

2010 ANNUAL REPORT
~~and~~
2011 STATE WATER PLAN



South Dakota
Board of
Water and Natural Resources



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
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Governor Dennis Daugaard
and Members of the Eighty-Sixth
Legislative Session

As required by state law, transmitted herewith is the 2010 Annual Report/2011 State Water Plan of the Board of Water and Natural Resources. The Annual Report describes water development and waste management activities during the past year. The State Water Plan outlines the projects on the State Water Facilities Plan and State Water Resources Management System.

Throughout this document you will see the on-going needs for water, wastewater, and solid waste projects statewide and how state assistance is critical to get these projects constructed. During the past year, the board awarded \$41.2 million in grant and loan funds for the planning, design, and construction of municipal drinking water, wastewater, lake/watershed restoration, rural water, solid waste disposal, and recycling projects. These awards were a critical link in having environmental projects, totaling more than \$171.5 million, move forward last year.

The Department of Environment and Natural Resources sincerely appreciates the interest and help of all who have contributed to the success of the State Water Plan in the past. The department will continue to work together with the Governor, the Legislature, the Board of Water and Natural Resources, local project sponsors, and the general public to make South Dakota even better.

Sincerely,

Steven M. Pirner, PE
Secretary

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**To
Governor Dennis Daugaard
and the
Eighty-Sixth Session, Legislative Assembly
2011**

**2010 ANNUAL REPORT
~~and~~
2011 STATE WATER PLAN**

Board of Water and Natural Resources

January 2011

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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 2010 Annual Report and the 2011 State Water Plan. The annual report provides progress reports on each funding program and other board activities during calendar year 2010. The second section sets forth the projects included on the State Water Facilities Plan and the State Water Resources Management System. A Water and Environment Fund Special Condition Statement that projects the status of the Water and Environment Fund at the end of fiscal year 2011 is included in Appendix A. A copy of the resolutions approved by the Board of Water and Natural Resources that provide recommendations to the Governor and the Legislature for the designation of projects on the State Water Resources Management System and the recommended Water and Environment Fund fiscal year 2012 appropriation levels are included in Appendix B.

2010 Annual Report

Board of Water and Natural Resources

Overview

South Dakota Codified Law 46A-1-14 requires an annual report of the Board of Water and Natural Resources (the board). The report summarizes the board's 2010 activities, including a detailed account of Water and Environment Fund grant and loan awards.

In November 2009, the board placed 25 projects on the 2010 State Water Facilities Plan. This made the projects eligible for financial assistance from a variety of federal and state sources. During the year, the board amended an additional 39 projects onto the plan.

The board awarded \$41.2 million in grant and loan funds to finance municipal drinking water systems, rural water systems, wastewater facilities, watershed restoration, solid waste disposal, recycling, and contaminated land restoration activities. These awards resulted in more than \$171.5 million in total activity. The loan and grant funds helped provide South Dakotans with safe and dependable environmental infrastructure.

Clean Water State Revolving Fund Loan Program

In 1989, the Clean Water State Revolving Fund (SRF) loan program began providing low-interest loans to governmental entities including municipalities, sanitary districts, and other special purpose districts. The loans are used for construction of wastewater facilities, storm sewers, and nonpoint source pollution control projects. During 2010, the board approved 12 loans totaling more than \$11.4 million (Table 1).

The base interest rates for the Clean Water SRF program were 2.25 percent for loans up to 10 years, 3.0 percent for up to 20 years, 3.25 percent for up to 30 years, and an interim financing rate of 2.0 percent for up to 3 years. The program's nonpoint source incentive rates are 1.25 percent for loans with a term of 10 years or less, 2.0 percent for loans with a term up to 20 years, and 2.25 percent for loans with a term up to 30 years. Projects for traditional wastewater or stormwater projects that included a nonpoint source component may receive the nonpoint source rate. The annual principal and interest payments will be calculated for a loan at the higher base interest rate. Using the lower nonpoint source interest rate, a loan will be sized using the annual payment previously calculated. The difference in the two loan amounts will be the amount of funding available for the nonpoint source component of the project.

The fiscal year 2010 appropriations bills for the SRF programs extended several of the requirements set forth in the American Recovery and Reinvestment Act. These new requirements involve 1) applying Davis-Bacon wage rates to all projects awarded in fiscal year 2010; 2) requiring that up to 20 percent of each capitalization grant be utilized for “green” projects; and 3) requiring that a portion of each capitalization grant be made available as additional subsidy.

To implement the new requirements for the 2010 capitalization grants, changes to the administrative rules governing the SRF programs were necessary. The Board chose to use principal forgiveness as the method to provide the additional subsidy. To receive principal forgiveness municipalities and sanitary districts with monthly residential wastewater rates of \$22 per month (based on 5,000 gallons usage or flat rate for wastewater) are eligible. Other applicants are required to have residential wastewater rates of \$40 per month (based on 5,000 gallons usage or a flat rate) to be eligible to receive principal forgiveness.

The Clean Water SRF program must provide at least \$1,497,892, but no more than \$4,993,274 as principal forgiveness.

The initial awards under the new rules were made in June 2010.

Table 1 – 2010 Clean Water State Revolving Fund Loan Awards

| <u>Sponsor</u> | <u>Description</u> | <u>Total Amount</u> | <u>Principal Forgiveness</u> | <u>Interest Rate</u> | <u>Term</u> |
|---|---|---------------------|------------------------------|----------------------|-------------|
| Brant Lake Sanitary District (CW-01) | Wastewater Collection and Treatment System | \$ 1,700,000 | - | 3.25% | 30 |
| Brookings (CW-03) | Southland Lane Storm Water Detention Project | 665,000 | \$ 66,500 | 3.0% | 20 |
| Dell Rapids (CW-05) | 15th Street Improvements (Old Hwy 77 to Clark Avenue) | 1,185,995 | 635,995 | 3.0% | 20 |
| Groton (CW-08) | Sanitary Sewer Replacement/Casing Under Railroad Tracks | 322,000 | 80,500 | 2.25% | 10 |
| Hot Springs (CW-02) | Utilities Upgrades | 1,453,000 | - | 3.0% | 20 |
| Lake Poinsett Sanitary District (CW-03) | Sanitary Sewer Expansion/New Treatment Pond | 3,075,000 | 1,603,000 | 3.25% | 30 |
| Lead (CW-07) | Storm and Sanitary Sewer Separation | 200,000 | 50,000 | 3.0% | 20 |

| <u>Sponsor</u> | <u>Description</u> | <u>Total Amount</u> | <u>Principal Forgiveness</u> | <u>Interest Rate</u> | <u>Term</u> |
|-------------------|---|---------------------|------------------------------|----------------------|-------------|
| Menno (CW-01) | Highway 18 Utilities Improvements | 240,000 | - | 3.0% | 20 |
| Selby (CW-01) | Wastewater Improvement Project | 700,000 | 700,000 | 0% | - |
| Spencer (CW-01) | Sewer Main Replacement | 230,156 | 100,000 | 3.25% | 30 |
| Watertown (CW-11) | Police Station "Green" Parking Lot | 815,000 | 500,000 | 3.0% | 20 |
| Wolsey (CW-03) | Sanitary & Storm Sewer Improvements Phase III | 901,560 | - | 3.0% | 20 |
| TOTAL | | \$ 11,487,711 | \$ 3,735,995 | | |

Drinking Water State Revolving Fund Loan Program

In 1998, the Drinking Water State Revolving Fund (SRF) loan program began providing low-interest loans to nonprofit corporations and governmental entities including municipalities, sanitary districts, and other special districts for the construction of drinking water facilities. In 2010, twelve loans were approved totaling more than \$10 million (Table 2).

The base interest rates for the Drinking Water SRF program were to 2.25 percent for terms up to 10 years, 3.0 percent for up to 20 years, and an interim financing rate of 2.0 percent for up to 3 years.

Disadvantaged communities are eligible to extend the repayment period from 20 to 30 years and may receive an interest rate below the base rate. To qualify as disadvantaged, the water system's monthly residential water bill must be at least \$25 per 5,000 gallons usage for municipalities and sanitary districts or \$55 per 7,000 gallons usage for all other community water systems.

Additionally, the median household income of the community must be below the statewide median household income (MHI). Communities with a median household income less than the MHI but greater than 80 percent of the MHI are eligible for an extended 30-year term loan at the base rate of 3.0 percent interest. Communities with a household income between 60 percent and 80 percent of the MHI are eligible for an extended 30-year term loan at 2.25 percent interest. An average household income less than 60 percent of the MHI is necessary to be eligible for an extended 30-year term loan at zero percent interest.

The fiscal year 2010 appropriations bills for the SRF programs extended several of the requirements set forth in the American Recovery and Reinvestment Act. These new requirements involve 1) applying Davis-Bacon wage rates to all projects awarded in fiscal year 2010; 2) requiring that up to 20 percent of each capitalization grant be utilized for “green” projects; and 3) requiring that a portion of each capitalization grant be made available as additional subsidy.

To implement the new requirements for the 2010 capitalization grants, changes to the administrative rules governing the SRF programs were necessary. The Board chose to use principal forgiveness as the method to provide the additional subsidy. To receive principal forgiveness municipalities and sanitary districts with monthly residential water rates of \$25 per month (based on 5,000 gallons usage or flat rate for wastewater) are eligible. Other applicants are required to have residential water rates of \$55 per month (based on 7,000 gallons usage) to be eligible to receive principal forgiveness.

The Drinking Water SRF program must provide at least \$4,071,900 as principal forgiveness, and can provide up to the entire cap grant amount of \$13,573,000.

The initial awards under the new rules were made in June 2010.

Table 2 – 2010 Drinking Water State Revolving Fund Loans Awards

| <u>Sponsor</u> | <u>Description</u> | <u>Total Amount</u> | <u>Principal Forgiveness</u> | <u>Interest Rate</u> | <u>Term</u> |
|---------------------------------|---|---------------------|------------------------------|----------------------|-------------|
| Clay Rural Water System (DW-03) | 2010 Improvements Project Phase II | \$ 2,208,000 | \$ 500,000 | 3.0% | 30 |
| Dell Rapids (DW-03) | 15th Street Improvements (Old Hwy 77 to Clark Avenue) | 531,835 | - | 3.0% | 20 |
| Delmont (DW-02) | Water Meter Replacement Project | 90,000 | 90,000 | 0% | - |
| Gayville (DW-01) | Water Distribution Improvements | 703,000 | 150,000 | 3.0% | 30 |
| Groton (DW-04) | Water Main, Tower, Booster Pump Improvements | 703,000 | 150,000 | 2.25% | 10 |
| Hot Springs (DW-01) | Utilities Upgrades | 1,636,000 | - | 3.0% | 20 |

| <u>Sponsor</u> | <u>Description</u> | <u>Total Amount</u> | <u>Principal Forgiveness</u> | <u>Interest Rate</u> | <u>Term</u> |
|-----------------|---|---------------------|------------------------------|----------------------|-------------|
| Hoven (DW-01) | Water Meters, Lines, Storage Tank Project | 750,000 | 750,000 | 0% | - |
| Huron (DW-03) | Water Tower Replacement Project | 1,098,900 | - | 3.0% | 30 |
| Oacoma (DW-02) | Water Storage Project | 1,351,300 | - | 2.25% | 10 |
| Viborg (DW-02) | SD Highway 19 Water Main Improvements | 847,000 | 730,000 | 3.0% | 30 |
| Webster (DW-02) | Water Meter Improvements | 387,400 | 150,000 | 2.25% | 10 |
| TOTAL | | \$ 10,306,435 | \$ 2,520,000 | | |

Consolidated Water Facilities Construction Program

The 2010 State Legislature appropriated \$3.225 million for the Consolidated Water Facilities Construction Program to provide grants and loans for water development projects on the State Water Facilities Plan. Additionally, prior year funding and reversions were available for award in 2010.

The board awarded 14 grants, three amendments, and two loans totaling more than \$3.0 million (Table 3). The 2010 awards leveraged more than \$31.1 million in total project activities.

Table 3 – 2010 Consolidated Awards

| <u>Sponsor</u> | <u>Description</u> | <u>Amount</u> | <u>Total Project</u> |
|--------------------------------|---|---------------|----------------------|
| 1 Ashton | Wastewater and Storm Sewer Improvements | \$ 500,000 | \$ 1,993,170 |
| 2 Bear Butte Valley Water, Inc | Regional Water System | 500,000 | 5,161,000 |
| 3 Buffalo Gap | Connection to Fall River Water Users District | 15,000 | 24,930 |
| 4 Delmont | Water Meter Replacement Project | 25,000 | 125,090 |

| | | | | |
|-----------|---|---|---------------------|----------------------|
| 5 | Green Valley Sanitary District | Water System Regionalization Project | 500,000 | 3,677,188 |
| 6 | <i>Hermosa</i> | <i>Utility Relocation Project</i> | <i>14,000</i> | <i>381,331</i> |
| 7 | Hot Springs | Sewer Outfall Line Replacement | 160,000 | 574,850 |
| 8 | Kingbrook Rural Water System | 2010 Additions | 100,000 | 8,300,000 |
| 9 | Menno | Hwy 18 Utilities Improvements | 100,000 | 136,500 |
| 10 | Mount Vernon | Wastewater Treatment and Collection System Improvements | 50,000 | 2,942,479 |
| 11 | Niche Homeowners Association | Water System Reconstruction Project | 80,000 | 179,238 |
| | Niche Homeowners Association | Water System Reconstruction Project | 99,200 | |
| 12 | <i>Oacoma</i> | <i>Water Storage Project</i> | <i>200,000</i> | <i>1,272,040</i> |
| 13 | Owanka Rural Water System | Owanka RWS Construction | 175,000 | 1,439,924 |
| 14 | Parker | Water Distribution Improvements--Phase 5 | 300,000 | 1,240,000 |
| 15 | Randall RC&D | Lewis & Clark Watershed Implementation Segment 2 | 130,000 | 2,817,500 |
| 16 | Utica | Water Tower Improvements | 13,500 | 33,000 |
| | Utica | Water Tower Improvements | 16,500 | |
| 17 | <i>Viewfield Rural Water Association Inc.</i> | <i>Viewfield System Expansion</i> | <i>100,000</i> | <i>875,000</i> |
| TOTAL | | | <u>\$ 3,078,200</u> | <u>\$ 31,173,240</u> |

* Italic projects in Table 3 received an amendment to existing agreement in calendar year 2010; and Bold projects in Table 3 indicate the project received a loan.

State Revolving Fund Programs – Grant Assistance

In 2010, the board allocated additional funds under both the Clean Water and Drinking Water state revolving fund programs for planning, technical assistance, and construction activities. The board's 2010 intended use plans approved the use of \$1,921,460 in Clean Water and Drinking Water funds for grants (Table 4).

Table 4 – 2010 State Revolving Fund Grant Allocations

| <u>Activity</u> | <u>Source</u> | <u>Amount</u> |
|--|--|---------------|
| Water Quality Construction Grants | Clean Water SRF Admin Surcharge | \$ 1,150,000 |
| Small System Technical Assistance Grants | Drinking Water SRF Set-Aside | 271,460 |
| SRF Application Preparation and Administration | Clean Water SRF & Drinking Water SRF Admin Surcharge | 500,000 |
| TOTAL | | \$ 1,921,460 |

Water Quality Watershed/Construction Grants: With the decrease in available Consolidated Program grant assistance in 2010, the board provided additional grant assistance from Clean Water Administrative Surcharge fees. The construction of wastewater treatment, collection, or conveyance projects and watershed assessment and implementation projects are eligible uses for these fees, and its use allows additional projects to be completed.

Water Quality Planning Grants: The Small Community Planning Grant Program was established to encourage proactive planning by small communities and systems. Grants are available for the preparation of a wastewater or storm water engineering study or rate analysis for systems serving populations of 2,500 or less. For engineering studies, participating systems are reimbursed 80 percent of the cost, up to \$6,000, with an additional \$2,000 made available for wastewater studies that include an infiltration/inflow analysis. For wastewater utility rate analysis reviews, participating systems are reimbursed 80 percent of the cost, up to \$1,600.

Technical Assistance Grants: Small Community Planning Grants are also available for the preparation of a drinking water engineering study or rate analysis for systems serving populations of 2,500 or less. Participating systems are reimbursed 80 percent of the cost, up to \$6,000 for engineering studies. For drinking water utility rate analysis reviews, participating systems are reimbursed 80 percent of the cost, up to \$1,600.

The board continued its technical assistance contract with the South Dakota Association of Rural Water Systems (Rural Water) in 2010. Rural Water provides assistance to small drinking water systems serving populations of 10,000 or less with compliance, permitting, and operational issues. In 2010, the Midwest Assistance Program conducted capacity assessments and follow-up

reviews to assist the department in ensuring that all borrowers demonstrate the required technical, financial, or managerial capacity to access Drinking Water SRF loan assistance

During 2010, the board approved eleven Water Quality or Technical Assistance awards totaling more than \$1.3 million (Table 5).

Table 5 - 2010 State Revolving Fund Programs Grant Awards

Watershed/Construction Grant Awards

| <u>Sponsor</u> | <u>Project</u> | <u>Grant Amount</u> |
|--------------------------------------|--|---------------------|
| Brant Lake Sanitary District | Wastewater Collection and Treatment System | \$ 800,000 |
| Gettysburg | Sanitary Sewer Rehabilitation Project Phase II | 80,000 |
| Lincoln County Conservation District | Lower Big Sioux River Implementation Segment 2 | 86,000 |
| Sioux Falls | Wastewater Regionalization Study | 75,000 |
| TOTAL | | \$1,041,000 |

Small Community Planning Grant Awards

| <u>Sponsor</u> | <u>Project</u> | <u>Grant Amount</u> |
|-------------------------|---|---------------------|
| Beresford | Water and Wastewater System Improvements Study | \$ 12,000 |
| Carthage | Wastewater Systems Improvements Study | 8,000 |
| Doland | Water and Wastewater Systems Improvements Study | 14,000 |
| Freeman | Wastewater System Improvements Study | 8,000 |
| Gregory | Water System Improvements Study | 6,000 |
| Kadoka | Water & Wastewater Systems Improvements Study | 14,000 |
| Lebanon | Wastewater System Improvements Study | 8,000 |
| Menno | Wastewater System Improvements Study | 8,000 |
| Northside Roy Lake, Inc | Wastewater Collection and Treatment Study | 6,000 |
| Peever | Water System Improvements Study | 6,000 |
| Philip | Sanitary and Storm Sewer Improvements | 14,000 |

| <u>Sponsor</u> | <u>Project Study</u> | <u>Grant Amount</u> |
|--|---|---------------------|
| Pleasant Valley Homeowners Association | Wastewater Systems Study | 6,000 |
| Stockholm | Wastewater Treatment Improvements Study | 6,000 |
| Twin Brooks | Water and Wastewater Systems Improvements Study | 12,000 |
| Wessington Springs | Water and Wastewater Systems Improvements Study | 14,000 |
| TOTAL | | \$ 142,000 |

Technical Assistance Awards

| <u>Sponsor</u> | <u>Project</u> | <u>Award</u> |
|---|--|--------------|
| Black Hills Council of Local Governments | SRF Application Preparation and Administration | \$ 37,500 |
| Central South Dakota Enhancement District | SRF Application Preparation and Administration | 15,000 |
| First District Association of Local Governments | SRF Application Preparation and Administration | 75,000 |
| Third Planning and Development District | SRF Application Preparation and Administration | 90,000 |
| TOTAL | | \$ 187,500 |

State Water Resources Management System

On March 29, 2010, Governor Rounds signed the 2010 Omnibus Bill (Senate Bill 64) which appropriated \$6.65 million for State Water Resources Management System (SWRMS) projects.

Individual project appropriations approved as part of the 2010 Omnibus Bill are detailed in the 2010 State Water Development Legislation section on page 15. During the year, the board placed \$6.65 million of 2010 appropriations under agreement (Table 6).

Information on individual SWRMS project accomplishments and activities is provided in the State Water Plan section (pages 27-44).

Table 6 – 2010 State Water Resources Management System Funding Awards

| <u>Project</u> | <u>Amount</u> | <u>Type</u> |
|--|---------------------|-------------|
| Lewis & Clark Rural Water System | 6,300,000 | Grant |
| Southern Black Hills Water Supply System | 350,000 | Grant |
| TOTAL | <u>\$ 6,650,000</u> | |

Watershed Protection – EPA Section 319 Grants

The South Dakota Watershed Protection Program is designed to assess nonpoint water pollution sources and to reduce or eliminate their impact on water quality throughout the state. Nonpoint source refers to the polluted run-off from urban, agriculture, and forest lands. The program provides technical and financial assistance to local watershed project sponsors in the planning and management of assessment and implementation projects. Additionally, the program administers state and federal grants, monitors the effectiveness of implementation projects, and provides information and education materials. Applications for Section 319 grants must be approved by the board prior to submission to EPA. In 2010, the board recommended that EPA award nearly \$2.5 million to watershed projects (Table 7).

Table 7 - 2010 EPA Section 319 Grants

| <u>Sponsor</u> | <u>Project</u> | <u>Amount</u> | <u>Total Project</u> |
|--|--|---------------|----------------------|
| Belle Fourche River Watershed Partnership | Belle Fourche River Watershed Implementation Project | \$ 641,150 | \$ 2,883,150 |
| South Dakota Grassland Coalition | Grassland Management and Planning Project | 310,000 | 728,260 |
| Lincoln County Conservation District | Lower Big Sioux River Watershed Project | 325,000 | 916,350 |
| South Dakota Discovery Center and Aquarium | NPS Information and Education Project | 300,000 | 534,086 |
| Pennington County | Spring Creek Watershed Management and Implementation Project | 324,000 | 629,176 |
| City of Watertown | Upper Big Sioux River Watershed Project | 420,000 | 2,315,202 |

| <u>Sponsor</u> | <u>Project</u> | <u>Amount</u> | <u>Total Project</u> |
|--|-------------------------------------|---------------|----------------------|
| Dakota Central Resource Conservation and Development Association | Upper Snake Creek Watershed Project | 159,850 | 1,606,793 |
| TOTAL | | \$ 2,480,000 | \$ 9,613,017 |

Solid Waste Management Program

The 2010 State Legislature appropriated \$1,000,000 for the Solid Waste Management Program (SWMP) and \$1,400,000 for Regional Landfill Assistance, of which \$500,000 may be used for the statewide cleanup of waste tires and solid waste. These appropriations, combined with reverted and unobligated prior year funding, resulted in more than \$3.4 million being available for grants and loans for recycling, waste tire, and solid waste disposal projects.

These programs were supported by three sources – a \$0.75 per ton landfill surcharge on municipal solid waste, a \$0.25 per tire vehicle registration fee, and principal and interest payments from past solid waste loan awards. A minimum of 50 percent of the SWMP funds appropriated is reserved for recycling activities.

The board awarded nineteen grants and one loan in 2010, totaling more than \$3.5 million (Table 8). Of these awards, seven were for recycling activities and thirteen were for municipal solid waste or waste tire cleanup activities. SWMP awards helped leverage more than \$7.9 million in total project activities.

Table 8 - 2010 Solid Waste Management and Regional Landfill Assistance Awards

| <u>Sponsor</u> | <u>Description</u> | <i>Municipal Solid Waste</i> | | <u>Total Project</u> |
|---------------------------------------|---|------------------------------|---------------------|----------------------|
| | | <u>Loan Amount</u> | <u>Grant Amount</u> | |
| City of Brookings | Landfill Trench 4 East | | \$ 300,000 | \$ 1,250,637 |
| DENR | Waste Tire Cleanup 2011 | | 500,000 | 500,000 |
| City of Huron | Feasibility Study for Municipal Recycling Waste to Energy | | 42,500 | 85,000 |
| Minnehaha County | Rural Subdivision Clean-Up Project | | 88,695 | 118,830 |
| City of Rapid City | Leachate Remediation | | 250,000 | 1,025,271 |
| SD Solid Waste Management Association | MOLO Training | | 34,050 | 54,800 |

| | | | | |
|--------------------------------------|---|------------|--------------|--------------|
| City of Sioux Falls | Household Hazardous Waste Expansion-- Sustainability Education Center | | 172,500 | 690,000 |
| South Eastern Council of Governments | Solid Waste Management Regional Revolving Loan Fund | | 275,000 | 343,750 |
| City of Sturgis | Refuse Collection/Restricted Use Rubble Site Equip | | 223,500 | 447,000 |
| City of Vermillion | Landfill Dozer Replacement | \$ 200,000 | 85,000 | 485,000 |
| City of Watertown | Landfill Gas Pilot Study | | 16,500 | 33,000 |
| City of Watertown | Landfill Disposal Cell #4 Construction | | 349,350 | 698,700 |
| TOTAL | | \$ 200,000 | \$ 2,337,095 | \$ 5,731,988 |

Recycling

| <u>Sponsor</u> | <u>Description</u> | <u>Loan Amount</u> | <u>Grant Amount</u> | <u>Total Project</u> |
|---|---|---------------------------|----------------------------|-----------------------------|
| Black Hills Habitat for Humanity | ReStore Construction Salvage Program | | \$ 163,261 | \$ 543,760 |
| City of Sioux Falls | Household Hazardous Waste Expansion-- Sustainability Education Center | | 172,500 | 690,000 |
| South Eastern Council of Governments | Solid Waste Management Regional Revolving Loan Fund | | 325,000 | 406,250 |
| Wall Street Mission/Goodwill Industries | Industrial Baler Purchase-- Sioux Falls | | 7,000 | 14,000 |
| City of Watertown | Recycling Collection Vehicle Purchase | | 92,780 | 185,565 |
| Watertown School District | High School Paper Recycling Project | | 28,738 | 35,922 |

| | | | |
|-----------------|-------------------------------|---------|--------------|
| City of Yankton | Yard Waste Composting Program | 187,500 | 375,000 |
| TOTAL | | \$ 0 | \$ 976,779 |
| | | | \$ 2,250,497 |

Brownfields Revitalization and Economic Development Program

The 2003 South Dakota Legislature followed the federal Brownfields Act and established a state Brownfields Revitalization and Economic Development Program within the department. The purpose of Brownfields projects is to complete environmental assessments and cleanups so that local governments can put contaminated lands back into productive, beneficial use and complete projects that are necessary to revitalize local economies. The 2003 bill created two subfunds: a Brownfields revolving loan subfund and a Brownfields assessment and cleanup subfund. The Board of Water and Natural Resources approves annual work plans for both subfunds. The department agreed to use existing staff to administer this new program.

While the department has made application for federal funding, the U.S. Environmental Protection Agency has not awarded South Dakota any federal funds for the Brownfields revolving loan subfund. Therefore, there has been no activity in this subfund. EPA has advised the department that until partners or potential applicants are identified, the department will not be eligible for federal revolving loan funds.

The department has used both federal Brownfields grants and federal Leaking Underground Storage Tank Trust Funds to complete environmental assessments and cleanups of Brownfields projects statewide. Projects are limited by federal law to \$200,000 for Assessment and \$200,000 for Clean Up. Brownfields projects are nominated by local project sponsors and approved by the Board of Water and Natural Resources. Table 9 contains a list of all the Brownfields projects that were approved by the board in calendar year 2010. The Brownfields process is an extremely useful tool to help assess and clean up contaminated lands statewide and move economic development projects forward that are a high local priority.

Table 9 - 2010 Brownfields Assessment and Cleanup Projects

| <u>Applicant</u> | <u>Site Name and Location</u> | <u>Activity</u> | <u>Land After Clean Up</u> | <u>Amount</u> |
|------------------|-------------------------------|----------------------|----------------------------|---------------------------|
| Pierre | City Well VOC Impact | Assessment & Cleanup | Commercial | \$ 326,565 ⁽¹⁾ |

| <u>Applicant</u> | <u>Site Name and Location</u> | <u>Activity</u> | <u>Land After Clean Up</u> | <u>Amount</u> |
|-----------------------------------|------------------------------------|----------------------|----------------------------|-----------------------|
| Highmore | Former Hoffman/Street Site | Assessment & Cleanup | Commercial | 93,378 ⁽¹⁾ |
| Highmore | Former Straight's Corner, Highmore | Assessment & Cleanup | Commercial | 48,293 ⁽¹⁾ |
| Selby | Main Street Contamination | Assessment & Cleanup | Commercial | 66,823 ⁽¹⁾ |
| Emery | Utility Project | Assessment & Cleanup | Commercial | 2,826 ⁽¹⁾ |
| Herreid | Utility and Street Project | Assessment & Cleanup | Commercial | 10,027 ⁽¹⁾ |
| Alcester/Boyer | Former Feed and Grain | Assessment & Cleanup | Commercial | 22,032 ⁽¹⁾ |
| Lake Area Improvement Corporation | Former Rosebud Manufacturing Site | Assessment & Cleanup | Commercial | 17,222 ⁽¹⁾ |
| Mitchell | Former Rozum Motors | Assessment & Cleanup | Commercial | 33,033 ⁽¹⁾ |
| Sioux Falls | Former Sioux Falls Stockyards | Assessment | Commercial | 6,711 ⁽¹⁾ |
| | | | TOTAL | \$ 626,910 |

⁽¹⁾ Actual costs as of October 20, 2010.

2010 State Water Development Legislation

On March 29, 2010, Governor Rounds signed Senate Bill 64, the Omnibus Water Funding Bill. The 2010 Omnibus Bill contained the following appropriations:

Appropriations from the Water and Environment Fund

- Consolidated Water Facilities Construction Program – \$3,225,000 to provide grants and loans for community drinking water, wastewater, and watershed improvement projects;
- Lewis and Clark Rural Water System – \$6,300,000 grant to provide nonfederal cost share for planning, engineering design, preconstruction, and construction of the regional water supply system;
- Southern Black Hills Water System - \$350,000 grant for engineering design, preconstruction, and construction of the regional water supply system;

- Solid Waste Management Program – \$1,000,000 to provide grants and low interest loans for recycling, solid waste disposal, and waste tire projects; and
- Regional Landfill Assistance - \$1,400,000 to provide grants and low interest loans for the construction, enlargement, or upgrading of regional landfills, of which \$500,000 to be used for the statewide cleanup of waste tires and solid waste.

Appropriations from WEF Subfunds and Other Sources

- Section 7 of the bill appropriated \$1,150,000 from the Clean Water State Revolving Fund program subfund for the purpose of providing water quality grants;
- Section 8 of the bill appropriated \$250,000 from the Clean Water State Revolving Fund program subfund for the purpose of contracting for the preparation of application and administration of loans;
- Sections 9 of the bill appropriated \$250,000 from the Drinking Water State Revolving Fund program subfund for the preparation of loan applications and their administration of loans; and
- Section 10 of the bill appropriated \$275,000 from the Drinking Water State Revolving Fund program subfund for technical assistance grants.

2011 State Water Plan

2011 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 board).

The State Water Plan, as established in SDCL 46A-1-2, consists of two components – the State Water Facilities Plan and the State Water Resources Management System. To be considered for the State Water Facilities Plan, projects must meet criteria established by the board. These eligibility criteria are used as guidelines for the board, the Department of Environment and Natural Resources (the department), and the water development districts when considering a project for inclusion on the State Water Facilities Plan. Additions to or deletions from the State Water Resources Management System can only be accomplished by the State Legislature.

State Water Facilities Plan

The State Water Facilities Plan (Facilities Plan) is a list of potential water projects. The Facilities Plan includes projects such as rural, municipal, and industrial water supply, wastewater collection and treatment facilities, storm sewers, groundwater protection, and watershed restoration. The board is responsible for approving the placement of projects on the Facilities Plan. Projects on the Facilities Plan are eligible to seek state and federal financial assistance. The board can provide direct assistance to projects on the plan and placement on the plan may influence federal and other state agency funding decisions.

In November 2010, the board considered 36 applications requesting placement on the State Water Plan. The board placed those projects on the Facilities Plan, bringing the total number of projects on the 2011 State Water Facilities Plan to 100 (Table 10). The 36 projects placed on the plan in November will remain on the Facilities Plan through 2012. Projects placed on the plan in November 2009, or that were amended onto the plan during calendar year 2010 will remain on the Facilities Plan through 2011. The bolded projects in Table 10 indicate projects that have received either partial or full funding. The bolded amounts on these projects reflect the amount that has been awarded to date. The projects remain on the Facilities Plan and remain eligible to request additional funding.

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. Once a project is removed from the Facilities Plan, the project sponsor must submit a new state water plan application to be eligible to seek assistance.

Table 10 - 2011 State Water Facilities Plan

| <u>Sponsor</u> | <u>Project Description</u> | <u>On Plan Through</u> | <u>Requested Funding</u> | <u>Total Project</u> |
|--|--|------------------------|--------------------------|----------------------|
| Bear Butte Valley Water, Incorporated | Regional Water System | 2011 | \$ 1,196,000 | \$3,989,000 |
| Bison | Main Street Storm Water Drainage | 2012 | 1,669,263 | 1,669,263 |
| Box Elder | Water Supply and Storage System - Phases I and II | 2011 | 553,000 | 7,132,000 |
| B-Y Water District | Phase I - Service Expansion to West City Limits Road | 2011 | 3,250,000 | 3,314,915 |
| B-Y Water District | Phase II - Service to West of Yankton/East Lake Area | 2011 | 1,500,000 | 1,578,812 |
| B-Y Water District | Phase III - Service to East Side City of Yankton | 2011 | 4,500,000 | 4,658,877 |
| B-Y Water District | Water Generator Acquisition | 2011 | 3,300,000 | 3,640,000 |
| Chamberlain | Wastewater Treatment Plant Improvements | 2012 | 192,000 | 192,000 |
| Clear Lake Betterment Association | Wastewater Treatment Facility and Collection System | 2012 | 4,724,440 | 4,724,440 |
| Colton | 5th Street Utility Improvements | 2011 | 300,000 | 663,000 |
| Dell Rapids | 15th Street Improvements (Old Hwy 77 to Clark Avenue) | 2011 | 1,717,830 | 2,500,000 |
| Delmont | Water Meter Replacement Project | 2011 | 60,000 | 125,090 |
| Doland | Water Improvements | 2012 | 2,622,240 | 3,122,240 |
| Doland | Wastewater Improvements | 2012 | 1,845,730 | 1,845,730 |
| Edgemont | Drinking Water System | 2011 | 2,075,000 | 2,075,000 |

| <u>Sponsor</u> | <u>Project Description</u> | <u>On Plan Through</u> | <u>Requested Funding</u> | <u>Total Project</u> |
|---------------------------------------|--|------------------------|--------------------------|----------------------|
| | Improvements | | | |
| Edgemont | Gross Alpha Contamination Remediation and Drinking Water System Improvements | 2012 | 5,000,000 | 5,000,000 |
| Ellsworth Development Authority | Regional Wastewater Treatment Facility | 2011 | 12,000,000 | 24,000,000 |
| Ethan | Wastewater Collection and Treatment Improvements | 2011 | 300,000 | 1,632,120 |
| Fall River Water Users District | Fall River Road Well Project | 2012 | 1,068,150 | 2,225,485 |
| Fairview | Drinking Water System Improvements and Service from South Lincoln RWS | 2011 | 473,500 | 782,500 |
| Faulkton | US Highway 212 Waterline Replacement | 2012 | 441,725 | 441,725 |
| Fort Pierre | Water System Improvements | 2012 | 1,894,000 | 2,219,000 |
| Frankfort | Wastewater and Storm Sewer Improvements | 2012 | 282,000 | 404,100 |
| Green Valley Sanitary District | Wastewater System Project | 2011 | 2,992,000 | 6,009,582 |
| Green Valley Sanitary District | Water System Regionalization Project | 2011 | 500,000 | 3,677,188 |
| Gregory | Water Source, Storage, and Distribution Improvements | 2011 | 1,000,000 | 1,513,933 |
| Groton | Sanitary Sewer Replacement/Casing Under Railroad Tracks | 2011 | 322,000 | 397,000 |
| Groton | Water Main, Tower, Booster Pump Improvements | 2011 | 703,000 | 1,203,000 |
| Harrisburg | Colombia Basin Sanitary/Storm Sewer Project | 2011 | 3,464,100 | 3,464,100 |
| Hermosa | Highway 79 Water Main Extension | 2012 | 75,000 | 150,408 |

| <u>Sponsor</u> | <u>Project Description</u> | <u>On Plan Through</u> | <u>Requested Funding</u> | <u>Total Project</u> |
|-------------------------------|---|------------------------|--------------------------|----------------------|
| Hermosa | North Sewer Collection Line Project | 2012 | 252,250 | 504,503 |
| Herreid | Wastewater Improvement | 2012 | 500,000 | 1,494,300 |
| Hisega Meadows Water, Inc | Acquisition and Improvements of Hisega Meadows Water System | 2012 | 1,490,000 | 2,474,000 |
| Hot Springs | Wastewater Treatment Plant Repair and Upgrades | 2012 | 1,990,000 | 1,990,000 |
| Hot Springs | 2010 Water System Supply/Storage Enhancements | 2011 | 2,900,000 | 2,900,000 |
| Hot Springs | Utilities Upgrades | 2011 | 3,089,000 | 3,089,000 |
| Hoven | Water Meters, Lines, Storage Tank Project | 2011 | 500,000 | 2,232,055 |
| Hurley | Drinking Water System Improvements Service from TM Rural Water System | 2012 | 518,000 | 518,000 |
| Huron | East Water Tower for Turkey Plant Project | 2011 | 750,000 | 1,485,400 |
| Huron | Water Tower Replacement Project | 2011 | 1,294,650 | 2,877,000 |
| Interior | Wastewater System Improvements | 2012 | 382,000 | 582,100 |
| Iroquois | Wastewater Collection System Improvements | 2011 | 200,000 | 875,500 |
| Java | Wastewater Improvements to Collection, Treatment, and Lift Station | 2012 | 438,325 | 438,325 |
| Kadoka | Phase I-Storm Water System Improvements | 2011 | 950,000 | 1,665,000 |
| LaBolt | Wastewater System Improvements Project | 2011 | 170,000 | 190,000 |
| Lake Byron Watershed District | New Project Sanitary Sewer Collection and Treatment | 2012 | 2,934,260 | 3,474,260 |
| Lebanon | Wastewater Improvements to | 2012 | 462,550 | 462,550 |

| <u>Sponsor</u> | <u>Project Description</u> Collection, Treatment, and Lift Station | <u>On Plan Through</u> | <u>Requested Funding</u> | <u>Total Project</u> |
|---|---|------------------------|--------------------------|----------------------|
| Lincoln County Conservation District | Lower Big Sioux River Implementation Segment 2 | 2011 | 86,000 | 677,000 |
| Longview Sanitary District | Water Regionalization | 2012 | 500,000 | 2,152,660 |
| Martin | North Lagoon Sludge Removal Facilities Plan | 2011 | 307,514 | 307,514 |
| McCook Conservation District | Vermillion River Basin Watershed | 2012 | 65,000 | 984,831 |
| McLaughlin | Water System Improvements | 2012 | 3,641,050 | 4,141,050 |
| McLaughlin | Wastewater System Improvements | 2012 | 2,583,686 | 3,083,686 |
| Menno | Storm Sewer Improvements Project | 2011 | 107,500 | 269,000 |
| Mid-Dakota RWS | Water Treatment and Distribution Expansion | 2011 | 13,000,000 | 15,000,000 |
| Mid-Dakota RWS | Pipeline Extension to Crow Creek Reservation | 2012 | 400,000 | 450,000 |
| Mid-Dakota RWS | Pipeline Extension North Western Sanborn County | 2012 | 900,000 | 930,000 |
| Mid-Dakota RWS | Pipeline Extension South Western Clark County | 2012 | 700,000 | 762,000 |
| Mid-Dakota RWS | Add-on User Expansion | 2012 | 501,950 | 669,950 |
| Mitchell | MTI Infrastructure Development--South Campus | 2011 | 500,000 | 2,319,000 |
| Montrose | Water Distribution Improvements | 2011 | 1,050,072 | 1,050,072 |
| New Underwood | New 10-Inch Reservoir Main | 2011 | 282,700 | 282,700 |
| Niche Homeowners Association | Water System Reconstruction Project | 2011 | 99,238 | 179,238 |
| Northville | Wastewater Treatment Facility | 2011 | 160,000 | 314,600 |

| <u>Sponsor</u> | <u>Project Description</u> | <u>On Plan Through</u> | <u>Requested Funding</u> | <u>Total Project</u> |
|----------------------------------|---|------------------------|--------------------------|----------------------|
| Parker | Water Distribution Improvements - Phase 5 | 2011 | 733,000 | 1,233,000 |
| Piedmont | Water System | 2012 | 490,000 | 2,133,000 |
| Piedmont | Wastewater System | 2012 | 2,789,012 | 2,789,012 |
| Pierpont | Ground Storage and Booster Pump | 2012 | 551,200 | 551,200 |
| Pickstown | Storm Sewer Improvements | 2011 | 200,000 | 698,850 |
| Pierre | Landfill Slide Remediation | 2011 | 924,000 | 1,336,000 |
| Plankinton | Comprehensive Utility Upgrades | 2011 | 750,000 | 8,081,055 |
| Platte | Wastewater Lagoons Aerator Installation | 2011 | 25,000 | 59,402 |
| Quinn | Municipal Sanitary Sewer System Project | 2011 | 368,800 | 737,685 |
| Randall CWD | Platte Plant Upgrade | 2011 | 2,825,000 | 6,650,000 |
| Ravinia | Storm Drainage Improvement | 2012 | 734,540 | 734,540 |
| Richmond Lake Sanitary District | Lagoon and Wastewater Collection Project | 2011 | 711,200 | 711,200 |
| Scotland | Stormwater Management Project | 2011 | 743,130 | 1,537,200 |
| Selby | Wastewater Improvement Project | 2011 | 1,000,000 | 3,947,375 |
| South Lincoln Rural Water System | Drinking Water System Improvements and Service from SLRWS to Town of Fairview | 2012 | 476,500 | 785,500 |
| Sioux Falls | 2011 Pipe Lining and Central Main Interceptor | 2011 | 23,116,000 | 23,116,000 |
| Sioux Falls | 2011 Water Main Replacement Projects | 2011 | 4,375,000 | 4,375,000 |
| Spencer | Sewer Main Replacement | 2011 | 230,156 | 430,156 |
| Springfield | Water Intake Source Project | 2011 | 230,000 | 502,000 |

| <u>Sponsor</u> | <u>Project Description</u> | <u>On Plan Through</u> | <u>Requested Funding</u> | <u>Total Project</u> |
|-------------------------------------|---|------------------------|--------------------------|----------------------|
| St. Lawrence | Waterline Replacement Project | 2011 | 30,000 | 58,370 |
| Sturgis | Water Supply/Distribution System Improvements | 2011 | 2,692,848 | 2,692,848 |
| Sturgis | Drinking Water System Improvements | 2012 | 6,618,450 | 6,618,450 |
| Terry Trojan Water Project District | Transmission System Improvements | 2011 | 150,400 | \$188,000 |
| Turton | Wastewater Improvements | 2012 | 456,100 | 456,100 |
| Utica | Water Tower Improvements | 2011 | 20,000 | 33,000 |
| Vermillion | Water Tower Project | 2011 | 1,600,000 | 1,600,000 |
| Viborg | SD Highway 19 Water Main Improvements | 2011 | 847,000 | 847,000 |
| Wall | Main Street Water Main Reconstruction | 2011 | 328,747 | 328,747 |
| Warner | Wastewater System Improvements | 2012 | 2,452,885 | 2,452,885 |
| Watertown | Police Station "Green" Parking Lot | 2011 | 815,000 | 815,000 |
| Webster | Water Meter Improvements | 2011 | 238,103 | 238,103 |
| White Lake | Water/Sewer Improvements | 2011 | 300,000 | 970,764 |
| Wilmot | Water System Improvements Project | 2011 | 300,000 | 1,981,820 |
| Winner | Water System Improvements | 2011 | 1,750,000 | 4,250,000 |
| Worthing | Utilities Improvements | 2011 | 406,127 | 406,127 |
| Yale | Wastewater Treatment Facility Replacement | 2011 | 662,000 | 1,138,000 |
| TOTAL | | | \$ 164,666,921 | \$ 240,659,191 |

* The **bolded projects** in Table 10 reflect projects that have received either partial or full funding.

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 list (Table 11) serves as the preferred priority list to optimize water resources management in the state. Once a project is placed on the SWRMS list, it remains on the list until removed by legislative action.

At its November 2010 meeting, at the request of the city of Sioux Falls, the board recommended that the Slip-Up Creek be deleted from the SWRMS list and that all other projects currently on the SWRMS list be retained. The current SWRMS list is shown below:

Table 11 – State Water Resources Management System Projects

| <u>Project</u> | <u>Description</u> |
|--|-------------------------------------|
| Big Sioux Flood Control Study | Watertown Flood Control |
| Black Hills Hydrology & Water Management Study | Black Hills Water Resources |
| CENDAK Irrigation Project | Irrigation Project - Central SD |
| Gregory County Pumped Storage Site | Multi-Purpose Water Utilization |
| Lake Andes-Wagner/Marty II Irrigation Unit | Irrigation - Charles Mix County |
| Lewis & Clark Rural Water System | Bulk Water System - Southeastern SD |
| Mni Wiconi Rural Water System | Rural Water System - Western SD |
| Perkins County Rural Water System | Rural Water System - Northwest SD |
| Sioux Falls Flood Control Project | Increased Flood Protection |
| Slip-Up Creek | Proposed Reservoir near Sioux Falls |
| Southern Black Hills Water System | Rural Water System - Southern Hills |
| Vermillion Basin Flood Control Project | Flood Control on Vermillion River |

SWRMS Project Status

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

Big Sioux Flood Control Study (Watertown & Vicinity) – 1989

- The Corps of Engineers completed a reconnaissance report titled “Flood Control for Watertown and Vicinity.” The study concluded the best alternative for flood protection for Watertown, Lake Kampeska, and Pelican Lake is a \$16 million dry dam on the Big Sioux River at the Mahoney Creek site.
- The Corps of Engineers, in cooperation with Watertown, East Dakota Water Development District, Codington County, Lake Kampeska Water Project District, and the Department of Environment and Natural Resources, initiated a feasibility study in 1988. State appropriations of \$150,000 were provided to help meet the nonfederal cost share.
- The final draft feasibility report was distributed in June 1994 for public review and comment. A public hearing in July 1994 in Watertown presented findings of the report and gathered comments. City and county elections were held and residents voted against further local participation in the 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 in February 1998, calling for a citywide vote on the proposed Mahoney Creek Dam. The record turnout of voters again rejected the proposed dam.
- In June 2001, the residents of Watertown called for a citywide vote on the proposed Mahoney Creek Dam project. The voters approved the project. City officials proceeded with updating the original Corps of Engineers feasibility study and obtaining support and financing for the project.
- After the affirmative vote, Watertown began negotiations with the Corps of Engineers to complete a General Re-evaluation Report of the city’s flood control alternatives. Negotiations continued in 2003, and the scope of work to be reviewed by the report continued to be evaluated. Cost of the re-evaluation report was estimated at \$2.8 million.
- In 2003, Watertown returned \$450,000 of state funds appropriated in 2003 for local participation during the General Re-evaluation process. Because of cost share and scope of work issues, Watertown decided to step back from participation in the re-evaluation and turned over all work to the Corps of Engineers.
- The Corps of Engineers received \$246,000 in 2003, \$473,000 in 2004, \$176,000 in 2005, and \$344,000 in 2008 to continue with the General Re-evaluation Report. Alternatives to be considered include the Mahoney Creek

Dry Dam, 3-5 medium sized dams, 800 small dams, and a diversion between Lake Kampeska and Lake Pelican.

- A stakeholders group consisting of representatives from the Lake Pelican and Kampeska water project districts, the Corps of Engineers, the City of Watertown, Codington County Commissioners and landowners was created in 2010. The group held several public meetings to discuss and develop a flood control plan.
- U.S. Army Corps of Engineers have indicated that the most cost effective solution is the Mahoney Creek Dry Dam. The City of Watertown voted to support the Mahoney Creek Dry Dam for flood protection. The cost-benefit study of the dam is anticipated to take two years and the total project cost is estimated at \$40 million dollars.

Black Hills Hydrology and Water Management Study – 1982

- The hydrology study compiled water resource data to assess the quantity, quality, and distribution of surface and ground water resources in the Black Hills area. These resources have been stressed by increasing population, periodic drought, and developments related to expansion of mineral, timber, agricultural, recreational, municipal and urban needs. The U.S. Geological Survey provided \$3.4 million from Federal Fiscal Years 1988 through 2001 to establish the hydrologic monitoring system, collect the data, and complete data analysis.
- The hydrology study entered Phase II in Federal Fiscal Year 1997 and was completed in 2002. The study emphasis during Phase I was data collection. The emphasis shifted to analytical activities and publication of maps and reports during Phase II.
- The hydrology study produced 31 technical reports including a lay reader summary, a comprehensive report on the hydrology of the Black Hills area, and a comprehensive lay reader atlas of water resources in the Black Hills area.
- The water management study provides local interests with the tools needed to assist in making informed management decisions about development of water resources. Data gathered during the hydrology study was used in the water management study. Congress appropriated funds in Federal Fiscal Year 1991 to initiate the Federal Black Hills Water Management Study by the Bureau of Reclamation.
- The Black Hills Water Management Study was completed in Federal Fiscal Year 2003. The study focused on needs assessment, management alternatives, and a final report.

- The 2004 Omnibus Bill appropriated \$100,000 for the development, evaluation, and review of studies related to development of regional water supply systems in or near the Black Hills. The Fall River Water User District sponsored a regional water supply study for an area that included all of Custer and portions of Fall River and southern Pennington counties.
- The 2005 Omnibus Bill appropriated \$100,000 for the development, evaluation, and review of studies related to development of regional water supply systems in or near the Black Hills. The Southern Black Hills Water System Inc., a nonprofit corporation, was formed to continue the feasibility study of a regional water system in Custer, Fall River, and southern Pennington counties. The Southern Black Hills Water System requested additional funds to continue activities begun by the Fall River Water User District. In June 2005, the Board awarded \$50,000 for these activities.
- The 2006 Omnibus Bill amended the State Water Resources Management System to add the Southern Black Hills Water System to its list of preferred, priority objectives for South Dakota. The bill also provided an initial appropriation of \$125,000 to allow the Southern Black Hills Water System to continue activities begun by the Fall River Water User District.
- In December 2006, the Lead-Deadwood Sanitary District submitted a request to have the remaining \$50,000 of SFY 2006 Black Hills Water Management Study funding placed under agreement with the district to conduct a regional water study in the Lead, Deadwood, and Central City area. The funding was awarded in January 2007, and the sanitary district selected an engineer in June 2007. The Lead-Deadwood Area Water Study Final Report was issued on July 18, 2008. The study provides an analysis of the Lead-Deadwood Sanitary District intake and water treatment plant, a review of the Lead and Deadwood distribution systems, an analysis of the development in the surrounding area, and the ability of the Lead-Deadwood Sanitary District to serve them.
- The 2009 Omnibus Bill appropriated \$65,000 for hydrology studies. These funds have been awarded to West Dakota Water Development District to cost share the United States Geological Survey groundwater aquifer study in the Black Hills. Study efforts were ongoing through 2010, and it is anticipated that the study will be completed in 2012.

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 2010.

Gregory County Pumped Storage Project – 1981

- Hydroelectric Component – The Gregory County Pumped Storage Project is a peak generation hydroelectric facility in northern Gregory County. In 1988, the Federal Energy Regulatory Commission (FERC) issued a preliminary permit for development of the project. The state's preliminary permit expired August 1991.
- Water Supply Component – The project has the potential to provide water for irrigation and municipal, rural, and industrial purposes using the hydroelectric project's upper bay as a water supply source. The Bureau of Reclamation completed a *Special Report on the Gregory Unit of the Pick-Sloan Missouri Basin Program, South Dakota* in 1992.
- The Water Resources Development Act of 1986 (Public Law 99-662) authorized the construction of a \$1.3 billion hydroelectric pumped storage facility by the Corps of Engineers. The Act also authorized up to \$100 million for construction of the associated Gregory Unit of the Pick-Sloan Missouri Basin Program.
- On June 20, 2001, Dakota Pumped Storage, LLC, a Minnesota corporation, filed a FERC Preliminary Permit application for a pumped storage hydroelectric facility in Gregory County. On September 25, 2001, South Dakota filed a Motion to Intervene and a Notice of Intent to File Competing Application for Preliminary Permit by the State of South Dakota. An Application for Preliminary Permit for the Gregory County Pumped Storage Hydroelectric Facility in Gregory County, South Dakota was filed with FERC by the South Dakota Conservancy District on October 12, 2001.
- The FERC issued a 3-year Preliminary Permit to the South Dakota Conservancy District on August 12, 2002. FERC denied the application by Dakota Pumped Storage, LLC.
- The 2002 Omnibus Bill appropriated \$100,000 to the South Dakota Department of Environment and Natural Resources to complete preliminary permit and full permit application to FERC. The department solicited Requests for Proposals from firms interested in providing the research to support the FERC permit. Four proposals were received. Black & Veatch was selected.
- The 2004 Black & Veatch study determined it did not appear to be cost effective to pursue the pumped storage project at this time. These findings were presented to the Board of Water and Natural Resources in June 2004. The FERC permit expired in 2005.

- In 2010, South Dakota Energy, L.L.C. submitted a preliminary permit application to FERC to study the feasibility of the South Dakota Energy Hydroelectric Project located on the Missouri River in Gregory County, South Dakota. On July 21, 2010, the Commission issued an Order Issuing Preliminary Permit and Granting Priority to File License Application for the project.

Lake Andes-Wagner/Marty II Irrigation Unit – 1975

- The 45,000-acre Lake Andes-Wagner Irrigation project and 3,000-acre Marty II Irrigation project are federally authorized Pick-Sloan Missouri Basin Units in Charles Mix County (Public Law 102-575). Estimated construction costs are \$175 million and \$24 million, respectively.
- In 1990, a plan of study was developed for a 5,000-acre research demonstration program to determine best management practices for irrigating glacial till soils containing selenium.
- The 1992 State Legislature authorized the construction of the Lake Andes-Wagner/Marty II project and provided a state loan cost share commitment of \$7 million. Both the state and federal project authorizations are contingent upon the successful completion of the 5,000-acre research demonstration program.
- In 1995, Congress approved \$250,000 for the research program. State and federal agencies revised the 1990 plan of study to re-scope the demonstration program and identify the specific issues and research components that are of national significance. A nine-year, \$11.3 million effort was projected.
- In 1999, the Bureau of Reclamation (BoR) received \$150,000 to prepare an environmental assessment for the demonstration program.
- The BoR completed the environmental assessment and issued a Finding of No Significant Impact for the demonstration program in 2000. Significant federal funding must be secured before the demonstration program can proceed.
- Since 2002, \$15,000 appropriated in 2002 and \$50,000 appropriated in 2003 has been placed under agreement by the Board of Water and Natural Resources. The Lake Andes-Wagner Irrigation district continued to seek federal funding for the demonstration program. No significant activity occurred on the project in 2008.

- The 2009 Omnibus Bill appropriated \$35,000 for the Lake Andes-Wagner/Marty II research demonstration program. These funds have been awarded to the project sponsor to continue their efforts to get this project moving forward.
- During 2010, the sponsor worked to assemble information and research data from multiple resources. Discussions with BoR are ongoing regarding possibly of funding and placing the project into the BoR's program proposal.

Lewis and Clark Regional Water System – 1989

- The proposed Lewis and Clark Regional Water System 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. Approximately 155,000 South Dakotans will receive water from Lewis and Clark.
- President Clinton signed Public Law 106-246 on July 13, 2000, authorizing the federal construction of the Lewis and Clark Regional Water System. The federal legislation also approved a federal appropriation of \$600,000 to continue project engineering and begin construction. The Board of Water and Natural Resources placed \$200,000 of state funding under agreement in 2000 to assist with these same project activities.
- Iowa and Minnesota sponsors provided funding support for project development in proportion to their service capacity needs. Iowa and Minnesota state legislatures authorized the project for construction and completed their cost share commitments.
- South Dakota Legislature authorized Lewis and Clark's South Dakota project features (\$200 million) in 1993. In 2002, the state cost share commitment of \$18,585,540 in 1993 dollars was established for the Lewis and Clark Regional Water System.
- The 2002 Omnibus Bill appropriated \$750,000 for the project. These funds, combined with federal and other local sources, completed the federal environmental review, the Final Engineering Report and initiated construction. Lewis and Clark Regional Water System's Final Engineering Report completed its initial required 90-day congressional review on September 8, 2002. The federal Office of Management and Budget (OMB) determined that Lewis and Clark could not submit its Final Engineering Report to Congress until OMB had approved it. Lewis and Clark worked with OMB to get its Final Engineering Report approved and resubmitted to Congress. Lewis and Clark held its formal groundbreaking on August 21, 2003.

- Lewis & Clark agreed in 2005 to provide Sioux Falls an additional 17 million gallons of water per day, bringing the total delivered capacity to 27 million gallons per day. Sioux Falls will finance the cost of the additional capacity.
- In May 2007, Lewis & Clark elected to change the project's name from "Rural" to "Regional". The project will be doing business as the Lewis & Clark Regional Water System.
- Through June 30, 2008, South Dakota Legislature had appropriated and the Board of Water and Natural Resources had placed under agreement \$19.275 million toward South Dakota's cost share commitment.
- In May 2008, Lewis & Clark began operating its first segment of pipeline – a nine mile emergency connection between Sioux Center and Hull, IA. Until Lewis & Clark water arrives, Lewis & Clark is purchasing water from Sioux Center and re-selling it to Hull.
- Also in May 2008, Lewis & Clark awarded a \$30.7 million contract for Treated Water Pipeline – Segments 8/7B. This eleven mile segment of 54" pipe in southern Clay County is the last segment of the main transmission line between the Missouri River and Sioux Falls.
- In July 2008, a \$20.8 million contract was awarded for the first phase of the water treatment plant, which includes a three million gallon underground reservoir, high capacity pumps, electrical building and two standby generators. This infrastructure is separate from the main treatment plant building. Work began in September and will take two years to complete. This is a roughly \$85 million, three-year project that includes the main treatment plant building.
- In July 2008, work was completed on a \$5.5 million contract that included one mile of river bank stabilization southwest of Vermillion to protect Lewis & Clark's main well field from erosion, as well as two well houses, four valve vaults and various piping. Utilizing a permanent easement, Lewis & Clark's main well field is located on land owned by the SD Department of Game, Fish & Parks (Frost Game Production Area). Lewis & Clark currently has six production wells constructed (four angle wells and two vertical wells), as well as two test wells.
- In September 2008, Lewis & Clark began operating its second segment of pipeline – a 12 mile emergency connection for Tea and Harrisburg. Until Lewis & Clark water arrives, Lewis & Clark is purchasing water from Sioux Falls and re-selling it to Tea and Harrisburg.
- The 2009 Omnibus Bill appropriated \$6.3 million for the engineering design, preconstruction activities, and construction.

- In April 2009, Lewis & Clark was approved to receive \$56.5 million from the Bureau of Reclamation as part of the American Recovery and Reinvestment Act.
- In May 2009, a \$64.1 million contract was awarded for Phase II of the water treatment plant. In July 2009, Phase II construction of the water treatment plant commenced. The anticipated completion for Phase II is March 2012.
- In July 2009, a \$5.04 million contract was awarded for the construction of the 85th Street Tower, which will have a three million gallon storage capacity, located in Sioux Falls. The tower will be one of three storage reservoirs for Lewis & Clark. This tower will be one of only 15 in the nation at this capacity. In October 2009, construction began on the three million gallon water storage tower. The anticipated completion for the tower is November 2011.
- In August 2009, a \$9.5 million dollar contract was awarded for the construction of two above ground reservoirs to be built near Tea. The completion deadline is October 2011. These two reservoirs along with the 85th Street tower will serve as Lewis and Clark's primary storage facilities. Construction on the reservoirs commenced in November of 2009.
- In September 2009, a \$3.7 million contract was awarded for the first segment of the "Minnesota Transmission Line." This segment is a five mile pipeline to be constructed in South Dakota and will serve Minnehaha Community Water Corporation, all Minnesota users, and Rock Rapids, Iowa. The anticipated deadline for completion was November 2010. Construction began on this section of pipeline in September 2010.
- In September 2009, a \$2.8 million contract was awarded for the construction of the Parker and Centerville service lines. These service lines will include almost fourteen miles for the Parker service line and five miles for the Centerville service line. The completion deadline for the service lines is November 2010.
- Lewis & Clark received \$10 million in federal funding in 2009 under the 2010 Energy and Water Appropriation bill.
- In November 2009, the last section of the Treated Water Pipeline, which is the main trunk between the water treatment plant and the city of Sioux Falls, was completed.
- In June 2010, the \$6.3M approved by the 2010 Legislature was put under agreement. This completes the State's cost share commitment to the project.

- A contract for five new wells was awarded in April 2010 for \$6.8 million. The five new wells will provide Lewis & Clark with an estimated 10 million gallons a day of additional capacity. Including the six previously drilled wells, Lewis & Clark's total well capacity will be approximately 28 million gallons per day.
- A \$4.2 million bid was awarded in May 2010 for the Treated Water Pipeline - Segment 11. This segment will connect Beresford to the main truck line. This is the first segment of the "Iowa Transmission Line." Eventually this line will connect to Sioux Center, Hull and Sheldon. This segment is approximately five miles, and the deadline for completion is August 2011.
- In October 2010, Lewis & Clark was awarded approximately \$4.5 million in reprogrammed American Recovery & Reinvestment Act funding through the Bureau of Reclamation.
- In October 2010, a \$7.55 million contract was awarded for the Minnesota – Segment 1, and runs along the South Dakota - Iowa border from just west of the Big Sioux River to a point six miles west of Rock Rapids. While a six mile stretch of this segment is scheduled to be operational by July 2011, the substantial completion deadline for the entire nine miles is November 2011. As part of a future contract, Minnehaha Community Water Corp will also tap into this line for a second connection on the east side of Sioux Falls.

Mni Wiconi Rural Water System – 1989

- Public Law 100-516, as amended in 1994, authorized 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. In 1995, the state authorization was amended to reflect the \$263 million project and a state cost share commitment of \$12.9 million.
- WR/LJ initiated construction of advanced features in 1993. These features were distribution systems that had access to interim ground water supplies. In June 1993, the Oglala Sioux Water Supply System also initiated construction of advanced features in the White Clay and Wakpamni districts of the Pine Ridge Reservation.
- In July 1996, the Oglala Sioux Water Supply System, along with WR/LJ, Rosebud, and Lower Brule rural water systems, held Mni Wiconi core facilities groundbreaking ceremonies at Echo Point near Ft. Pierre.
- In 1997, the Oglala Sioux Water Supply System awarded a \$16.4 million contract for the construction of the water treatment plant near Ft. Pierre. Construction activities began in 1997 and were completed in 2002.
- In 2001, the state appropriated a \$1.7 million loan for continued construction of the Mni Wiconi Rural Water System. This appropriation completed the state's cost share commitment to the project.
- WR/LJ secured an \$8.0 million Drinking Water State Revolving Fund Program loan in 2006 to advance construction of the North Core Pipeline. Construction on the first phase was completed in 2007, conveying water from the water treatment plant near Ft. Pierre to Hayes. This first phase of the North Core Pipeline hooked up over 100 rural residences along the way.
- In the fall of 2008, WR/LJ bid its last major distribution area to be served the Powell area project. Construction of the Powell area project was completed in 2009.
- In August 2008, the Oglala Sioux Water Supply System celebrated the delivery of Missouri River water to the Pine Ridge Indian Reservation with its 24-inch South Core Pipeline providing service to users in the Wanblee area.
- In 2008, the Rosebud Sioux Water Supply System installed a second 12-inch pipeline from White River to Highway 18. Completion of this project provides the Rosebud system with its full design capacity of Missouri River water delivery to Todd County.
- The federally authorized Lower Brule Sioux Water Supply System component of the Mni Wiconi system was completed in 2008.

- In October 2009, the Federal Fiscal Year 2010 Energy and Water Appropriation bill was signed. The bill appropriated \$22 million for the continued construction of the Mni Wiconi project.
- The Bureau of Reclamation, as part of the American Recovery and Reinvestment Act in 2009, approved \$10 million for the rehabilitation of Indian Education water systems on Pine Ridge Indian Reservation. The Mni Wiconi system was also allocated \$10.2 million for operation and maintenance, including the operation of the treatment plant located in Fort Pierre.
- WR/LJ worked out an agreement with the City of Ft. Pierre to sell the City water for a period of three years. WR/LJ already had a connection to the City, but it was sized for only temporary and emergency purposes. WR/LJ upsized the connection and installed a large automatic control valve. On February 8, 2010, the City of Ft. Pierre was turned on to rural water.
- Bids for the Cedar Community Project were opened in July. Project construction started in September and the completion date is set for December 31, 2010. The Cedar Project is located between the communities of Quinn, Cottonwood and Cactus Flat, and borders the north side of the Badlands National Park. It will consist of approximately 40 miles of new pipeline and will serve 38 user connections.

Perkins County Rural Water System – 2004

- The 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. The project was originally placed on the State Water Resources Management System list in 1993.
- 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. The Perkins County Rural Water System signed a water service agreement with the North Dakota State Water Commission in May 1996.
- The 1996 State Legislature authorized the construction of the Perkins County RWS project and approved a state cost share commitment of \$1.0 million. The 1996 Legislature also appropriated \$450,000 of the \$1.0 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. Perkins County RWS provided \$898,478 of these funds to the North Dakota State Water Commission to make water available at the border. The project was

removed in 2000 when the original \$1.0 million state cost share commitment was provided and expended.

- President Clinton signed Public Law 106-136 on December 7, 1999. The federal authorization for construction of the rural water system was originally introduced on August 2, 1996. The legislation provided a 75 percent federal cost share. Federal legislation was reintroduced in 1999. On August 4, 1999, the House Committee on Resources conducted a hearing and amended the authorization. The amended bill passed the House by unanimous consent on October 26, 1999. The bill was sent to the Senate and on November 22, 1999, also passed by unanimous consent.
- In November 2003, the Board of Water and Natural Resources recommended the return of the Perkins County Rural Water System to the State Water Resources Management System list and recommended revising the state cost share commitment to the project to \$2.5 million in grant and \$4.5 million in loan funding. In 2004, the Perkins County Rural Water System was placed on the SWRMS list, and the state cost share commitment of \$2.5 million in grant and \$4.5 million in loan funding was approved by the Legislature.
- Project sponsors held an official groundbreaking on May 1, 2004, in Hettinger, North Dakota. The project began its South Dakota construction with the Lodgepole area distribution system. Construction activities included distribution lines to provide water to nearly 100 sites, and the construction of the system's main booster pump station near the North Dakota border.
- Construction was initiated on the main transmission pipelines toward Lemmon and Bison in 2005. Lemmon began receiving water from the Perkins County Rural Water System in September 2005, and Bison in 2006. Rural distribution from the main transmission pipelines continued in 2006 with service being provided in the Lemmon and Shadehill service areas.
- The Perkins County Rural Water System continued to rely heavily on the state funding in 2007 receiving a total of \$2.0 million in state assistance consisting of \$1.5 million in grant and \$500,000 in loan. Federal Funding received in 2007 totaled \$358,000. This state and federal funding allowed Perkins County to award its fourth distribution system contract.
- Perkins County Rural Water System received \$500,000 in state funding in 2008 consisting of a \$356,000 loan and \$144,000 grant. These awards fulfilled the state's cost share commitment to Perkins County.
- Federal funding received in 2008 totaled \$3.0 million. A distribution system contract was awarded in August 2008 for 41 miles of pipeline to serve approximately 45 residential and pasture taps. Additionally in 2008, a 330,000-gallon water storage tank was built at the pump house. It will spread

out the water usage so that water from Southwest Water Authority can be used more efficiently.

- Perkins County Rural Water System received approximately \$2.3 million in federal funding in 2009 and received approximately \$4.5 million under the federal American Recovery and Reinvestment Act. The funding was partitioned between two phases, Phase VI, with \$1.0 million in funding, and Phase VII, with \$3.5 million in funding. The contract for Phase VI was awarded in August 2009 for 79 miles of pipeline to serve approximately 68 residential and pasture taps. This section of the distribution system will be completed in April 2010. Advertisement for bids on Phase VII will be completed by the end of year 2009. Phase VII will include 168 miles of pipeline and serve approximately 100 residential and pasture taps.
- During the months of April through June 2009, Perkins County Rural Water System conducted a study for an alternative water supply and water treatment plant utilizing the Shadehill Reservoir as a water source. Perkins County Rural Water System has a contract to receive 400 gallons per minute from Southwest Water Authority and the demand is projected to exceed the contracted amount.
- As part of the 2010 Energy and Water Appropriation bill, Perkins County Rural Water System was approved for \$1 million in funding.
- A \$3.2 million contract was awarded in February 2010 for Phase VII. Phase VII is anticipated to be completed by the end of calendar year 2010.
- In 2010, Perkins County Rural Water System was awarded \$3.2 million reprogrammed American Recovery & Reinvestment Act funding through the Bureau of Reclamation.

Sioux Falls Flood Control Project – 1989

- In 1961, the Corps of Engineers completed a channelization, levee, and diversion system to provide 100 year flood protection on the Big Sioux River and on Skunk Creek.
- Because of subsequent flooding events on the Big Sioux River and Skunk Creek, the Corps of Engineers re-analyzed the flood criteria in the early 1980's and determined that the 1% chance flood occurrence was greater than previously established. The Corps then recommended that the levee system be upgraded so that it would continue to provide Sioux Falls with 100-year flood protection on the Big Sioux River and Skunk Creek. Project upgrades include constructing a dam on the Big Sioux River just above the confluence of Skunk Creek as well as raising the levees along the Big Sioux River from Skunk Creek to Interstate 229, raising the levees along Skunk Creek from

Marion Road to the Big Sioux River, raising the levees above and along the diversion channel, modifying the spillway chute, replacing the stilling basin, and modifying some bridges.

- The 1992 State Legislature authorized project construction and a state cost share commitment of \$4.55 million. Federal authorization was completed as part of the 1996 Water Resources Development Act on October 12, 1996 (Public Law 104-303). The Act authorizes a \$34.6 million construction 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 was executed.
- Construction of Phase 1A of the Big Sioux River/Skunk Creek Flood Control Project was completed in 2001 and addressed the spillway and stilling basin area at the outfall of the diversion channel. Later that year bids were accepted on Phase 1B of the project addressing the levies adjacent to Morrell's downstream to Cliff Avenue.
- Sioux Falls continued to work with the Corps of Engineers on final design and construction of the project. State assistance totals \$2.9 million to date. Sioux Falls continued to secure required easements and properties for the project.
- Construction of Phase 2A of the project continued in 2007. Phase 2A work included improvements to the levees on the Big Sioux River from 49th Street to Interstate 229.
- Phase 2B of the project was completed in 2008. This work included the levee and associated structures on the east side of the Big Sioux River from 41st Street to 49th Street. The City is anticipating advancing sufficient funds to the US Army Corps of Engineers to complete Phase 2 work in the next two years. This is an ambitious schedule, but will reduce the high cost of flood insurance for many properties now being placed in the flood zone A of the National Flood Insurance Program.
- Phase 2C will raise about two miles of existing levees, approximately two to five feet, in order to provide 100-year flood protection along the Big Sioux River within the City of Sioux Falls. In October of 2009, the Corps of Engineers began accepting proposals for this phase of the project. Estimated costs for this phase are between \$7.5 million and \$10 million. Phase 2C of the Sioux Falls Flood Control project was awarded in February of 2010 for approximately \$12 million. The project is expected to be completed at the end of calendar year 2010.

- In December 2009, the city issued \$27 million in taxable revenue bonds. Seventeen million will be advanced to the Corps of Engineers for levy and dam construction. The balance is to pay for the 41st Street Bridge project.
- As part of the 2010 Energy and Water Appropriation bill, \$1.84 million was appropriated to the Corps of Engineers for the Sioux Falls Flood Control Project.
- In March 2010 the City of Sioux Falls began reconstructing the existing 41st Street bridge in order to raise the levee system. The project was substantially completed in September 2010.

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 project proposes to store Big Sioux River water for municipal use by Sioux Falls and for recreation and fish and wildlife activities. No activity took place on the project in 2010.

Southern Black Hills Water System – 2006

- The 2006 Omnibus Bill amended the State Water Resources Management System to add the Southern Black Hills Water System to the list of preferred, priority objectives for South Dakota. The bill also provided an initial appropriation of \$125,000 to allow the Southern Black Hills Water System to continue activities begun under the Black Hills Hydrology and Water Management Study (page 32).
- The project objective is to construct a rural regional water system capable of delivering quality drinking water to rural residents and area communities in Custer, western Fall River, and southern Pennington counties. Communities involved include Custer, Edgemont, Hermosa, Hill City, Hot Springs, Keystone, and Pringle.
- Project sponsors continued to work with representatives from the Department of Agriculture, Rural Development Program to secure funding for the construction of the North Hot Springs service area. In 2007, negotiations with the city of Hot Springs for a permanent water source failed to produce a contract.
- Local support continues to be strong for the project with area-wide rural signups near 500 individual homes. Additionally, strong interest continues to be expressed by the Custer State Park, the Mount Rushmore National Park,

the Crazy Horse Foundation, and the various area communities for water service from the system.

- In 2009, Southern Black Hills Water System secured an initial water source and received a water permit for a future well site. Southern Black Hills Water Systems secured easements for construction of pipeline and a storage reservoir.
- In 2009, Southern Black Hills Water System secured funding through Department of Agriculture, Rural Development Program for Phase I construction. Southern Black Hills is currently finalizing construction plans and anticipates opening for bids in early 2010. Phase I construction is planned for 2010.
- The 2010 Omnibus Bill appropriated \$350,000 for the engineering design, preconstruction activities, and construction. The 2010 Omnibus bill established the state cost share commitment at \$12 million.
- In 2010, Southern Black Hills opened bids and awarded three contracts for Phase I of the project. Phase I consists of a water treatment plant, an underground reservoir, and approximately 30 miles of distribution pipeline. Southern Black Hills received more than \$4.5 million in Rural Development loan and grant funding to assist with Phase I.

Vermillion Basin Flood Control Project – 1987

- The project objective is to address the severe flooding problems in the Vermillion River Basin. The basin covers 2,697 square miles in parts of 14 counties and is about 150 miles long with an average width of about 20 miles.
- In 1993, the Corps of Engineers completed The *Vermillion Basin Flood Control Reconnaissance Report* but failed to 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 (FEMA) Hazard Mitigation grant for a *Feasibility Study of Flood Control Alternatives* for the basin. In 1994, more than 70 technical experts met to develop a multi-objective plan to reduce flooding impacts in the Vermillion River Basin. The National Park Service compiled the group's issues and suggestions and formulated the multi-objective plan.
- The Vermillion River Watershed Authority was incorporated in December 1997 and is comprised of representatives from the Clay, Miner, Turner, McCook, and Lake county commissions.

- The Vermillion River Watershed Authority proposed to use FEMA Hazard Mitigation grant funds to widen the channel at the outlet of Lake Thompson and construct a control structure to retain the natural outlet elevation, channel maintenance along 19 miles of the Vermillion River and its tributaries, and wetland restoration and development throughout the basin. The cost benefit ratio for the outlet of Lake Thompson was found to be in error. The ratio was actually less than one; consequently, all FEMA Hazard Mitigation funds were withdrawn. The Authority has withdrawn its request to set the outlet elevation on Lake Thompson and has moved to dissolve after financial records are completed. No activity occurred on the project in 2010.

Recommendations to the Governor and State Legislature

In November 2010, the board conducted a public meeting on the State Water Resources Management System (SWRMS) projects. The board adopted Resolution #2010-99 recommending the deletion of the Slip-Up Creek Reservoir project from the SWRMS list and that all other projects are retained. The board also adopted Resolution #2010-100 providing its recommendations to the Governor and the Legislature for the Water and Environment Fund and SRF subfunds fiscal year 2012 appropriation levels. A summary of the board's recommendations is provided below (Table 12). Full resolutions are in Appendix B.

Table 12 – 2010 Board of Water and Natural Resources Funding Recommendations

| WATER AND ENVIRONMENT FUND AND GENERAL FUND | |
|---|--------------|
| Lake Andes Wagner (loan) | \$ 55,500 |
| Sioux Falls Flood Control | 3,310,000 |
| Southern Black Hills Water System | 2,000,000 |
| SWRMS Total | \$ 5,365,500 |
| | |
| Consolidated Water Facilities Construction Program | \$ 5,150,000 |
| | |
| Regional Landfill Construction Assistance | \$ 1,750,000 |
| | |
| Solid Waste Management Program | \$ 1,000,000 |
| | |
| SRF SUBFUNDS | |
| | |
| Clean Water State Revolving Fund (SRF) Admin Surcharge Fees | |
| Water Quality Grants | \$ 1,200,000 |
| SRF Application and Administration Assistance | \$ 200,000 |
| Drinking Water SRF Set-Asides and Admin Surcharge Fees | |
| Small System Technical Assistance | \$ 255,000 |
| SRF Application and Administration Assistance | \$ 200,000 |

Appendix A

Water and Environment Fund Special Condition Statement

WATER AND ENVIRONMENT FUND
Special Condition Statement
As of 7-1-10

| | | |
|---|---------------------|-----------------------------|
| Cash Balance from MSA - 6-30-10 | | \$16,583,057 |
| Prior Year Correction | | |
| Correction of Solid Waste Permit Fee Deposit | (\$4,313) | |
| Projected FY2011 Revenues | | |
| Capital Construction Fund | \$8,000,000 | |
| Contractors' Excise Tax | \$1,000,000 | |
| Investment Interest (Earned '10 deposited '11) | \$592,000 | |
| Loan Principal & Interest Payments (Water) | \$65,000 | |
| Loan Principal & Interest Payments (Solid Waste) | \$880,000 | |
| Solid Waste Fees | <u>\$1,650,000</u> | |
| Subtotal | \$12,182,688 | |
| Projected FY2011 Expenditures (Per SDCL 1-40-32) | | |
| Administrative Fee Fund | <u>(\$500,000)</u> | |
| Subtotal | (\$500,000) | |
| Revenues Less Expenditures | | <u>\$11,682,688</u> |
| Projected Fund Balance Available for Expenditure | | \$28,265,744 |
| Obligations (Signed contract by 7/1/10) | | |
| Consolidated | (\$6,644,777) | |
| Solid Waste & RLA Grants/Loans | (\$4,154,495) | |
| Rapid City Area Regional Study (07 Omnibus) | (\$6,682) | |
| SWRMS Grants/Loans - Major Projects | | |
| LA-Wagner | (\$26,027) | |
| Lewis & Clark RWS | (\$12,600,000) | |
| Southern Black Hills Water System | (\$918,179) | |
| West Dakota WDD | <u>(\$65,000)</u> | |
| Subtotal | | (\$24,415,160) |
| Project Expenditures Authorized by the Legislature - No agreement signed | | |
| Subtotal | | \$0 |
| Program Expenditures Authorized by the Legislature - No agreement signed | | |
| Consolidated Program Authority (2010 Omnibus) | (\$1,134,193) | |
| SWMP/RLA Authority (2010 Omnibus) | <u>(\$990,652)</u> | |
| | | <u>(\$2,124,845)</u> |
| Surplus/(Deficit) Funds Available (as of 6/30/11) | | <u>\$1,725,740</u> |

Appendix B

Board of Water and Natural Resources Resolutions

STATE OF SOUTH DAKOTA
BOARD OF WATER AND NATURAL RESOURCES
RESOLUTION #2010-100

PROVIDING TO THE SOUTH DAKOTA LEGISLATURE AND GOVERNOR, THE BOARD OF WATER AND NATURAL RESOURCES RECOMMENDATIONS FOR WATER AND ENVIRONMENT FUND FISCAL YEAR 2012 EXPENDITURE AUTHORIZATION LEVELS.

WHEREAS, SDCL 46A-1-2 provides the means for the planning, funding and construction of a state water plan and creates a State Water Resources Management System component and a State Water Facilities Plan component of the State Water Plan; and,

WHEREAS, pursuant to the authority provided in SDCL 46A-1-10, the Board of Water and Natural Resources (the Board) annually provides recommendations to the Governor and the State Legislature regarding deletions and additions to the State Water Resources Management System component of the State Water Plan; and,

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

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

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

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

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

WHEREAS, the Board has reviewed potential funding and technical assistance needs of projects that may require funding from the Clean Water State Revolving Fund Administrative Surcharge, Drinking Water State Revolving Fund Set-Asides, and Drinking Water State Revolving Fund Administrative Surcharge fees deposited in Water and Environment Fund Subfunds; and,

WHEREAS, the Board conducted a public hearing and adopted an Intended Use Plan that includes projects that require funding from the Clean Water State Revolving Fund Administrative Surcharge, Drinking Water State Revolving Fund Set-Asides, and Drinking Water State Revolving Fund Administrative Surcharge fees deposited in Water and Environment Fund Subfunds; and,

WHEREAS, the Board conducted a public meeting on November 4, 2010, to take statements from all interested parties regarding water development and solid waste funding needs.

NOW THEREFORE BE IT RESOLVED, that the Board recommends to the Governor and the State Legislature the Water and Environment Fund fiscal year 2012 appropriation level of five million one hundred fifty thousand dollars (\$ 5,150,000) for the Consolidated Water Facilities Construction Program; and,

IT IS FURTHER RESOLVED, that the Board recommends to the Governor and the State Legislature the following Water and Environment Fund fiscal year 2012 line-item appropriation levels for projects on the State Water Resources Management System:

| | |
|---------------------------------------|---------------------|
| Lake Andes-Wagner/Marty II Irrigation | \$ 55,500 |
| Sioux Falls Flood Control | \$ 3,310,000 |
| Southern Black Hills Water System | <u>\$ 2,000,000</u> |
| SWRMS Total | \$ 5,365,500 |

IT IS FURTHER RESOLVED, that the Board recommends to the Governor and the State Legislature the Water and Environment Fund fiscal year 2012 appropriation level of one million seven hundred fifty thousand dollars (\$ 1,750,000) for continued funding of construction, remediation, enlargement, closure, or upgrade of Regional Landfills; and,

IT IS FURTHER RESOLVED, that the Board recommends to the Governor and the State Legislature the Water and Environment Fund fiscal year 2012 appropriation level of one million dollars (\$ 1,000,000) for the Solid Waste Management Program; and,

IT IS FURTHER RESOLVED, that the Board recommends to the Governor and the State Legislature the following Water and Environment Fund Subfund fiscal year 2012 appropriation levels for the Drinking Water State Revolving Fund Set-Asides, and from the Clean Water State Revolving Fund Administrative Surcharge fees, and Drinking Water State Revolving Fund Administrative Surcharge fees approved in the respective 2011 Intended Use Plans for the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund Programs:

Clean Water State Revolving Fund (SRF) Admin Surcharge Fees

| | |
|---|--------------|
| Water Quality Grants | \$ 1,200,000 |
| SRF Application and Administration Assistance | \$ 200,000 |

Drinking Water SRF Set-Asides and Admin Surcharge Fees

| | |
|---|-------------------|
| Small System Technical Assistance | \$ 255,000 |
| SRF Application and Administration Assistance | <u>\$ 200,000</u> |

WEF Subfund Total: \$ 1,855,000

Dated this 30th day of November, 2010.

BY: /s/ Brad Johnson
Chairman, Board of Water and
Natural Resources

(SEAL)

ATTEST:

BY: /s/ Don Rounds
Secretary, Board of Water and
Natural Resources

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