

2023 State Water Plan

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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 by the board and the Department of Agriculture and Natural Resources (the department) 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 made 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. 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 2022, the board considered 22 applications requesting placement on the State Water Plan. The board placed all 22 projects on the Facilities Plan, bringing the total number of projects on the 2023 State Water Facilities Plan to 410 (Table 11 and Table 12).

The projects in Table 11 have received either partial or full funding. Projects that have received funding from the board remain on the Facilities Plan until project completion and remain eligible to request additional funding.

The projects or a portion of the project in Table 12 had not received funding as of December 31, 2022. Projects placed on the plan in November 2021 or that were amended onto the plan during calendar year 2022 remain on the Facilities Plan through December 2023. The 22 projects placed on the plan in November 2022 remain on the Facilities Plan through December 2024.

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 11 - 2023 State Water Facilities Plan Funded Projects

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Aberdeen	Wastewater Treatment Facility	\$51,323,000	\$56,323,000
Alcester	Collection System Improvements Phase 1	\$1,669,000	\$1,669,000
Alcester	Wastewater System Improvements Phase I	\$3,710,000	\$3,710,000
Alexandria	Water Distribution Improvements	\$500,000	\$500,000
Alexandria	Wastewater System Improvements	\$2,772,000	\$2,894,000
Andover	Wastewater and Storm Sewer System Improvements	\$1,168,000	\$1,168,000
Arlington	Phase 1 Collection System Improvements	\$1,036,698	\$1,190,310
Aurora	Sanitary Sewer Collection System Replacement	\$4,352,000	\$4,352,000
Aurora	Wastewater System Improvements Phase II	\$4,358,859	\$4,508,000
Aurora-Brule Rural Water System, Inc	System Improvements and Expansion	\$6,000,000	\$6,184,220
Baltic	Lift Station Replacement and Sewer Improvements	\$1,773,671	\$1,879,000
Baltic	Water System Improvements	\$1,828,671	\$1,934,000
BDM Rural Water System, Inc	Water System Improvements	\$11,537,000	\$11,537,000
Bear Butte Valley Water, Inc	Alkali Road Expansion	\$6,317,500	\$6,317,500
Belle Fourche	Hat Ranch Well Installation	\$1,760,000	\$1,760,000
Beresford	Seventh Street Utility Extension	\$672,000	\$672,000
Beresford	Wastewater Collection and Treatment Improvements	\$14,436,000	\$14,436,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Big Sioux Community Water System, Inc	Distribution System Improvements	\$17,788,000	\$17,788,000
Bison	Wastewater Collection and Treatment Improvements	\$2,214,000	\$2,214,000
Black Hawk Water User District	Water System Improvements Phase II	\$1,688,000	\$1,688,000
Blunt	Water Distribution System Improvements	\$657,000	\$657,000
Bowdle	Wastewater Improvements Project	\$2,345,309	\$2,429,000
Box Elder	Well #10 Construction	\$1,742,000	\$1,742,000
Box Elder	Sanitary Sewer Upgrade and Expansion	\$4,000,000	\$5,800,000
Box Elder	Drinking Water Improvements	\$6,190,500	\$6,190,500
Box Elder	Wastewater Improvements for Cheyenne Boulevard, Westgate Road, and South Trunk Main	\$6,261,000	\$6,261,000
Box Elder	Drinking Water Improvements	\$6,630,000	\$6,630,000
Brandon	Wastewater Infrastructure Improvements	\$1,345,005	\$2,690,010
Brandon	Water Tower and Booster Station	\$5,687,000	\$5,687,000
Brandon	Water Infrastructure Improvements	\$7,467,900	\$24,893,000
Brandon	Bethany Sewer Main Extension	\$478,837	\$3,625,000
Bridgewater	Sanitary and Storm Sewer Improvements	\$4,517,561	\$4,600,000
Britton	Lift Station and Sewer Improvements	\$1,416,830	\$1,531,000
Brookings	State Avenue Stormwater Improvements	\$850,000	\$850,000
Brookings	34th Avenue Wastewater Collection Improvements	\$4,000,000	\$4,000,000
Brookings	Water Treatment Facility	\$72,002,500	\$74,002,500

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Brookings-Deuel Rural Water System, Inc	Phase Tank Mainline Improvements	\$8,310,800	\$9,010,800
Bryant	Wastewater System Improvements	\$2,508,450	\$2,549,094
Bryant	Drinking Water System Improvements	\$2,072,100	\$2,112,694
Buffalo Gap	Cast Iron and 4-inch PVC Replacement	\$1,147,000	\$1,147,000
Butte-Meade Sanitary Water District	Drinking Water Improvements	\$3,325,000	\$3,325,000
Canistota	Watermain Replacements	\$667,000	\$667,000
Canistota	Sanitary/Storm Sewer Infrastructure Improvements	\$1,758,000	\$1,758,000
Canova	Water Infrastructure Improvements	\$190,000	\$190,000
Canton	Beaver Creek Trunk Sewer Improvements	\$2,339,689	\$2,658,000
Canton	Drinking Water Improvements	\$2,088,689	\$2,407,000
Castlewood	Distribution System Improvements and Tower Rehab	\$800,000	\$800,000
Cavour	Collection System Improvements	\$956,000	\$956,000
Chamberlain	Water Improvements	\$800,000	\$850,000
Chamberlain	Wastewater Improvements	\$2,100,000	\$2,500,000
Chancellor	Drinking Water Distribution System Improvements	\$2,288,000	\$2,288,000
Chancellor	Sanitary and Storm Sewer Improvements	\$3,489,000	\$3,489,000
Chancellor	Drinking Water Distribution Improvements Phase 2	\$1,300,000	\$1,300,000
Chancellor	Sanitary and Storm Sewer Improvements Phase 2	\$1,400,000	\$1,400,000
Claremont	Wastewater Improvements	\$625,000	\$625,000
Clark	Drinking Water System Improvements	\$7,612,370	\$7,857,370

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Clark Rural Water System, Inc	Willow Lake and Bradley System Improvements	\$2,950,000	\$2,950,000
Clay Rural Water System, Inc	2020 Improvements Project	\$2,185,000	\$2,185,000
Clay Rural Water System, Inc	Water System Improvements Project	\$16,517,000	\$16,517,000
Colman	Water Distribution Improvements 2022	\$230,400	\$230,400
Colman	Wastewater Collection System Improvements 2022	\$1,995,000	\$1,995,000
Colton	Sanitary Sewer Improvements Phase 4	\$2,609,000	\$2,609,000
Corona	Water Distribution System Improvements	\$391,000	\$391,000
Corsica	Water Distribution System Improvements	\$405,000	\$405,000
Corsica	Sanitary and Storm Sewer System Improvements	\$897,000	\$999,825
Cresbard	Distribution System Improvements	\$2,068,000	\$2,068,000
Cresbard	Sanitary and Storm Sewer Improvements	\$3,124,000	\$3,124,000
Crooks	Palmira Distribution	\$1,214,000	\$1,214,000
Crooks	Palmira Collection	\$2,400,000	\$2,400,000
Crooks	New Lift Station and Sanitary Sewer Expansion	\$1,823,000	\$1,823,000
Crooks	Eastside Lift Station	\$1,256,697	\$1,494,000
Custer	Treatment Facility Upgrade and Forcemain Slip-lining	\$1,539,000	\$1,539,000
Custer	Wastewater Treatment System Upgrade Phases 2 and 3	\$11,090,000	\$11,442,109
Dakota Dunes Community Improvement District	Parallel Sanitary Sewer Line	\$415,780	\$519,220

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Dakota Dunes Community Improvement District	Forcemain Improvements	\$658,733	\$823,416
Dakota Dunes Community Improvement District	Water System Improvements	\$686,400	\$857,000
DANR	Riparian Buffer Initiative	\$1,000,000	\$1,000,000
Davison Rural Water System, Inc	Water Distribution Improvements and Meter Upgrade	\$1,250,000	\$1,256,042
Deer Mountain Sanitary District	Water System Construction/Replacement	\$5,221,350	\$5,221,350
Dell Rapids	Southeast Phase 1 and Railroad Wastewater Improvement	\$4,324,000	\$4,324,000
Dell Rapids	Southeast Phase 1 and Railroad Water Improvement	\$2,486,000	\$2,486,000
Dell Rapids	5th/6th/ Iowa Street Wastewater Improvements	\$2,714,000	\$2,714,000
Dell Rapids	5th/6th/ Iowa Street Water Improvements	\$926,000	\$926,000
Dell Rapids	3rd Street Drinking Water Improvements	\$2,136,000	\$2,136,000
Dell Rapids	3rd Street Sanitary Sewer/Storm Sewer Improvements	\$5,273,071	\$5,890,000
Delmont	Sanitary Sewer Line Replacement	\$1,210,000	\$1,210,000
DeSmet	Water Distribution System Improvements	\$565,000	\$565,000
DeSmet	Wastewater Collection System Improvements 2022	\$1,899,750	\$2,090,000
DeSmet	Water Distribution Improvements 2022	\$5,050,000	\$5,050,000
Dupree	Wastewater System Improvements	\$3,238,562	\$4,008,562
Edgemont	Water System Upgrades	\$700,000	\$700,000
Edgemont	Iron Removal System Installation	\$637,000	\$637,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Elk Point	Washington and Douglas Streets Water Improvements	\$495,000	\$495,000
Elk Point	Washington and Douglas Streets Wastewater Improvements	\$593,000	\$593,000
Elkton	Wastewater Improvements Phase I	\$4,000,000	\$4,000,000
Elkton	Water Improvements Phase I	\$2,000,000	\$2,000,000
Elkton	Wastewater Improvements Phase II	\$2,165,000	\$2,165,000
Elkton	Water Improvements Phase II	\$2,587,000	\$2,587,000
Ellsworth Development Authority	West River Water Regionalization Study	\$300,000	\$300,000
Emery	Storm Sewer Improvements	\$2,494,000	\$2,494,000
Faith	New Elevated Water Storage Tank	\$3,000,000	\$3,000,000
Fall River Water Users District	Water System Improvements	\$10,007,000	\$10,007,000
Flandreau	Wastewater Collection System Improvements 2022	\$4,172,919	\$4,380,000
Flandreau	Water Distribution Improvements 2022	\$4,232,919	\$4,440,000
Fort Pierre	Wastewater Treatment System Improvements	\$3,701,000	\$3,701,000
Fort Pierre	Storage Tank	\$4,629,381	\$24,679,078
Garretson	Dows Street Watermain Improvements	\$92,900	\$202,000
Gayville	Sanitary/Storm Sewer Rehabilitation	\$4,858,000	\$4,929,000
Grant-Roberts Rural Water System, Inc	Internal System Improvements	\$6,794,000	\$6,794,000
Green Valley Sanitary District	Centralized Sewer Collection System	\$2,370,000	\$9,722,000
Gregory	Water Distribution Improvements	\$3,485,000	\$3,485,000
Gregory	Wastewater Improvements Phase I	\$4,452,000	\$4,452,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Groton	Water System Improvements	\$1,798,000	\$1,798,000
Groton	Watermain Improvements	\$1,326,000	\$1,326,000
Hanson Rural Water System, Inc	Water Distribution Improvements and Meter Upgrade	\$3,630,000	\$3,639,529
Harrisburg	Westside Trunk and Southeastern Sewer Improvements	\$16,459,073	\$17,749,000
Harrisburg	Wastewater Treatment Facility Construction	\$24,487,000	\$24,487,000
Harrisburg	Southeastern Water Improvements	\$6,305,000	\$6,305,000
Hartford	Western Avenue Sewer Improvements	\$1,334,000	\$1,334,000
Hartford	Wastewater Treatment Facility/Collection System	\$16,162,216	\$16,762,000
Hermosa	Drinking Water Source and Gumbo Lily Lane Extension	\$3,025,000	\$3,525,000
Hermosa	Lagoon Expansion and Gumbo Lily Lane Extension	\$1,074,000	\$1,150,000
High Meadows Water Association, Inc	Drinking Water Improvements	\$1,140,000	\$1,140,000
Howard	Wastewater Collection System Improvements Phase I	\$5,137,864	\$5,274,000
Hudson	Sanitary Sewer Improvements Phase 2	\$1,378,000	\$1,678,000
Hudson	Water System Improvements	\$1,799,305	\$2,161,000
Humboldt	Sanitary Sewer Improvements	\$2,801,000	\$2,801,000
Humboldt	Water Distribution Improvements	\$425,700	\$425,700
Hurley	Center Avenue Collection System Improvements	\$900,000	\$2,089,000
Huron	DEX Storm Sewer Improvements	\$720,000	\$5,030,000
Huron	Wastewater Infrastructure Improvements 2022	\$1,903,500	\$6,345,000
Huron	Water System Improvements 2022	\$4,872,084	\$13,032,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Huron	Sequencing Batch Reactor Replacement	\$14,946,000	\$14,946,000
Ipswich	Storm Sewer Upgrades	\$2,584,482	\$2,584,482
Irene	Wastewater Treatment Improvements	\$584,000	\$584,000
Irene	Water Tower Improvements	\$2,024,000	\$2,024,000
Isabel	Wastewater Collection Improvements	\$1,247,039	\$2,044,374
James River Water Development District	South Central Watershed Implementation Project Segment 2	\$5,000,000	\$46,895,340
Joint Well Field, Inc	Water Treatment Plant Improvements	\$6,273,000	\$6,273,000
Joint Well Field, Inc	New Water Treatment Plant	\$9,460,000	\$9,560,000
Kadoka	Poplar Street Drinking Water Improvements	\$641,000	\$641,000
Kadoka	Sanitary and Storm Sewer Improvements	\$2,744,781	\$2,873,000
Kennebec	Sewer and Storm Sewer Improvements	\$2,392,000	\$3,132,000
Keystone	New Well Construction	\$195,000	\$244,000
Kingbrook Rural Water System, Inc	Carthage Watertower Improvements	\$360,000	\$360,000
Kingbrook Rural Water System, Inc	2022 System Improvement Project	\$32,750,000	\$33,000,000
Lake Norden	Wastewater Lagoon Improvements	\$2,580,000	\$2,580,000
Lake Norden	Water Storage Tower	\$2,019,000	\$2,019,000
Lake Poinsett Sanitary District	Lift Station and Collection System Improvements	\$4,600,000	\$4,600,000
Lake Preston	Wastewater Collection System Improvements	\$2,992,000	\$2,992,000
Lake Preston	Water Distribution System Improvements	\$5,610,000	\$5,610,000
Lake Preston	Phase 2 Drinking Water Improvements	\$2,599,000	\$2,599,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Lake Preston	Phase 2 Sanitary Sewer Utility Improvements	\$2,921,000	\$2,921,000
Lead	Mill Street Waterline Replacement	\$187,287	\$763,931
Lead	Mill Street Wastewater and Storm Sewer Separation	\$272,632	\$913,285
Lead-Deadwood Sanitary District	Wastewater Treatment Plant Improvements	\$907,000	\$907,000
Lead-Deadwood Sanitary District	Drinking Water System Improvements	\$3,720,000	\$3,720,000
Lennox	Boynton Avenue Water Improvements	\$868,000	\$868,000
Lennox	Boynton Avenue Wastewater Improvements	\$2,809,000	\$2,809,000
Lennox	Central Basin Water Improvements Phase 4	\$2,976,000	\$2,976,000
Lennox	Central Basin Wastewater Improvements Phase 4	\$7,279,000	\$7,279,000
Lesterville	Storm Sewer System Improvements	\$1,310,000	\$1,335,000
Lewis and Clark Regional Water System, Inc	Water System Expansion	\$13,136,100	\$43,787,000
Lincoln County Rural Water System, Inc	Eastern Distribution System Improvements	\$3,791,000	\$3,791,000
Madison	Sanitary Sewer Improvements Segments 1 - 6	\$5,192,400	\$5,692,400
Madison	Drinking Water Improvements Segments 1 - 6	\$11,658,500	\$12,308,500
Marion	Broadway Avenue Water Improvements Phase I	\$1,493,682	\$2,293,500
Marion	Broadway Avenue Wastewater Improvements Phase I	\$1,543,682	\$2,243,500
McLaughlin	Drinking Water Improvements	\$962,396	\$1,732,396
Mid-Dakota Rural Water System, Inc	Water System Improvements	\$45,335,000	\$45,335,000
Miller	Water Improvements - Phase III	\$2,500,000	\$2,500,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Miller	Wastewater Improvements - Phase III	\$4,239,000	\$5,239,000
Miller	Phase IV Wastewater	\$797,000	\$910,000
Miller	Phase IV Water	\$4,194,000	\$4,307,000
Mina Lake Sanitary District	Water Meter Replacement	\$352,000	\$352,000
Minnehaha Community Water Corp., Inc	Water Storage and Capacity Improvements	\$7,510,000	\$7,510,000
Minnehaha Community Water Corp., Inc	Water Distribution Improvements	\$44,349,000	\$44,349,000
Mission Hill	Wastewater System Improvements	\$820,000	\$851,010
Mitchell	East Central Drainage Sanitary/Sewer Improvements Phase II	\$1,000,000	\$4,200,000
Mitchell	Daily Drive Lift Station Replacement	\$1,500,000	\$1,500,000
Mitchell	Water Tower Improvements	\$1,175,000	\$1,175,000
Mitchell	Livesay Lane Wastewater and Storm Water	\$1,245,000	\$1,245,000
Mitchell	Water Distribution Improvements	\$2,840,000	\$2,840,000
Mitchell	Wastewater Treatment Facility Improvements	\$18,789,000	\$20,831,000
Mitchell	Wastewater Collection System Improvements	\$4,760,000	\$4,760,000
Mitchell	Drinking Water System Improvements	\$11,000,000	\$11,000,000
Mitchell	Wastewater Treatment Facility Improvements Phase 2	\$27,195,000	\$30,000,000
Mni Wasté Water Company	Intake Emergency Slide Repair	\$1,238,302	\$2,938,302
Mni Wasté Water Company	Highway 63 North	\$6,448,598	\$43,441,000
Mobridge	Drinking Water System Improvements	\$10,677,851	\$11,297,730
Montrose	Sanitary Sewer and Treatment System Improvements	\$363,200	\$363,200

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Morristown	Potable Water System Improvements	\$202,600	\$214,760
Newell	Wastewater System Improvements	\$603,000	\$709,000
Newell	Water System Improvements	\$992,000	\$1,142,000
North Sioux City	Southwest Sewer Basin	\$6,863,000	\$7,060,897
North Sioux City	Streeter Drive Water Treatment Plant Expansion	\$7,351,000	\$7,651,000
North Sioux City	Water Tower Construction	\$2,700,000	\$2,700,000
Northdale Sanitary District	Sanitary Sewer Line Relocation	\$440,000	\$440,000
Northville	Drinking Water System Improvements	\$1,224,320	\$1,250,250
Onida	Water Distribution Improvements Phase 2	\$2,000,000	\$2,000,000
Onida	Wastewater System Improvements Phase 2	\$3,746,000	\$5,700,000
Parker	Watermain Improvements Phase 6	\$3,707,000	\$3,707,000
Parker	Wastewater Improvements Phase 6	\$4,625,000	\$4,625,000
Parkston	Wastewater Collection/Treatment Improvements	\$3,016,000	\$3,280,300
Peever	Wastewater Collection and Treatment Improvements	\$2,577,173	\$2,606,500
Perkins County Rural Water System, Inc	Water Storage Tank and Pipeline Improvements	\$7,060,000	\$7,060,000
Philip	Northeast Wastewater System Improvements	\$216,698	\$353,500
Pickerel Lake Sanitary District	Wastewater Collection Improvements	\$4,263,000	\$4,263,000
Pickstown	Wastewater Improvements	\$1,362,000	\$1,400,000
Pierpont	Water Meter Replacement	\$132,000	\$132,000
Pierre	Wastewater Treatment Facility Improvements	\$15,310,000	\$15,310,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Pierre	Water Treatment System Construction	\$36,850,000	\$36,850,000
Plankinton	Wastewater Collection System Improvements	\$5,306,000	\$5,430,250
Platte	Drinking Water System Improvements	\$426,000	\$1,349,175
Platte	Wastewater Improvements	\$690,000	\$693,000
Pleasant Valley Homeowners Association, Inc	Drinking Water Improvements	\$398,000	\$398,000
Powder House Pass Community Improvement District	Water Resource Recovery Facility Expansion and Lift Station	\$7,501,000	\$7,501,000
Presho	Water Meters	\$150,000	\$150,000
Presho	Collection System Improvements	\$4,048,000	\$4,048,000
Randall Community Water District	Geddes Consolidation and System Improvements	\$5,600,000	\$5,600,000
Randall Community Water District	Internal System Improvements	\$9,036,250	\$9,036,250
Randall Community Water District	Regional Waterline Upgrade	\$49,991,000	\$49,991,000
Randall Community Water District	Regionalization to Mitchell	\$45,000,000	\$45,000,000
Rapid City	Booster Station Improvements	\$350,000	\$785,000
Rapid City	Water Reclamation Facility Upgrades	\$3,400,000	\$7,400,000
Rapid City	South Plant Water Reclamation Facility Improvements	\$145,000,000	\$145,000,000
Rapid Valley Sanitary District	System Expansion for Service to Box Elder	\$6,679,000	\$12,028,000
Ravinia	Stormwater Drainage System Improvements	\$1,865,000	\$1,865,000
Raymond	Lift Station and Lagoon Improvements	\$60,000	\$1,011,225
Roscoe	Water Improvements	\$2,883,000	\$2,883,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Roscoe	Infrastructure Improvements	\$4,320,000	\$4,700,834
Rosholt	Water Tower Construction	\$2,150,000	\$2,150,000
Saint Lawrence	Sanitary Sewer Cleaning and Televising	\$71,000	\$71,000
Saint Lawrence	Wastewater Collection System Improvements	\$2,487,000	\$2,487,000
Saint Lawrence	Water System Improvements	\$1,148,000	\$1,148,000
Salem	2021 Storm Sewer Improvements	\$847,000	\$847,000
Salem	Industrial Area Water Improvements	\$1,417,000	\$1,417,000
Salem	Industrial Area Wastewater Improvements	\$2,704,000	\$2,704,000
Seneca	Sewer Improvements	\$351,950	\$351,950
Shared Resources, Inc	Water Treatment Plant, Storage and Distribution	\$108,260,000	\$108,260,000
Sioux Falls	Brandon Road Lift Station Parallel Force Main	\$11,400,000	\$11,400,000
Sioux Falls	Primary Digester Mixing Improvements - 2016	\$11,000,000	\$11,000,000
Sioux Falls	Stormwater Improvements Basins 95, 104 and 371	\$9,000,000	\$9,000,000
Sioux Falls	Water Reclamation Facility Expansion	\$225,025,000	\$231,825,000
Sioux Falls	Transmission Redundancy and Well 25 Replacement	\$12,500,000	\$12,500,000
Sioux Rural Water System, Inc	Water System Improvements - 2018	\$10,921,000	\$11,321,000
Sioux Rural Water System, Inc	Water System Improvements	\$4,981,000	\$5,081,000
South Lincoln Rural Water System, Inc	Water System Improvements	\$27,564,000	\$27,564,000
South Shore	Water System Improvements	\$1,635,000	\$1,635,000
Southern Black Hills Water System, Inc	Paramount Point to Spring Creek Acres Extension	\$3,600,000	\$3,600,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Spearfish	Exit 17 Water Tank and Well	\$4,620,000	\$4,620,000
Spearfish	Wastewater Conveyance and Treatment Improvements	\$8,521,000	\$8,521,000
Spring/Cow Creek Sanitary District	Wastewater Treatment Improvements	\$1,232,860	\$1,232,860
Spring/Cow Creek Sanitary District	Water Storage and Infrastructure	\$2,220,000	\$2,220,000
Springfield	Water Line Replacement	\$190,000	\$380,000
Springfield	Water Treatment Plant Replacement	\$2,000,000	\$2,000,000
Stratford	Wastewater Treatment and Televising Improvements	\$128,220	\$128,220
Stratford	Drinking Water Improvements	\$2,172,000	\$2,172,000
Sturgis	Drinking Water Improvements	\$4,968,000	\$5,688,000
Summerset	Wastewater Treatment Plant Expansion	\$9,519,321	\$9,995,000
Tabor	Wastewater Collection System Improvements	\$4,150,000	\$4,900,000
Tea	Sanitary Sewer Regionalization	\$5,539,000	\$5,539,000
Tea	Hagedorn Water Improvements	\$593,634	\$1,764,000
Tea	Sanitary Sewer Improvements	\$670,626	\$1,778,000
Tea	85th Street Elevated Storage Tank	\$2,700,000	\$2,700,000
Tea	Regionalization with Sioux Falls	\$8,394,000	\$8,394,000
Terry Trojan Water Project District	Water System Rehabilitation	\$812,000	\$812,000
Terry Trojan Water Project District	New Storage Tank	\$757,400	\$757,400
Timber Lake	Wastewater Improvements	\$2,693,400	\$3,513,400
Timber Lake	Water Distribution and Storage Improvements	\$3,175,491	\$4,034,725

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
TM Rural Water District	Water System Improvements	\$8,448,000	\$8,448,000
Tripp County Water User District	System Wide Improvements	\$13,300,000	\$13,500,000
Tulare	Drinking Water Improvements	\$1,395,000	\$2,145,000
Tulare	Wastewater Improvements	\$2,502,267	\$2,540,000
Tyndall	Collection System Improvements	\$873,000	\$1,056,000
Tyndall	Watermain Replacement	\$2,000,000	\$2,000,000
Valley Springs	Water Utilities Improvements	\$1,603,000	\$1,603,000
Valley Springs	Sanitary Sewer Utilities Improvements	\$1,779,000	\$1,779,000
Valley Springs	Drinking Water System Improvements 2022	\$3,539,728	\$3,605,000
Vermillion	New Landfill Cells 6 and 7	\$2,466,000	\$2,466,000
Vermillion	Tom Street Lift Station Replacement	\$502,500	\$1,075,000
Viborg	Park Avenue Storm and Sanitary Sewer Improvements	\$800,000	\$1,771,000
Volga	Wastewater Collection System Improvements	\$1,980,200	\$2,405,000
Volga	Drinking Water System Improvements	\$2,162,340	\$2,525,000
Volga	Water Tower Construction	\$3,700,000	\$3,700,000
Wagner	Walnut Avenue Watermain Upgrade	\$237,500	\$475,000
Watertown	Landfill Improvements Cell #7 Construction	\$2,040,000	\$2,147,076
Watertown	Water Treatment Plant Equipment Upgrades	\$999,640	\$999,640
Watertown	Wastewater Facility Administration and Operation Building Construction	\$5,000,000	\$5,000,000
Watertown	Primary Clarifier Replacement	\$2,500,000	\$2,500,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Watertown	Watermain Replacement Mellette and Harmony Hill	\$3,341,500	\$3,341,500
Watertown	Cast Iron Main Replacement	\$4,862,300	\$4,862,300
Watertown	New Well Field Development	\$6,939,000	\$6,939,000
Watertown	Wastewater Collection and Treatment Improvements	\$32,014,000	\$35,714,000
Waubay	Wastewater Treatment Facility Bank Stabilization	\$1,365,000	\$1,365,000
WEB Water Development Association, Inc	Raw Water Pipe Expansion	\$6,520,000	\$11,202,000
WEB Water Development Association, Inc	Highway 83 to 212 Treated Water Pipeline	\$32,710,000	\$48,500,900
Webster	Storm Water Improvements Project	\$353,000	\$353,000
Webster	Water Line Replacement	\$6,631,000	\$6,631,000
Webster	Sewer Line Replacement	\$1,184,000	\$1,184,000
Webster	Water System Improvements - Phase II	\$4,278,673	\$4,433,000
Webster	Wastewater Improvements Project Phase II	\$7,403,673	\$7,558,000
Wessington	Cleaning and Televising	\$23,000	\$46,000
Wessington Springs	College Avenue Wastewater Improvements	\$322,700	\$322,700
Wessington Springs	2nd Street Wastewater Replacement	\$176,387	\$176,387
Wessington Springs	2nd Street Drinking Water Improvements	\$180,883	\$773,238
Wessington Springs	College Avenue Drinking Water Improvements	\$679,000	\$679,000
West River/Lyman-Jones Rural Water System, Inc	Water Distribution and Storage Improvements	\$4,000,000	\$4,000,000

<u>Sponsor</u>	<u>Project Description</u>	<u>Amount Funded</u>	<u>Total Project</u>
Westberry Trails Water Users Association, Inc	Drinking Water Improvements	\$1,465,650	\$1,465,650
Weston Heights Sanitary District	New Water Storage Reservoir	\$3,871,000	\$3,871,000
White	Watermain Replacements	\$2,501,800	\$2,501,800
White	Sanitary Sewer Line Replacements	\$2,567,100	\$2,567,100
Wilmot	Wastewater Collection System Improvements	\$4,002,408	\$4,092,000
Wolsey	Pumphouse Replacement	\$326,000	\$326,000
Worthing	Wastewater Treatment Facility Improvements	\$2,754,961	\$2,845,000
Yankton	Wastewater Treatment Improvements Phase 1	\$4,500,000	\$4,500,000
Yankton	Wastewater Collection Improvements	\$7,200,000	\$7,200,000
Yankton	Water Distribution and Storage Improvements	\$8,202,000	\$8,202,000
Yankton	Wastewater Treatment Plant Improvements Phase 2	\$42,000,000	\$44,565,600
Total		\$2,115,338,628	\$2,389,767,566

Table 12 - 2023 State Water Facilities Plan Unfunded Projects

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Projected State Funding</u>	<u>Total Project</u>
Aberdeen	Raw Water Intake and Transmission Pipeline	2023	\$454,000,000	\$454,000,000
Aberdeen	Water Treatment Facility	2023	\$36,139,132	\$36,139,132
Angostura Irrigation District	Irrigation Pipe Repair	2023	\$194,062	\$194,062
Bear Butte Valley Water, Inc	Backup Well and Tilford Road Loop	2023	\$4,998,000	\$4,998,000
Bear Butte Valley Water, Inc	Elk Vale Road Loop	2023	\$8,947,000	\$8,947,000
Belle Fourche	Gallery Springs Line Replacement	2023	\$5,328,000	\$5,328,000
Bison	Wastewater Collection and Treatment System	2023	\$4,765,034	\$4,765,034
Britton	Industrial Park Wastewater Improvements	2023	\$532,000	\$532,000
Britton	Industrial Park Water Improvements	2023	\$1,043,000	\$1,043,000
Brookings	Lead Water Service Line Replacement Program	2023	\$920,000	\$920,000
Brookings	Research Park Sanitary Sewer	2023	\$2,354,000	\$2,354,000
Brookings	SW and East Sewer Interceptor Replacement Phase 2	2023	\$6,700,000	\$6,700,000
Chester Sanitary District	Wastewater Collection System Improvements	2023	\$3,600,000	\$3,600,000
Chester Sanitary District	Water System Improvements	2023	\$6,500,000	\$6,500,000
Clay Rural Water System, Inc	Water Treatment and Storage Improvements	2023	\$26,016,000	\$26,016,000
Copper Oaks 1, Inc	Water System Improvements	2024	\$91,652	\$91,652
Corona	Wastewater System Improvements	2023	\$1,926,000	\$1,926,000
Crooks	Water Tower and Water System Improvements	2023	\$5,683,000	\$5,683,000
Dell Rapids	Sewer Infrastructure Improvements	2023	\$23,702,000	\$23,702,000
Ellsworth Development Authority	Meade County Area Water System	2023	\$12,191,552	\$12,191,552
Emery	Water Meter Replacement	2024	\$68,000	\$118,000

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Projected State Funding</u>	<u>Total Project</u>
Fort Pierre	Drinking Water Treatment Plant Construction	2023	\$19,651,000	\$19,651,000
Freeman	Water and Sewer Improvements	2023	\$2,885,174	\$2,885,174
Garretson	Sanitary and Storm Sewer Improvements	2023	\$4,036,000	\$4,036,000
Garretson	Watermain Improvements	2023	\$3,578,662	\$3,578,662
Geddes	Storm Sewer Replacement	2023	\$378,132	\$378,132
Gregory	Wastewater System and Water Distribution Improvement	2023	\$23,163,700	\$23,163,700
Harrisburg	Westside Trunk Sewer Phase 2	2024	\$11,611,147	\$11,611,147
Henry	Water System Improvements	2023	\$6,120,000	\$6,120,000
Henry	Wastewater System Improvements	2023	\$8,047,800	\$8,047,800
Hill City	Water System Supply Improvements	2023	\$637,500	\$637,500
Hot Springs	North River Street Sewer Replacement	2024	\$800,000	\$1,000,000
Hot Springs	North River Street Sewer Replacement	2024	\$1,054,025	\$1,400,000
Hot Springs	Water System Supply and Storage	2023	\$4,250,000	\$4,250,000
Howard	Water Distribution System Improvements	2024	\$3,652,600	\$3,652,600
Humboldt	Water Storage Improvements	2024	\$2,085,638	\$2,085,638
Hurley	Sanitary Sewer Improvements	2023	\$820,000	\$820,000
Keystone	Bullion Street Water and Wastewater Replacement	2023	\$1,187,606	\$1,187,606
Kimball	Main Street Water and Sewer Improvements	2024	\$1,139,840	\$3,456,563
Lake Andes	Lift Station and Forcemain Improvements	2023	\$1,230,000	\$1,230,000
Lake Preston	Elevated Water Storage Tower	2024	\$2,000,000	\$2,000,000
Lennox	Trunk Sewer Installation and Lift Station Replacement	2024	\$16,802,280	\$16,802,280
Lennox	Central Basin and Wastewater Treatment Improvements	2023	\$15,012,000	\$15,012,000
Mitchell	Lake Mitchell Dredging and Restoration	2024	\$38,465,000	\$38,465,000

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Projected State Funding</u>	<u>Total Project</u>
Mitchell	Wastewater System Improvements	2023	\$23,100,000	\$23,100,000
Mobridge	Wastewater System Improvements	2023	\$3,000,000	\$3,000,000
Murdo	Water Meter Improvements	2023	\$429,276	\$429,276
New Underwood	Drinking Water System Improvements	2024	\$7,580,000	\$7,580,000
Oglala Lakota County School	Wolf Creek School Water Storage	2023	\$1,471,000	\$1,471,000
Philip	Wastewater and Storm Sewer Improvements	2023	\$3,164,500	\$3,164,500
Piedmont	Central Wastewater System	2023	\$4,500,000	\$4,500,000
Piedmont	Water Tower and Well	2023	\$2,200,000	\$2,200,000
Pine Grove Community Water Association, Inc	Drinking Water System Improvements	2023	\$1,434,700	\$1,434,700
Pukwana	Sewer Line Extension	2023	\$240,000	\$240,000
Rapid City	East Side Water Treatment Facility	2023	\$135,000,000	\$135,000,000
Rapid City	Solid Waste Cell #16, Gas Collection System, and Flare Replacement	2023	\$6,650,000	\$6,650,000
Rapid Valley Sanitary District	Water Resource Recovery and Collection System Improvements	2023	\$51,575,000	\$51,575,000
Raymond	Water System Improvements	2023	\$2,444,200	\$2,444,200
Reliance	Drainage Improvements	2024	\$146,230	\$146,230
Salem	Sanitary and Storm Sewer Improvements Phase 2	2024	\$6,833,000	\$6,833,000
Salem	Watermain Improvements Phase 2	2024	\$3,521,000	\$3,521,000
Salem	Wastewater Improvements Phases 2 and 3	2023	\$8,015,000	\$8,015,000
Salem	Water System and Water Treatment Improvements	2023	\$9,281,000	\$9,281,000
Sioux Falls	Basin 15 Sanitary Sewer Expansion	2023	\$21,065,500	\$21,065,500
Sioux Falls	Pump Station 240 Capacity Improvements	2023	\$35,000,000	\$35,500,000

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Projected State Funding</u>	<u>Total Project</u>
South Dakota Bureau of Administration	Capitol Lake Water Quality Improvements and Potable Water Conservation	2024	\$2,500,000	\$7,000,000
Springfield	Wastewater System Improvements	2023	\$6,800,000	\$6,800,000
Stratford	Drinking Water System Improvements	2023	\$3,498,800	\$3,498,800
Stratford	Wastewater System Improvements	2023	\$5,139,335	\$5,139,335
Sturgis	Sanitary Sewer Improvements - 2022	2023	\$10,338,964	\$10,338,964
Sturgis	Sanitary Sewer Rehabilitation	2023	\$19,751,760	\$19,751,760
Tripp	Storm Water System Upgrades	2023	\$1,913,000	\$1,913,000
Tripp	Water System Improvements/ B-Y Connection	2023	\$1,700,000	\$1,700,000
Tyndall	Stormwater System	2023	\$2,930,000	\$2,930,000
Tyndall	Wastewater Collection System Improvements	2023	\$13,860,000	\$13,860,000
Valley Springs	Drinking Water Improvements	2023	\$5,412,000	\$5,412,000
Valley Springs	Sanitary Sewer Improvements	2023	\$2,568,000	\$2,568,000
Vermillion	Landfill Leachate Pond #2 Construction	2023	\$1,300,000	\$1,300,000
Vermillion	Wastewater Treatment Facility Upgrades	2024	\$21,960,000	\$21,960,000
Vermillion	Water Treatment Facility Upgrades	2024	\$6,637,142	\$6,637,142
Volga	Drinking Water Treatment System Upgrades	2023	\$290,882	\$290,882
Wagner	Wastewater System Improvements	2023	\$11,500,000	\$11,500,000
Wagner	Water System Improvements	2023	\$9,400,000	\$9,400,000
Wall	Sanitary Sewer Replacement	2023	\$1,366,413	\$1,366,413
Wall	Water Main Replacement	2023	\$1,378,750	\$1,378,750
WEB Water Development Association, Inc	Water System Improvements	2023	\$214,993,415	\$214,993,415
Wessington	Drinking Water System Improvements	2024	\$673,000	\$673,000

<u>Sponsor</u>	<u>Project Description</u>	<u>On Plan Through</u>	<u>Projected State Funding</u>	<u>Total Project</u>
Wessington Springs	Wastewater Treatment Facility Upgrades	2024	\$575,000	\$1,079,000
Whitewood	Wastewater Treatment Facility Upgrades	2024	\$3,758,000	\$3,758,000
Wolsey	Wastewater Outfall Line Replacement	2024	\$255,725	\$255,725
Worthing	Water Distribution Infrastructure Improvements	2023	\$3,866,000	\$3,866,000
		Total	\$1,455,323,128	\$1,463,829,826

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 13) 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.

Table 13 – State Water Resources Management System Projects

<u>Project</u>	<u>Description</u>
Belle Fourche Irrigation Upgrade Project	Irrigation Project – Belle Fourche Region
Big Sioux Flood Control Study	Watertown Flood Control
CENDAK Irrigation Project	Irrigation Project - Central SD
Gregory County Pumped Storage Site	Multi-Purpose Water Utilization
Hydrology and Water Management Studies	Statewide Water Resources
Lake Andes-Wagner/Marty II Irrigation Unit	Irrigation - Charles Mix County
Lewis and Clark Rural Water System	Bulk Water System - Southeastern SD
Sioux Falls Flood Control Project	Increased Flood Protection
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 (SWRMS).

Belle Fourche Irrigation Upgrade Project - 2012

- The 2012 Omnibus Bill added the Belle Fourche Irrigation District upgrade project to the SWRMS list. The project was for the construction of a \$5,000,000 Belle Fourche irrigation upgrade project to include replacement of the Indian Creek siphon, the Horse Creek siphon, the north canal control house, the south canal control house, repair of the Belle Fourche River siphon, and removal of sediment from the south canal intake for the purpose of stabilizing crop and forage production in central western South Dakota to offset the effects of drought conditions which naturally devastate South Dakota's economic viability.

- South Dakota Codified Law 46A-1-13.12 authorized a state cost share commitment of up to \$2,500,000 in grant and \$2,500,000 in loan assistance to provide funding for the Belle Fourche Irrigation District upgrade project.
- The appropriations for 2012 included a \$1,250,000 grant and a \$1,250,000 loan for engineering design, preconstruction, and construction of the facilities associated with the Belle Fourche irrigation upgrade project.
- During calendar years 2012 and 2013, engineering design of siphons and the canal gatehouse was on-going.
- The appropriations for 2013 included a \$750,000 grant and a \$750,000 loan for engineering design, preconstruction, and construction of the facilities associated with the Belle Fourche irrigation upgrade project.
- The appropriations for 2014 included a \$500,000 grant and a \$500,000 loan for engineering design, preconstruction, and construction of the facilities associated with the Belle Fourche irrigation upgrade project. This completed the state cost share commitment to the upgrade project.
- Bids were opened and awarded for the Indian Creek and Horse Creek siphons in 2013, and construction started in October of 2013. The Indian Creek siphon was completed in 2014 and was operational for the 2014 irrigation season. The Horse Creek siphon was completed in 2015 and was operational for the 2015 irrigation season.
- Bids were opened and awarded for the canal gatehouse upgrade in 2015, and construction started in the fall of 2015. The canal gatehouse upgrade was completed in the spring of 2016 and was operational for the 2016 irrigation season.
- In May 2014, bids were opened for dredging of the reservoir intake structure. Dredging operations were approximately 10 percent complete prior to 2016 when the contractor experienced difficulties with their methods to hydraulically dredge the reservoir. The dredging contractor returned to the site in late summer of 2016 with larger equipment to resume dredging operations. Dredging of the intake was completed in the spring of 2017.
- The final portion of the Belle Fourche irrigation upgrade project was an assessment of the Belle Fourche River siphon. The work was bid during the 2017 construction season, and the work was completed in the spring of 2018.
- With all proposed work completed, the Board of Water and Natural Resources took action to certify the project complete as of November 1, 2018. As a result of this action the Belle Fourche Irrigation District began making loan payments on November 1, 2019.
- No activity occurred on the project in 2022.

Big Sioux Flood Control Study (Watertown and 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 was 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. The 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 included the Mahoney Creek Dry Dam, three to five medium sized dams, 800 small dams, and a diversion between Lake Kampeska and Lake Pelican.
- A stakeholder's 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.
- The U.S. Army Corps of Engineers 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 once started, and the total project cost is estimated at \$40 million dollars.
- In 2015, the city of Watertown indicated its intent to partner with the Corps of Engineers to conduct a feasibility level study update to investigate flood risk management solutions for Watertown.

- In 2016, the \$225,125 in grant funds appropriated by the 2016 legislature was placed under agreement with the city of Watertown. This grant will fund half of the nonfederal cost share for the flood control feasibility study to be completed by the Corps of Engineers.
- In October 2019, discussions were held with the city of Watertown regarding the study and the need for additional flood protection in the area. Through the existing Big Sioux Flood Information System additional flood inundation studies were conducted and reviewed to show potential benefits of construction of the Mahoney Creek Dry Dam.
- In 2020, the additional flood inundation reviews were completed showing potential benefits of the Mahoney Creek Dry Dam. Flood elevation reductions would be realized; however, it appears only in extreme flood events above the 100-year occurrence level. Additional benefits to other downstream communities would be very limited even during high flow events.
- In 2022, the \$225,125 in grant funds appropriated by the 2016 legislature remained unexpended and were received. The 2022 Legislature allocated \$249,227 for the project. This grant will fund half of the nonfederal cost share for the flood control feasibility study to be completed by the Corps of Engineers.
- In 2022, the city of Watertown met with the Corps of Engineers to discuss how to best move the study forward. Due to recent federal funding appropriations, the Corps believes it will receive funding for the study and prioritize it in its list of projects to begin work in the coming year.

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 2022.

Gregory County Pumped Storage Project - 1981

- The Gregory County Pumped Storage Project is a proposed peak generation hydroelectric facility in northern Gregory County. 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.
- After extensive geotechnical and environmental studies of the site, the Corps was forced to abandon the investigation when its mission was altered and hydroelectric development projects were no longer federally funded.
- Hydroelectric Component – The South Dakota Conservancy District authorized a feasibility study to determine if the state of South Dakota should sponsor a continuation of the project with nonfederal funding. To protect the site during these studies, the District applied for and received a 3-year Preliminary Permit from the Federal Energy Regulatory Commission (FERC) effective August 1, 1988. The state's preliminary permit expired August 1, 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.
- 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 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 applications 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 and Veatch was selected.
- The Black and Veatch study was completed in 2004 and determined that it was not cost-effective to pursue the pumped storage project at that time. These findings were presented to the Board of Water and Natural Resources in June 2004. The state's preliminary permit expired in 2005.
- In 2010, South Dakota Energy, LLC submitted a preliminary permit application prepared by Symbiotics, LLC 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 a preliminary permit to South Dakota Energy. The preliminary permit issued to South Dakota Energy expired on July 1, 2013.
- On July 3, 2013, Gregory County, with Schulte Associates, LLC as its designated agent filed a preliminary permit application to study the feasibility of the proposed Gregory County Energy Project.
- On July 30, 2013, Western Minnesota Municipal Power Agency, a municipal corporation and political subdivision of the state of Minnesota, filed a preliminary permit application to study the feasibility of the proposed Gregory County Pumped Storage Project. Western Minnesota Municipal Power Agency finances the construction and acquisition of the generation and transmission facilities for members of Missouri River Energy Services.
- On December 19, 2013, FERC released an order issuing a Preliminary Permit and Granting Priority to File License Application for the project to Western Minnesota Municipal Power Agency. The preliminary permit expired in December 2016.
- On December 1, 2016, the Missouri Basin Municipal Power Agency, doing business as Missouri River Energy Services, applied to FERC for a preliminary permit to study the feasibility of the 1,200-MW Gregory County Pump Storage Project.

- On February 14, 2017, FERC issued a deficiency letter for the Missouri River Energy Services application requesting that revisions be filed within 45 days and informing the applicant that failure to provide this information may result in the application being rejected.
- In a letter dated April 18, 2017, FERC informed Missouri River Energy Services that due to its failure to file a response to FERC's February 14, 2017, letter, the preliminary permit application for the Gregory County Pump Storage Project was rejected pursuant to section 4.32(g) of the Commission's regulations.
- On June 28, 2022, Western Minnesota Municipal Power Agency filed the Notice of Intent and Pre-Application Document with FERC for the project. The filing of these documents commences the FERC licensing process. Western Minnesota Municipal Power Agency intends to utilize FERC's Integrated Licensing Process for this licensing proceeding. Within 60 days of the notice FERC is required to public notice the documents and commence public scoping meetings 30 days after.
- On July 12, 2022, FERC issued an official Tribal consultation letter for review and comment of the project by potentially impacted tribal entities. This was followed by virtual public meetings for interested agencies, tribes, and organizations and the general public on September 22, 2022.
- The current proposed timeline for public comments on different steps of the project application process submitted by Western Minnesota Municipal Power Agency include opportunities to comment on the Pre-Application Document through November 1, 2023, public meetings for proposed study phases on January 5, 2023, opportunity for comment on the study results and draft application through July 2025, public comment on the final license through October 2025, and final decisions by the applicant to move forward by March 2026.

Black Hills Hydrology and Water Management Study – 1982 to 2015

- The hydrology study compiled water resource data to assess the quantity, quality, and distribution of surface and groundwater 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 provided interested parties 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 for 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 provided 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 analyzed the ability of the Lead-Deadwood Sanitary District to serve them.
- The 2009 Omnibus Bill appropriated \$65,000 for hydrology studies. These funds were awarded to West Dakota Water Development District to cost share the United States Geological Survey groundwater aquifer study in the Black Hills.
- Several microgravity surveys were completed during 2010 and 2011 at three study sites in the Black Hills. Collected data was analyzed spatially to help characterize the heterogeneity of the Madison and Minnelusa aquifers and possibly the transition zone between the two aquifers. Time-series data was analyzed at each of the three study sites and correlated with water levels in Madison aquifer wells. This analysis helps characterize vertical heterogeneity and effective porosity at selected sites.
- A report entitled “Microgravity Methods for Characterization of Groundwater-Storage Changes and Aquifer Properties in the Karstic Madison Aquifer in the Black Hills of South Dakota” was completed in 2012.

Hydrology and Water Management Studies – 2015 to Present

- The 2015 Omnibus Bill appropriated \$250,000 for statewide hydrology and water management studies. In June 2015, the Department of Environment and Natural Resources was awarded a \$47,000 grant to conduct aquifer isotope analysis in eastern South Dakota. The department's Geological Survey program conducted this work, and the final report was issued in September 2017.
- The 2016 Omnibus Bill appropriated \$750,000 for the development of a Big Sioux River Basin Hydrologic model. In March 2016, the appropriation was placed under agreement with the Department of Environment and Natural Resources to hire a consulting firm to develop the hydrologic model for the Lower Big Sioux River Basin.
- In May 2016, DENR issued a Request for Proposals to consulting firms to develop the hydrologic and hydraulic model. Nine firms submitted proposals for review. In August 2016, after review by all involved state agencies and interviews of several firms, RESPEC was selected as the consulting firm to complete the hydrologic and hydraulic models.
- The 2017 Omnibus Bill appropriated an additional \$450,000 for the development of a Big Sioux River Basin Hydrologic model. In March 2017, the appropriation was placed under agreement with the Department of Environment and Natural Resources to increase the contract with RESPEC to \$1,300,000 to complete development of the models for the Lower Big Sioux River Basin.
- Using the new models, the Big Sioux River Flood Information System was developed. A majority of the effort in 2017 focused on developing a basin-wide hydrologic model as well as hydraulic models for the cities of Watertown, Brookings, Dell Rapids, Sioux Falls, and North Sioux City. Concurrently, a web user interface was created to allow access to model predictions, stream gauge data, and precipitation data. The project team met several times with the local authorities to gain feedback on model results and user interface.
- In 2017 and 2018, new stream gauges were installed to improve the stream gauge network available for the Flood Information System.
- The beta version of the Flood Information System was operational in the spring of 2018. The beta version was used to help predict river elevations and flood inundation during flooding in June 2018. The model predictions matched very closely to the actual flood levels observed. Entities that were along the river where flooding occurred were able to accurately predict if any infrastructure would be impacted due to the flood waters and prepare accordingly.
- The Flood Information System was completed in December 2018. With the completion of the model, federal, state, county, and local community authorities are able to use the Flood Information System to evaluate flood scenarios and prepare appropriately for flood response.
- In June 2018, an additional \$10,000 from the remaining funds of the 2017 Omnibus Bill appropriation was placed under agreement with the Department of Environment and Natural Resources. These funds were used to cost share on a United States Geological Survey high resolution hydrographic mapping study in the Lower Big Sioux River Basin. Other entities contributing to the project include US Geological Survey (\$20,000), SD Department of

Transportation (\$20,000), city of North Sioux City (\$3,333), Dakota Dunes Community Improvement District (\$3,333), and Union County (\$3,333). The primary goal of the project is to determine more accurate flow routes for flood waters and runoff from heavy precipitation events. The area under study has a complex drainage pattern through a heavily developed area. The project will give state and local authorities a better understanding of potential impacts from severe drainage events in the area. In 2019, digital data sets were created for terrain and flow paths. Field verification of flow structures, such as culverts, took place during 2020.

- In the spring of 2019 significant flooding occurred along the Big Sioux River corridor from Watertown to North Sioux City and Dakota Dunes. The recently completed Big Sioux River Flood Information System (BSRFIS) was used extensively during the March and April floods by local, state, and federal officials as a tool to predict areas that would be impacted by flood waters. Appropriate protection measures were implemented by county emergency managers and city officials based on the predictions of the BSRFIS. The cities of Watertown, Dell Rapids, Sioux Falls, North Sioux City, and Dakota Dunes, as well as the general public, all benefited from the information the BSRFIS was able to provide. Real time monitoring of flood events by state officials verified that the BSRFIS models were highly accurate.
- In March 2019, \$90,149.50 from the remaining funds of the 2017 Omnibus Bill appropriation was placed under agreement with the Department of Environment and Natural Resources. These funds were used to help fund the replacement of well pumps within the Statewide Ground Water Quality Monitoring Network. The five Water Development Districts with wells needing pumps located within their district provided the remaining \$26,931.75 needed to complete the funding. The well pumps in the monitoring network were beyond their useful life and experiencing mechanical issues that were beyond normal repair. The lack of reliable operation made it difficult to ensure samples could be obtained as scheduled. The monitoring network provides a valuable resource for state and local entities when making decisions on current water quality conditions and trends in 25 of the state's vulnerable shallow aquifers.
- The 2022 Omnibus Bill appropriated \$1,021,500 for improvements and expansion of the statewide observation monitoring well network. The funds were placed under agreement in March 2022 with the Department of Agriculture and Natural Resources to undertake the upgrades and improvements. The network of nearly 1,600 observation wells provides historic water levels of aquifers through the state and assures proper water management and appropriations are made. Areas of the state have limited and insufficient wells to collect adequate data to assure proper management of the state's water resources. These funds will install and refurbish up to 50 wells along with the installation of automatic data collection units on up to 100 existing wells.

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.
- The Board of Water and Natural Resources placed \$15,000 in 2002 and \$50,000 in 2003 under agreement. The Lake Andes-Wagner Irrigation District continued to seek federal funding for the demonstration program.
- The 2009 Omnibus Bill appropriated \$35,000 for the Lake Andes-Wagner/Marty II research demonstration program. These funds were awarded to the project sponsor to continue its efforts to get this project moving forward.
- During 2010, the sponsor worked to assemble information and research data from multiple resources. Discussions with BoR continued regarding the possibility of funding and placing the project into the BoR's program proposal.
- The 2011 Omnibus Bill appropriated \$55,500 for the Lake Andes-Wagner/Marty II research demonstration program. However, these funds will not be awarded unless the federal government makes the decision to begin funding the project at levels that will ensure project completion in a reasonable timeframe.
- In June 2012, a portion of South Central Water Development District's future use permit reserving water from the Missouri River was transferred to the Lake Andes-Wagner Irrigation District. The District's transfer was for the reservation of 96,000 acre-feet of water annually from the Missouri River for future development including irrigation, municipal, stock watering, fire protection, industrial, and public recreation use. The seven-year review of this permit, as required by statute, was conducted in October 2013 before the Water Management Board, and the permit was allowed to remain in effect for 96,000 acre-feet annually, subject to the required fee being submitted.
- No activity occurred on the project in 2022.

Lewis and Clark Regional Water System – 1989

- The Lewis and Clark Regional Water System is 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 in 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. The Iowa and Minnesota State Legislatures authorized the project for construction and completed their cost share commitments.
- The 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 groundbreaking on August 21, 2003.
- In 2005, Lewis and Clark agreed to provide Sioux Falls an additional 17 million gallons of water per day, bringing the total delivered capacity to 45 million gallons per day. Sioux Falls financed the cost of the additional capacity.
- In May 2007, Lewis and Clark elected to change the project's name from "Rural" to "Regional". The project is doing business as the Lewis and Clark Regional Water System.
- In May 2008, Lewis and Clark began operating its first segment of pipeline – a nine-mile emergency connection between Sioux Center and Hull, Iowa. Until Lewis and Clark water arrives, Lewis and Clark will purchase water from Sioux Center and resell it to Hull.
- Through June 30, 2008, the South Dakota Legislature had appropriated, and the Board of Water and Natural Resources had placed under agreement, \$19,275,000 toward South Dakota's cost share commitment.
- In July 2008, a \$20.8 million contract was awarded for the first phase of the water treatment plant, which included 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.

- In July 2008, work was completed on a \$5.5 million contract that included one mile of riverbank stabilization southwest of Vermillion to protect Lewis and Clark’s main well field from erosion, as well as two well houses, four valve vaults, and various piping. Utilizing a permanent easement, Lewis and Clark’s main well field is located on land owned by the SD Department of Game, Fish and Parks (Frost Game Production Area).
- In September 2008, Lewis and Clark began operating its second segment of pipeline, a 12-mile emergency connection for Tea and Harrisburg. Until Lewis and Clark water arrived, Lewis and Clark purchased water from Sioux Falls and re-sold 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 and 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.
- In July 2009, a \$5.04 million contract was awarded for the construction of the 85th Street Tower, which has a three million-gallon storage capacity, located in Sioux Falls.
- In August 2009, a \$9.5 million contract was awarded for the construction of two above-ground reservoirs to be built near Tea. These two reservoirs along with the 85th Street tower serve as Lewis and Clark’s primary storage facilities.
- 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 constructed in South Dakota and serves Minnehaha Community Water Corporation, all Minnesota users, and Rock Rapids, Iowa.
- In September 2009, a \$2.8 million contract was awarded for construction of the Parker and Centerville service lines. These service lines include almost fourteen miles for the Parker service line and five miles for the Centerville service line.
- Lewis and 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.
- A contract for five new wells was awarded in April 2010 for \$6.8 million. The five new wells will provide Lewis and Clark with an estimated 10 million gallons a day of additional capacity. Including the six previously drilled wells, Lewis and Clark’s total well capacity will be 28 million gallons per day.
- A \$4.2 million bid was awarded in May 2010 for the treated water pipeline - segment 11. This five-mile segment connected 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.

- In June 2010, the \$6.3 million approved by the 2010 Legislature was put under agreement. This completed the State's cost share commitment to the project.
- In October 2010, Lewis and Clark was awarded approximately \$3.5 million in reprogrammed American Recovery and Reinvestment Act funding through the Bureau of Reclamation.
- In October 2010, a \$7.55 million contract was awarded for the Minnesota – segment 1 pipeline, which runs along the South Dakota - Iowa border from just west of the Big Sioux River to a point six miles west of Rock Rapids.
- Lewis and Clark received \$1,996,000 in federal funding through the Bureau of Reclamation in FFY 2011. Lewis and Clark was also allocated an additional \$306,000 in funding for FFY 2011 in reprogrammed funds.
- In May 2011, Lewis and Clark awarded a \$1.6 million dollar contract for the pipeline commissioning. This contract provided for testing, disinfecting, and cleaning 85 miles of pipes from the water treatment plant near Vermillion to Sioux Falls.
- Lewis and Clark received \$5.5 million in federal funds for FY 2012. Lewis and Clark initiated operation of its water treatment plant and began to serve water to eleven of its twenty members in July 2012.
- The 20 members and three states have prepaid 100 percent of the nonfederal cost share. Because the prepayments made by the 20 members and three states, which total just under \$154 million, have been fully utilized, the schedule to connect the remaining nine members is entirely dependent upon future federal funding.
- In 2014, Lewis and Clark was provided \$22 million in advance federal funding from Minnesota. These funds were used to construct transmission lines to Luverne and Magnolia.
- In 2014, Lewis and Clark received a \$1 million reimbursable grant for advance federal funding from South Dakota. These funds were made available by the Joint Appropriations Committee in Senate Bill 53. These funds were used to acquire easements and pay for engineering costs for two of the five segments of the Madison service line.
- In 2015, Lewis and Clark was provided \$19 million in advance federal funding from Minnesota. These funds were used to connect the Lincoln Pipestone Rural Water System, construct a 4 million-gallon storage reservoir southwest of Luverne, install a booster station southeast of Luverne, acquire easements, and complete design for the pipeline between Adrian and Worthington.
- In 2015, Lewis and Clark received a \$7.7 million loan for advance federal funding from South Dakota. These funds were made available by Senate Bill 173. These funds were used to construct segments one and five of the Madison service line. Madison was the only South Dakota member system not yet connected; however, construction of segments 1 and 5 does not get a drop of water to Madison. In 2016, the agreement was amended to include engineering design and easement acquisition of segments 2 through 4 and was estimated to cost more than \$22 million for final construction.

- DENR worked with three regional water systems and the city of Madison to develop a wheeling option as an alternative to providing federal fund advances to construct the balance of the Madison service line. The wheeling option builds on the construction of segments 1 and 5. Segment 1 provides Minnehaha Community Water Corporation (MCWC) with its second Lewis and Clark connection a mile west of Crooks. That connection increases the delivery of Lewis and Clark water to MCWC to 1.1 million gallons per day and with \$1.8 million in wheeling upgrades and frees up water from MCWC's water treatment plants to feed its Tower 3B near Colton. Tower 3B feeds water into a new 12-inch Big Sioux Community Water line going north and west to connect with Lewis and Clark's segment 5 to deliver 1 million gallons of water per day to Madison costing \$3 million to construct. The wheeling option saved the state more than \$17 million in federal fund advances.
- In 2015, Lewis and Clark delivered water to 12 of the 20 members.
- In January 2016, the first of several contracts for the wheeling option to provide water to Madison was awarded. The contract was awarded by MCWC, and construction of the additional lines to free capacity elsewhere within MCWC's distribution system was completed in the fall of 2016. This work was funded partially by a \$900,000 Consolidated grant.
- In May and July of 2016, the Big Sioux Community Water System awarded bids for its portion of the Madison wheeling option. The work included construction of a new water distribution line to connect MCWC to a new Lewis and Clark line east of Madison and a new pump station to provide the pressure needed to move the water. Construction was completed in early 2017. This work was funded by a \$2,000,000 Consolidated grant and a \$1,014,000 Drinking Water SRF loan.
- In April 2016, Lewis and Clark awarded the contract for construction of the Madison meter building and Crooks meter building/pump station. These buildings supply metering and pressure for water to get to Madison. Construction was completed in late 2016.
- In June 2016, the final bids for the Madison wheeling project were awarded by Lewis and Clark for construction of segments 1 and 5 of the Lewis and Clark lines and connections to MCWC and Big Sioux CWS. Construction of this work was completed early 2017.
- In 2016, Lewis and Clark delivered water to 13 of the 20 members, with Luverne being connected in March 2016. Water demand has increased, and the treatment plant is now staffed 24 hours per day seven days a week.
- From 2015 through 2017, Lewis and Clark had been provided \$44.5 million in advance federal funding from Minnesota. This federal funding advance allowed all the Lewis and Clark members in Minnesota to be connected and begin receiving water.
- In May 2017, Lewis and Clark received \$2.25 million in advance federal funding from Iowa. These funds were used to pay for engineering services and easement acquisition for the pipeline and meter building to Sioux Center. The bill passed by Iowa's legislature also committed \$4.75 million for use in fiscal year 2018.
- In 2017, Lewis and Clark delivered water to 14 of the 20 members, with Lincoln Pipestone Rural Water System being connected in November 2017.

- In May 2017, the joint projects of Lewis and Clark, Big Sioux CWS, MCWC, and the city of Madison were fully completed. With the completion of the projects, Madison now has access to 1 million gallons of water per day from a regional system supplier. All South Dakota members of Lewis and Clark are now directly or indirectly connected to the system.
- In May 2018, Lewis and Clark received \$4.75 million in advance federal funding from Iowa. These funds, along with a \$2.25 million advance in 2017 from Iowa were used to construct pipeline starting at Sioux Center and going approximately six miles west towards the Big Sioux River.
- In June 2018, Lewis and Clark awarded a contract for the purchase of an emergency generator for the Tea Pump Station. Without this generator 93 percent of the water produced by the system cannot be delivered to its customers if power is lost. A portion of the remaining funds from the \$7.7 million federal fund advance from South Dakota in 2015 were used for the procurement of this generator.
- After 2018, Lewis and Clark was able to provide 16 of its 20 members with access to their full allocation of water with Worthington anticipated to be connected in early December 2018. The Lewis and Clark system construction was estimated to be 75 percent complete and anticipated being at 80 percent complete with the construction planned for 2019 and 2020.
- Through FY 2017, the federal government appropriated \$249.15 million for the project. Federal funding levels included \$14.875 million in FY 2018; however, only \$100,000 was included for FY 2019 in the proposed White House budget.
- In May 2019, Lewis and Clark was able to fully connect to Worthington, MN and provide a second connection to Lincoln Pipestone Rural Water System. Of the 20 full members of Lewis and Clark, 16 systems are now able to access their full allocation water.
- In 2019, the Lewis and Clark system was 82 percent complete with construction underway between Beresford and Sioux Center, IA. Connection to Hull and Sioux Center, IA was anticipated in 2022, and would provide 18 of its 20 members with access to water.
- Through FY 2018, the federal government appropriated \$264.025 million for the project. Federal funding levels included \$14.9 million in FY 2019. The remaining federal cost share to provide is currently \$180 million, which is indexed annually for inflation.
- Through FY 2019, the federal government appropriated \$278.925 million for the project. Recent federal funding levels include \$18.0 million in FY 2020. The remaining federal cost share to provide is currently \$166.8 million, which is indexed annually for inflation.
- In 2020, bids were opened, and contracts awarded for construction of a 2.5-million-gallon elevated water storage tower in Union County near Beresford which will allow Lewis and Clark to provide water to Hull and Sioux Center, Iowa when completed in 2023, and eventually Sheldon, Iowa as well. Work continues on the nearly 34-mile long pipeline segment from Beresford to Sioux Center which will also connect Hull. The pipeline is scheduled for completion in late 2022.

- In 2020, a contract was also awarded for the construction of a 22-million gallon per day (MGD) radial collector well at the site of the existing wellfield. When completed in the spring of 2023 the total well production capacity will be approximately 49 MGD when combined with the existing vertical well capacity.
- Through FY 2020, the federal government appropriated \$296.925 million for the project. Recent federal funding levels include \$17.5 million in FY 2021.
- Lewis and Clark's current buildout capacity is 45 MGD, but the system has been designed so it can be expanded to 60 MGD in the future. The most recent estimated cost for this expansion is \$114 million in today's dollars. The members who voluntarily participate in this expansion are required to cover 100 percent of their proportional share of the cost. In 2020 when initial discussions began the anticipated need for expansion was estimated at ten years. Due to the impacts of the 2021 drought and demands seen, expansion is necessary as soon as funds are available. In 2022, \$13,136,100 of South Dakota's American Rescue Plan Act funds were awarded for the expansion. Additional funds from Iowa were provided to assist in the expansion project.
- In 2022, direct federal appropriations of \$21.9 million were received through the annual appropriations bill with an additional \$75.5 million appropriated through the Bipartisan Infrastructure Law. The FY 2023 proposed White House budget is \$6.6 million with an additional \$12.0 million requested from the congressional delegation. Lewis and Clark is eligible to receive additional FY 23 and FY 24 funding through the Bipartisan Infrastructure Law.
- As of 2022, the original 45 MGD system buildout is 93 percent complete. Of the 20 members of Lewis and Clark, 16 members are now able to access their full allocation of water. Based on recent federal funding levels it is estimated all 20 members will be fully connected by 2025.
- In 2022, construction continued on the 22 MGD horizontal collector well. Due to delays, substantial completion has been moved back to the end of the calendar year. Additional projects nearing completion in 2022 are water tower and pump station upgrades at Beresford and meter buildings at Sioux Center and Hull. Additional projects that are or will soon be starting are 32 miles of 16-inch line and a water storage reservoir to fully connect Madison, a water tower and meter building at Sheldon, a pump station at Hull and 17 miles of 16-inch line between Hull and Sheldon.

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 Skunk Creek.
- Because of subsequent flooding events on the Big Sioux River and Skunk Creek, the Corps of Engineers reanalyzed the flood criteria in the early 1980s and determined that the one percent chance of 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 included 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 was executed between the Department of the Army and the city of Sioux Falls for final design work.
- 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 levees 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 from 2001 to 2007. 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 advanced sufficient funds to the US Army Corps of Engineers to complete Phase 2 work in the next two years. This was an ambitious schedule, but reduced the high cost of flood insurance for many properties now being placed in Flood Zone A of the National Flood Insurance Program.
- Phase 2C raised 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 2009, the Corps of Engineers accepted proposals for this phase of the project. Phase 2C of the Sioux Falls Flood Control project was awarded in February 2011 for approximately \$12 million. The project was completed by the end of calendar year 2011.
- In December 2009, the city issued \$27 million in taxable revenue bonds; \$17 million of the total was advanced to the Corps of Engineers for levee and dam construction. The balance was 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 reconstructed the existing 41st Street bridge in order to raise the levee system. The project was substantially completed in September 2010.

- The 2011 Omnibus Bill appropriated \$3.31 million for project design and construction.
- Phase 3 was awarded at \$8.8 million, and work began above the diversion dam and on the diversion channel where the levees were raised two to four feet. Phase 3 was completed by the end of calendar year 2012 and is the final phase of construction.
- The Corps of Engineers prepared documents for certification of the remaining uncertified levees within the city. FEMA has completed the process of revisiting the flood insurance rate maps within the city limits. With the completion of the new rate maps, the Sioux Falls Flood Control Project will be complete.
- In 2013, the project reached substantial completion. The new levee system building was built, and all of the gates and posts for the closure structures were received. Testing of the controls for the dam was conducted, and the operation of the gates was successfully completed. The Corps of Engineers awarded and completed a project to replace a deficient drainage structure through the levee next to the Sioux Falls zoo.
- In 2015, the major work on the levee system was completed. The Corps of Engineers submitted the application to FEMA for a physical map revision. The FEMA review and issuance of new flood insurance rate maps result in approximately 1,500 properties in Sioux Falls being taken out of the floodplain.
- In 2016, the \$2,036,375 in grant funds appropriated by the 2016 legislature was placed under agreement with the city of Sioux Falls. This funding provided the final portion of the state's cost share commitment to provide half of the nonfederal cost share to the city, and all necessary work has been completed.
- In 2022, Sioux Falls finalized work with the Corps of Engineers to complete property appraisals for city-owned land that was not previously appraised. After final costs were reviewed it was determined the eligible project costs were less than originally estimated when funds were appropriated. Of the \$2,036,375 provided in 2016, the city of Sioux Falls reverted \$911,375.

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 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 withdrew its request to set the outlet elevation on Lake Thompson and moved to dissolve after financial records are completed.

- No activity occurred on the project in 2022.