transfer)	1,500,000

**General Investigations**

James River SD and ND	\$100,000
Watertown and Vicinity	95,000

**1999 State Water Development Legislation Appropriations**

The 1999 Legislature adopted Senate Bill 217, the Omnibus Water Funding Bill, authorizing the following appropriations from the Water and Environment Fund:

- Consolidated Water Facilities Construction Program -- \$2,750,000 to provide grants and loans for community drinking water, wastewater, and lake improvement projects;
- Mni Wiconi Rural Water System -- \$1,500,000 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;
- James River Restoration Project -- \$100,000 grant for restoration activities;
- Black Hills Hydrology and Water Management Study -- \$275,000 grant to local project sponsors to provide nonfederal cost share for ongoing studies of the Black Hills;
- Bad River Watershed -- \$525,000 grant to provide nonfederal cost share for Bad River watershed activities;
- Lewis and Clark Rural Water System -- \$50,000 grant to provide for engineering design and congressional authorization;

- Fall River -- \$800,000 grant to provide nonfederal cost share for the engineering design, preconstruction activities, and construction of facilities;
- Solid Waste Management Program -- \$345,000 to provide grants and loans for municipal solid waste disposal, recycling projects, and waste tire clean up; and
- Department of Environment and Natural Resources -- \$1,000,000 to provide grants for the clean up of waste tires.

The 1999 Omnibus Bill additionally provided the following appropriation from sources other than the Water and Environment Fund.

- Total Maximum Daily Load (TMDL) -- \$150,000 grant from the Environment and Natural Resources Fee Fund to determine selected TMDL limits; and
- Federal Rural Community Hardship Grant Program -- \$322,300 of federal funds to construct a wastewater collection and treatment system for the community of Ridgeview on the Cheyenne Indian Reservation.

# 2000 STATE WATER PLAN

# 2000 State Water Plan

## Overview

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

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

## State Water Facilities Plan

The State Water Facilities Plan (Facilities Plan) is a listing of potential water 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; ground water contamination; pollution prevention or remediation; and dam safety. 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 1999, the board reviewed and approved placement of 53 projects on the facilities plan, bringing the total number of projects on the 2000 State Water Facilities Plan to 91 (Table 8). Projects on the facilities plan are eligible to seek state and federal financial assistance. The board can provide direct financial assistance. Additionally, the board's assistance 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

**2000 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	2000	\$	\$	\$2,873,000	\$2,873,000
Alcester	Wastewater system improvements	2001	300,000			2,216,000
Artesian	Wastewater collection improvements	2000				1,027,000
Aurora	Wastewater collection improvements	2001	200,000	440,000		660,000
Aurora-Brule RWS	Plant pumping upgrade	2001				125,000
BDM RWS	Roberts County - phase II	2000	425,000			12,615,000
Beresford	West 13th Street utility improvements	2001	200,000	659,900	127,000	1,386,900
Big Sioux CWS	Water system distribution improvement	2001	200,000			1,072,000
Big Stone City	Sanitary sewer and water main	2001	250,000	63,000		818,000
Bristol	Water system improvements	2001	135,000		135,000	270,000
B-Y WUD	B-Y Bon Homme County expansion	2000	100,000			3,100,000
B-Y WUD	B-Y Water treatment plant expansion	2000	250,000			8,350,000
Canistota	Sanitary sewer improvements	2000	300,000			1,950,000
Canistota	Water distribution system improvements	2000	200,000			1,425,000
Carthage	Water system project	2000		185,000		385,000
Centerville	Water and sewer system improvements	2001	400,000			3,726,000
Chamberlain	Water treatment plant upgrade	2001	400,000		700,000	1,500,000
Chester San District	Wastewater treatment	2001	260,000			774,000
Clark RWS	Reservoir and control improvement	2001	95,000			520,000
Clay RWS	System expansion	2001				617,000
Colman	Wastewater treatment improvement	2001	150,000			825,000
Conde	Water distribution/storage improvements	2000	150,000		178,200	328,200
Custer	Water and wastewater improvement	2001	200,000		500,000	1,100,000
Day Conservation District	Blue Dog Lake watershed improvement	2001	90,000			1,083,544
Delmont	Wastewater treatment upgrade	2000	30,000			50,000
Doland	U.S. Hwy 212 utilities replacement	2000	40,000			69,580
East Gregory RW	Booster station/water tower improvement	2000	10,043			16,738
Egan	Wastewater treatment project	2000				135,000
Elk Point	Heritage Park storm sewer improvement	2001	100,000	184,000		284,000
Elk Point	Pearl Street utility improvement	2001	500,000	460,000	100,000	1,360,000
Elkton	Water storage improvement	2001	142,450			569,800
Faulk Conservation District	Lake Faulkton watershed restoration	2001	436,790			2,176,500
Fort Pierre	Wastewater treatment/collection	2000	300,000			1,225,000
Freeman	Sewer main improvement project	2000	30,000			150,000
Freeman	Walnut Street sanitary sewer improvement	2001	54,000			108,000
Garretson	Dam reconstruction project	2000	90,000			157,000
Garretson	Water system improvement	2001	300,000			2,837,920
Gregory	Water improvement project	2000	100,000			440,000
Hamlin Conservation District	Lake Poinsett watershed	2001	110,000			390,500
Harrisburg	Water system improvement	2001	240,000		380,205	795,800
Harrold	Wastewater treatment facility expansion	2001	59,875			239,500
Hartford	Water and sewer main replacement	2001	200,000	600,000	300,000	1,200,000
Hecla	Wastewater treatment facility	2001	104,800			468,550
Highmore	Water tower project	2000	275,000			499,800
Highmore	Water supply improvement	2001	150,000			195,030
Hill City	Municipal wastewater improvement	2001	200,000	800,000		1,500,000
Hughes County	Cow/Spring Creek sanitary system	2000				35,000
Irene	Main Street water improvement project	2000	70,000		71,000	167,000
Kingbrook RWS	System expansion	2001	75,000			657,000
Lake Conservation District	Lakes Herman/Madison/Brant watershed	2001	135,000			1,588,900
Lake Norden	Water storage facility project	2000		174,000		348,000
Lake Pelican WP District	Lake Pelican dredging	2001	400,000			1,128,200
Lake Poinsett San District	Wastewater collection expansion	2000				4,200,000
Lake Preston	Water/sanitary sewer improvement	2001	63,000			290,710
Lennox	Water and sewer system improvement	2001	300,000	342,500	342,500	1,360,000

<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>	
Letcher	Force main improvement	2001	24,000			48,000
Lower Brule Sioux Tribe	Lagoon system relocation and expansion	2001	195,000			1,100,000
Menno	Water and sewer main expansion	2001	10,000			27,000
Mesa View Water Users	Well replacement project	2000	48,000			80,000
Miller	Storm sewer addition	2000	243,750			487,500
Mitchell	B-Y Rural Water hookup project	2000			10,100,000	17,100,000
Mobridge	Northwest storm sewer improvement	2001	300,000			1,476,000
Northern Hills Comm Dev	Deadwood Hill utility infrastructure project	2000	600,000			3,754,240
Parkston	Storm water drainage project	2000				231,662
Ramona	Water storage project	2000		100,000		300,000
Randall CWD	System expansion	2000	250,000			13,500,000
Randall CWD	Water distribution	2001				360,395
Rapid City	Wastewater treatment plant upgrade	2001		20,500,000		21,000,000
Rapid Valley San District	Refinance of CWSRF loan	2000				460,697
Scotland	Wastewater collection	2000	25,000			40,700
Scotland Lake Henry	Lake Henry project	2000	200,000			1,740,000
Sioux Falls	Drinking water facility improvements	2001			3,000,000	3,000,000
Sioux Falls	Wastewater facility improvements	2001		5,000,000		5,000,000
Spink Conservation District	Turtle Creek/Redfield watershed project	2001	20,000			152,000
Sturgis	Wastewater treatment improvements	2001	200,000	1,480,000		1,680,000
Summit	Wastewater treatment improvements	2001	50,000			155,000
Summit	Water system improvements	2001	150,000			900,000
Tea	Brian Street utility improvement	2001	100,000	105,000	105,000	310,000
TM RWD	Distribution system upgrade - phase III	2000	200,000			1,565,700
Tri-County Water Association	Water service to Isabel	2001	350,000		632,250	1,460,000
Tripp	Water line replacement project	2000	77,940			129,900
Tripp County WUD	Gregory County system expansion	2000	200,000			4,865,100
Tyndall	Tyndall water system improvements	2000				540,000
Tyndall	Main Street improvement	2001	100,000	220,000		940,000
Wagner	Main Street reconstruction	2001	41,000			653,475
Waubay	Water system upgrades	2000	400,000		612,431	1,012,431
Waverly San District	Wastewater collection and treatment	2001	86,000			485,000
Wentworth	Water distribution improvement	2001	100,000			242,500
Yankton	23rd Street watermain project	2000	20,000			46,500
Yankton	Wastewater collection	2001		800,000		2,200,000
Yankton	Wastewater treatment plant	2001	400,000	6,230,000		6,630,000
			<u>\$13,211,648</u>	<u>\$38,343,400</u>	<u>\$20,156,586</u>	<u>\$167,063,972</u>

\* 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
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
Brennan Reservoir	Proposed Reservoir Near Rapid City
CENDAK Irrigation Project	Irrigation Project In Central SD
Fall River County Rural Water System	Rural Water System In Fall River County
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
Mid-Dakota Rural Water System	Rural Water System In Central SD
Mni Wiconi Rural Water System	Rural Water System In Western SD
Perkins County Rural Water System	Rural Water System In Northwestern 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 about 3.25 million tons of sediment into Lake Sharpe, primarily from eroding gullies and stream banks. The sediment negatively impacts fishing and other recreation in the Pierre-Fort Pierre area.
- Increased ground water elevations caused by the sediment-induced river elevation contribute to flooding in the Pierre-Fort Pierre area during winter peak power releases from the Oahe Dam when ice cover restricts downstream flow. To reduce flooding, power generation from the dam must be reduced during the coldest days of the year. Estimated economic losses from decreased power and recreation are about \$15 million annually.
- The U.S. Army Corps of Engineers had proposed building levees

in the Pierre-Fort Pierre area to allow greater releases and maximize power generation. Many local interests believe that a combination of watershed treatment and localized dredging in Lake Sharpe will be a more acceptable and effective solution than levees. Congress is also working on a plan to relocate a portion of the Pierre residential area which is most affected.

- State authorization of the \$21 million project was approved in 1995; this included a state cost share commitment of \$875,000 in grants. State appropriations total \$875,000 from 1995 to 1999.

### **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 million. The U.S. Bureau of Reclamation, Board of Water and Natural Resources, and the Belle Fourche Irrigation District executed a Memorandum of Understanding outlining the funding commitment.
- The rehabilitation project received \$62.5 million in federal appropriations from FFY 1985 through FFY 1998.
- The State Legislature authorized the project in 1995 with a state cost share commitment of \$4 million. Over a three year period, the state legislature appropriated \$4 million for the Belle Fourche project and completed the authorized state cost share commitment in 1997. The state funds were used to replace 47 wooden bridges that did not meet current safety standards.
- The project was declared substantially complete in June 1998 by the Bureau of Reclamation.

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

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

### **Black Hills Hydrology and Water Management Study - 1982**

- The hydrology study will compile water resource data to make informed management decisions concerning the development of water resources in the Black Hills area related to the expansion of mining, municipal, recreational, and urban water development needs. The U.S. Geological Survey has provided a total of \$3.1 million from FFY 1988 through FFY 1999 to establish the hydrologic monitoring system and collect data.
- The hydrology study entered Phase II during FFY 1997. The emphasis of the study during Phase I was data collection and has now shifted to analytical activities during Phase II. Phase II of the hydrology study is expected to be completed by March 2001.
- Products resulting from Phase II of the hydrology study were

defined in the "Updated Plan of Study for Phase II of the Black

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

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

Hydrologic conditions and budgets for the Black Hills of South Dakota

Estimated recharge to the Madison and Minnelusa aquifers

Water-quality characteristics for the Black Hills area

Geochemistry of the Madison and Minnelusa aquifers

Map Series:

Hydrogeologic maps and cross sections

Structure maps

Potentiometric maps

Final technical report

Hydrologic atlas

- The water management study will provide local project sponsors with tools to assist them in making water development and water management decisions. Data gathered during the hydrology study will be utilized in the water management study. Congress appropriated funds in FFY 1991 to initiate a federal Black Hills Water Management Study by the Bureau of Reclamation. Federal appropriations total \$1,175,000 through FFY 2000.
- The Water Management Study is scheduled to be completed by the end of FFY 2001. The focus for the remaining years will be on the water needs assessment, development of an Integrated Goundwater/Surface Water Model, and development of alternatives and final reports.
- A Black Hills Hydrology and Water Management Study Steering Committee was established in 1991 to provide local input into the development of the hydrology and water management studies. Membership is comprised of individuals from the Black Hills and from adjacent areas in Wyoming.
- The State Legislature authorized the project in 1992 with a state cost share commitment of \$2.5 million. State legislative appropriations to the local project sponsors total \$1,555,000 from 1988 through 1999. Additionally, the Department of Environment and Natural Resources received \$505,000 in state legislative appropriations to drill monitoring wells and establish and operate

a stream gauging system to assist the hydrologic evaluations.

#### **Brennan Reservoir – 1991**

- The purpose of the Brennan Reservoir/Rapid City Wastewater Recycling project is to determine feasibility of constructing wetlands at the upper end of a proposed reservoir to provide tertiary wastewater treatment for Rapid City. The proposed area for Brennan Reservoir and the wetlands lies across Dry Creek southeast of Rapid City.
- Water stored in the reservoir could also be used to irrigate about 5,000 acres located in the Rapid Valley Water Conservancy District. This would meet more than half of the current demands for the Rapid Valley District.
- The 1990 State Legislature provided \$25,000 to assist local sponsors in an engineering study of the Brennan Reservoir site. The Brennan Reservoir Preliminary Project Plan report was completed in July 1992 by the Alliance and HDR Engineering. The Legislature provided \$25,000 in 1993 and \$25,000 in 1998 to conduct additional Brennan Reservoir studies.

#### **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 1999.

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

- The proposed Fall River Rural Water System will provide quality Madison aquifer water to a service area covering the eastern half of Fall River 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. 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 first 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.

- The Fall River Water Users District Rural Water System Act of 1997 was signed by the President on November 3, 1998, and became Public Law 105-352. The legislation was amended to provide for a federal cost share of 70 percent and a nonfederal cost share of 30 percent and the funding to be provided through the U.S. Department of Agriculture (USDA).
- In 1999, the proposed Fall River rural water system's cost estimate was increased to \$5.9 million. The Fall River Water Users District entered into a contract to purchase water from the city of Hot Springs for their primary source of water.
- The rural water system's Rural Development grant application for \$2 million was approved for Phase I. The project anticipates receiving up to \$4 million from USDA (Rural Development and National Resources Conservation Service (NRCS)) over the course of the project. The rural water system has secured a \$200,000 P.L. 566 grant from NRCS.
- A SWRMS appropriation of \$800,000 was put under agreement in May 1999. A Drinking Water State Revolving Fund loan for up to \$759,000 was approved in December 1999. This should complete the funding package for the project.

### **Gregory County Pumped Storage Project - 1981**

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

activity occurred on the project in 1999.

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

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

- In 1999, the James River WDD completed debris removal at seven bridge sites removing 25,000 tons of debris. Work on three additional bridge sites are 20 percent to 90 percent complete; and the last bridge site will be started by January 2000. The James River WDD is anticipating completion of the project four months ahead of schedule and 18% under budget.

### **Lake Andes-Wagner/Marty II Irrigation Unit - 1975**

- The 45,000-acre Lake Andes-Wagner Irrigation project and 3,000-acre Marty II Irrigation project are federally authorized Pick-Sloan Missouri Basin Units in Charles-Mix County (Public Law 102-575). Estimated construction costs are \$175 million and \$24 million, respectively.
- In 1992, the State Legislature authorized the construction of the Lake Andes-Wagner/Marty II project and provided a state cost share commitment of \$7 million. Both the state and federal project authorizations are contingent upon the successful completion of the research demonstration program.
- In 1990, a plan of study was prepared for a 5,000-acre research demonstration program to determine best management practices for irrigating glacial till soils containing selenium. Congress approved \$250,000 in 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. No significant activity occurred on this project in 1998.
- In 1999, the Bureau of Reclamation (BOR) received \$150,000 for FFY 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.

### **Lewis and Clark Rural Water System - 1989**

- The proposed Lewis and Clark RWS will be a bulk delivery system providing treated Missouri River water to communities and existing rural water systems in southeastern South Dakota, northwestern Iowa, and southwestern Minnesota. South Dakota membership includes eight communities and three rural water systems. About 133,000 South Dakotans would receive water from Lewis and

Clark.

- Iowa and Minnesota project sponsors have provided funding support for project development proportionate to their respective service capacity needs. Iowa and Minnesota have authorized the project for construction.
- The 1993 State Legislature authorized Lewis and Clark's South Dakota project features (\$200 million) and authorized the Governor and local project sponsors to negotiate a nonfederal matching agreement with Congress. The state's cost share may not exceed 50 percent of the nonfederal match requirement. State legislative appropriations have totaled \$675,000 from 1990 through 1998.
- Congress provided \$350,000 from FFY 1991 to 1994 for the Bureau of Reclamation's technical assistance on the feasibility study and project development.
- The Lewis and Clark federal authorizing legislation was introduced during the 103<sup>rd</sup> Congress, 104<sup>th</sup> Congress, and 105<sup>th</sup> Congress. The Senate Subcommittee on Water and Power conducted a hearing on the proposed Lewis and Clark project in 1994, 1996, 1997, and 1998. The House Subcommittee on Water and Power held its first hearing on the Lewis and Clark federal legislation in 1998. The federal legislation provides for a federal cost share of 80 percent and nonfederal cost share of 20 percent. The city of Sioux Falls' share is to be 50 percent of the incremental cost to the city for participation in the project.
- During the 106<sup>th</sup> Congress, the Senate Subcommittee on Water and Power held a hearing on May 27, 1999. The bill was passed out of the Committee on Energy and Natural Resources in July 1999, and was reported to the full Senate where it was passed with unanimous consent on November 19, 1999. There were minor revisions in the legislation, but no changes to the cost share language. The legislation on the House of Representative side remains in subcommittee.

### **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 million in federal grants, \$15 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. The state's commitment also provided that the \$8.4 million cost share could be increased by ordinary fluctuations in construction costs. In 1998, Mid-Dakota received a state appropriation of \$1.3 million which completed the state's commitment to the Mid-Dakota project and brought the total provided to \$9.67 million from 1988 through 1998.
- 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.
- Mid-Dakota began operation of the water treatment plant in 1997. The completion of the main pipeline and a secondary pipeline to Gettysburg allowed the system to begin providing potable water to the communities of Highmore, Onida, and Blunt along with rural users in the Oahe Plains Water System. Water service to rural customers in the Highmore West, Okobojo, Canning and Onida service areas was completed in 1999. Water service to the communities of Harrold, Virgil, Ree Heights, Miller, and St. Lawrence was also completed in 1999.
- Mid-Dakota RWS bid and awarded four contracts in 1999. The first was to continue hooking up rural residents and communities in Potter, Sully, Hyde, Hand, and Hughes counties in central South Dakota. The next two contracts extended the main transmission pipeline from the water storage tower just west of Highmore to a point just east of St. Lawrence. This main pipeline extension made it possible for Mid-Dakota to provide water service to the communities of Ree Heights, Miller, and St. Lawrence by the end of 1999. The final contract awarded in 1999 was for the construction of three water storage tanks. Once completed, the tanks will be located near the towns of Gettysburg and Agar and the third tank will be near the Spring/Cow Creek recreational area north of Pierre. Construction of the water storage tanks will not be completed until late 2000.
- Federal appropriations for planning and construction activities total \$60.373 million from FFY 1992 through 1999. In October 1999, the Bureau of Reclamation reprogrammed \$2 million of FFY 1999 funds to the Mid-Dakota project making this the fourth straight year that Mid-Dakota has received such funding from the Bureau of Reclamation. In FFY, 2000 Congress approved an

appropriation of \$14 million for construction of the Mid-Dakota RWS project and additionally appropriated \$10,000 of FFY 2000 funds for operation and maintenance activities associated with the wetland enhancement portions of the project.

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

- Public Law 100-516, as amended in 1994, authorizes a \$263 million federal project to provide high quality Missouri River water to 50,000 western South Dakota citizens in a 10-county area extending south and west of Fort Pierre through the Pine Ridge Indian Reservation.
- The Oglala Water Supply System component encompasses the distribution facilities on the Pine Ridge Indian Reservation and the off-reservation core system facilities including the Missouri River intake and water treatment plant. The Rosebud and Lower Brule components include the delivery and distribution facilities associated with service to their respective reservations. About \$200 million of the project costs are allocated to the tribal systems as non-reimbursable federal costs. Operation and maintenance for the tribal systems are a federal trust responsibility.
- West River/Lyman-Jones Rural Water System, Inc. (WR/LJ) is the non-Indian distribution component. The cost share for construction is 80 percent federal and 20 percent nonfederal. WR/LJ is responsible for its operation and maintenance costs.
- The 1992 State Legislature authorized the construction of the Mni Wiconi project. The 1995 Legislature amended the authorization to reflect the \$263 million project, and the state cost share commitment was revised to \$12.9 million. To date, nearly \$9.2 million in state loans have been authorized by the State Legislature.
- Federal appropriations for planning and construction activities total nearly \$139 million through FFY 1999. The Bureau of Reclamation has also reprogrammed a total of \$4.5 million to the Mni Wiconi project through FFY 1999. Congress also approved a FFY 2000 appropriation level of \$23.873 million for construction and \$5.527 million for operation and maintenance.
- WR/LJ initiated construction of advance features in 1993. These features are distribution systems that have access to interim ground water supplies.

- In June 1993, the Oglala Sioux Water Supply System initiated construction of advanced features in White Clay and Wakpamni districts of the Pine Ridge Reservation. In 1996, the Oglala Sioux Water Supply System approved two contracts for construction on the main intake facility to be located at Echo Point near Fort Pierre and the site preparation and sludge lagoon construction contract at the water treatment plant.
- In July 1996, the Oglala Sioux Water Supply System along with the West River/Lyman-Jones, Rosebud, and Lower Brule rural water systems had the Mni Wiconi core facilities groundbreaking ceremonies at Echo Point near Fort Pierre.
- During FFY 1997, the Oglala Sioux Water Supply System bid and awarded a \$16.4 million contract for the construction of the water treatment plant near Fort Pierre. Construction activities began in 1997 and are anticipated to be complete in early 2000.
- The WR/LJ Rural Water System has constructed over 1,500 miles of main transmission and distribution pipelines in western South Dakota and provides quality drinking water to over 850 rural taps and the communities of Draper and White River. WR/LJ has used interim water sources to include groundwater from a Pennington County well, the city of Presho, and the Rosebud Sioux Tribe, and Missouri River water from the Lower Brule Sioux Tribe as sources to feed its distribution system. Additionally, WR/LJ has constructed distribution pipelines in Stanley County and in the Vivian and Presho areas in anticipation of the completion of the Mni Wiconi Water Treatment Plant near Ft. Pierre. In 1999 WR/LJ awarded three additional system contracts. The first was for the construction of a new distribution system for the small community of Draper and the other two were for the construction of four elevated water storage towers near the communities of Wall, Kennebec, Murdo, and Presho. These tanks will be cost shared with the local communities and enhance water service to the individual communities. Construction of these additional system features is scheduled to be completed in 2000.
- In anticipation of the completion of the Missouri River water Treatment Plant located near Ft. Pierre, the Oglala Sioux Tribe has completed nearly 30 miles of main transmission pipeline features of the Mni Wiconi Rural Water Supply System. Main transmission pipelines from just south of Ft. Pierre to the Vivian/I-90 junction have been completed and contracts for the construction of the main transmission pipeline from the Water

Treatment Plant through Ft. Pierre and construction of the main transmission pipeline from a point approximately 15 miles south of Ft. Pierre to Draper are scheduled to be bid in FFY 2000.

- In addition all three tribal members of the Mni Wiconi Rural Water Supply System have continued to develop on-reservation systems. The tribes are developing the supplemental water supplies identified in the final engineering report. The Lower Brule Sioux Tribe upgraded its Missouri River water treatment plant in late 1999 and anticipates providing water to on-reservation and WR/LJ customers in the Reliance service, including the community of Reliance, in early 2000. The Rosebud Sioux Tribe has developed local groundwater resources enabling them to serve tribal customers and construct a main core transmission pipeline segment from the reservation to White River. Rosebud also provides water to WR/LJ for a portion of its customers in Mellette County to include White River. The Oglala Sioux Tribe has developed local groundwater resources enabling it to provide water to tribal member on the reservation and continues to design and construct both on-reservation distribution and Mni Wiconi main core transmission pipelines.

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

- The proposed Perkins County RWS 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 State Legislature provided \$50,000 per year in 1993 and 1994 to assist the project with its initial feasibility study and federal authorization.
- In 1994, a feasibility study was completed and identified hooking up to the Southwest Pipeline Project in North Dakota as the preferred alternative.
- In 1995, water service contract negotiations began between Perkins County and North Dakota's Southwest Pipeline Project. North Dakota's state authorization for the Southwest Pipeline Project required that Perkins County agree to pay all of the incremental construction costs incurred in bringing water to the border. Under this requirement, Perkins County's share of the Southwest Pipeline Project was estimated at \$6 million. Approximately \$4.5 million of this amount was for project features that were constructed in North Dakota prior to 1995. The remaining \$1.5 million was an estimate of the costs to bring water

the rest of the way to the border.

- In May 1996, the Perkins County Rural Water System completed negotiations with the North Dakota State Water Commission and signed a water service agreement. Several contracts were then awarded in North Dakota bringing water towards the border. After bidding, Perkins County's share of these contracts was reduced from the estimated \$1.5 million to \$898,478.
- The 1996 State Legislature authorized the construction of an \$18 million Perkins County RWS project and approved a state cost share commitment of \$1 million. In 1996, the Legislature also appropriated \$450,000 of the \$1 million commitment. In 1997, the state Legislature appropriated the remaining \$550,000 for the Perkins County project providing the cost share required by North Dakota to bring water service to the Perkins County area. The appropriation of this \$550,000 in 1997 completed the state's authorized cost share commitment.
- Federal legislation to authorize construction of the rural water system was first 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.
- Federal legislation to authorize construction of the Perkins County Rural Water System was again introduced in Congress in 1999. On August 4, 1999, the House Committee on Resources conducted a hearing and amended the preference power language. The amended bill was reported to the House floor and passed by unanimous consent on October 26, 1999. The House bill was reported to the Senate and on November 22, 1999, passed by unanimous consent. The Perkins County Rural Water System Act of 1999 was signed by the President on December 7, 1999 (Public Law 106-136).

#### **Pick-Sloan Riverside Irrigation – 1987**

- This proposal is an attempt to integrate existing irrigators along the Missouri River corridor into the Pick-Sloan Missouri Basin Program. The project would provide irrigators with an opportunity to utilize Pick-Sloan power and the potential to obtain power revenue assistance. No significant activity occurred on this project in 1999 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 FFY 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.

### **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 1999.

## **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 FFY 1991 through 1993 for the study efforts.
- The Vermillion Basin Flood Control Reconnaissance Report completed by the Corps of Engineers in 1993 did not identify a feasible federal project. The project sponsors re-evaluated project alternatives for nonfederal development.
- Local project sponsors submitted a pre-application notification for a Federal Emergency Management Agency hazard mitigation grant for a Feasibility Study of Flood Control Alternatives for the basin. In June 1994, more than 70 technical experts met to develop a multi-objective plan to reduce the impacts of flooding in the Vermillion River Basin. The National Park Service compiled the group's issues and suggestions and formulated a multi-objective hazard mitigation management plan.
- The Turner Lincoln Clay (TLC) Water Project District held a public meeting in July 1995 to discuss a proposal to construct a dam on the East Fork of the Vermillion River for flood control.
- The Vermillion River Watershed Authority was incorporated in December 1997 and is composed of representatives from Clay, Miner, Turner, McCook, and Lake counties' commissions.
- The Authority is proposing to use Federal Emergency Management Agency (FEMA) Hazard Mitigation grant funds to widen the channel at the outlet of Lake Thompson and construct a control structure to retain the natural outlet elevation; channel maintenance along 19 miles of the Vermillion River and its tributaries; and wetland restoration and development throughout the basin.

**Recommendation  
to the Governor  
and State  
Legislature**

In November 1999, the board conducted a public meeting on the funding needs of the State Water Resources Management System projects. The board adopted Resolution #99-71 recommending to the Governor and Legislature that the Belle Fourche Irrigation Project, Fall River County Rural Water System, Mid-Dakota Rural Water System, and the Perkins County Rural Water System be dropped from the SWRMS list during the 2000 Legislative Session. Belle Fourche has substantially completed its federal project and the state cost share commitment for Fall River RWS, Mid-Dakota RWS, and Perkins County RWS has been placed under agreement with the project sponsors. The board also recommended that the remaining projects on the SWRMS list be retained and that no new projects be added. The board adopted Resolution #99-72 providing its funding recommendations to the Governor and the Legislature for Water and Environment Fund fiscal year 2000 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**

Lake Andes/Wagner Irrigation Research Program (loan)	\$40,000
Lewis and Clark Rural Water System	200,000
Mni Wiconi Rural Water System (Loan)	2,000,000
Sioux Falls Flood Control	300,000
Total	<u>\$2,540,000</u>
Consolidated Water Facilities Construction Program	\$4,500,000
DENR Waste Tire Clean Up	\$1,500,000

# APPENDIX A

WATER AND ENVIRONMENT FUND

Special Condition Statement

# APPENDIX B

BOARD OF WATER AND NATURAL RESOURCES

RESOLUTIONS

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