

The Mighty Missouri: An Overview of River Management and Water Rights



ISSUE
MEMORANDUM
2023-05

Introduction

[SDCL 46-1-1](#) establishes that the people of South Dakota "have a paramount interest in the use of all the water of the state and that the state shall determine what water of the state, surface and underground, can be converted to public use or controlled for public protection." The Missouri River is the state's most plentiful and diversified source of surface water, providing a water supply directly or indirectly to over 550,000 South Dakotans.

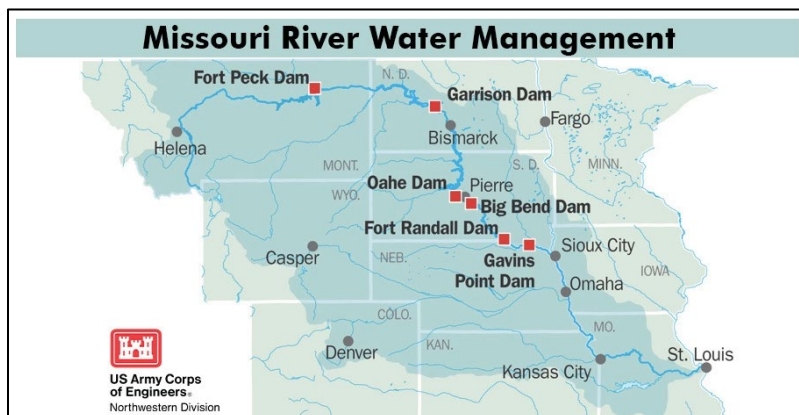
As a historic drought has left the Colorado River and its reservoirs of Lake Mead and Powell at historically low levels, water scarcity for forty million people in the arid West has quickly become a crisis. Resources like the Missouri River, particularly where it flows through low-population states with minimal utilization, are seen as a potential solution. Yet, while Congress delegates the authority to manage the flow of the Missouri River to the United States Army Corp of Engineers, water rights fall under the jurisdiction of the state, and the state has the right to allocate water from the natural flow of the Missouri River through its boundaries.

The purpose of this issue memo is to provide a background of Missouri River management, summarize the statutory and regulatory framework that governs water rights, provide a summary of current water allocation and water projects that divert Missouri River water within the state, and address the impact of future water projects.

Background

The Missouri River Basin drains the largest watershed in the country, covering approximately one-sixth of the United States. The basin includes portions of ten states and part of Canada, spanning over 525,000 square miles.¹

Four Missouri mainstem dams are located in South Dakota—Oahe, Big Bend, Fort Randall, and Gavins Point—along with their accompanying reservoirs—Lakes Oahe, Sharpe, Francis Case, and Lewis and Clark. The combined storage capacity of the six mainstem dams (including Fort Peck in Montana and Garrison in North Dakota) is 72.4 million acre-feet²—the largest reservoir system in the United States.³



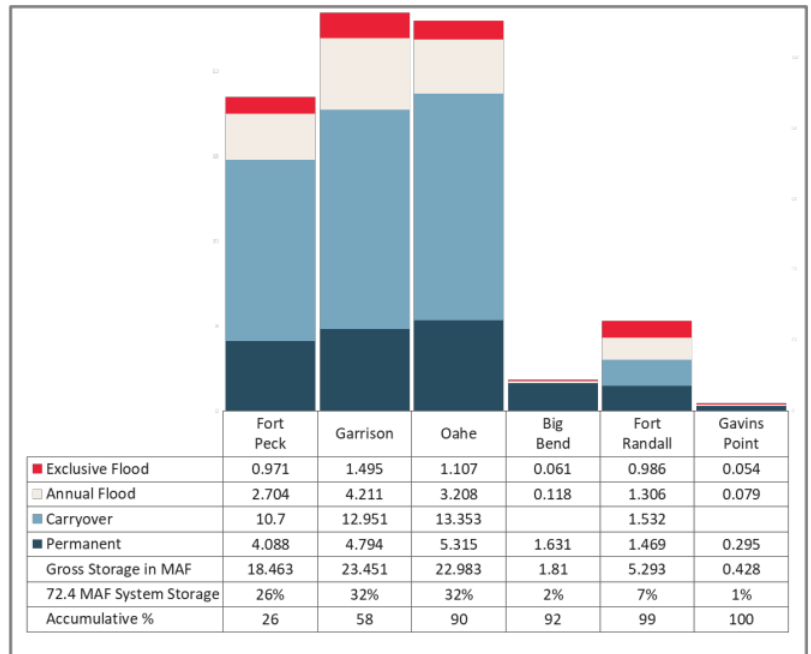
¹ *Missouri River Mainstem Reservoir System, System Description and Regulation*, United States Army Corp of Engineers, https://www.nwd-mr.usace.army.mil/rcc/reports/pdfs/System_Description_Final_Approved_April2020.pdf.

² An acre-foot is the amount of water required to cover one acre to a one-foot depth, equivalent to 43,560 cubic feet or 325,850 gallons.

³ *Missouri River Basin*, United States Army Corp of Engineers, <https://www.nwd-mr.usace.army.mil/>.

To better manage the Missouri River, Congress passed the Flood Control Act of 1944, which authorized the construction of the four mainstem dams in South Dakota as part of the Pick-Sloan Plan.⁴ While Congress recognized the interests and rights of states to develop and utilize watersheds within their borders, the Act established the general framework of governance over the Missouri River, establishing a comprehensive plan for the conservation, control, and use of water resources in the Missouri River Basin to be spearheaded by the United States Army Corp of Engineers.⁵ In exchange for over 500,000 acres of rich river bottomland to be flooded by the reservoirs above the dams, South Dakota was promised access to Missouri River water for certain authorized purposes, as well as significant investment from the federal government in irrigation and hydroelectric projects. Many of the projects promised through the Pick-Sloan Plan never materialized, leaving state leaders to pursue other initiatives to fill the gap of investment the state was supposed to receive.⁶

*Missouri River Reservoir System
Storage Capacities in Million Acre Feet (USACE)*



Total Mainstem Storage Capacity in SD

Reservoir	Storage Capacity
Oahe	23.0 million acre-feet
Sharpe	1.8 million acre-feet
Francis Case	5.3 million acre-feet
Lewis & Clark	0.43 million acre-feet
Total	30.5 million acre-feet

Given its crucial importance as an economic driver as well as an unpredictable force of nature, regulation and control of the Missouri River has long been a topic of contention between the federal government, upper and lower basin states, tribal nations, and interest groups. Passage of subsequent federal legislation, such as the National Environmental Policy Act, Clean Water Act, and Endangered Species Act, makes competing river purposes a balancing act, often resulting in litigation.

⁴ The Pick-Sloan Plan, coined after Colonel Lewis Pick of the U.S. Army Corp of Engineers and William Sloan of the Bureau of Reclamation, was a compromise of the competing river development plans of the Corp and the Bureau of Reclamation, settling the jurisdiction of the two agencies. Pick and Sloan met for the first time in Pierre in a meeting arranged by South Dakota Governor M.Q. Sharpe and Robert Hipple, ardent supporter of the Oahe Dam and publisher of the *Capital Journal*. *The Oahe Irrigation Project*, Pete Carrels, <https://nsudigital.org/virtual-exhibits/the-oahe-project/1944-big-bold-river-plan/>.

⁵ Public Law 78-534. A significant provision for upper basin states in the Flood Control Act, often referred to as the O'Mahoney-Millikin Amendment, established that states wholly or partially west of the ninety-eighth meridian, the historical divide between east and west, could allocate water in their states for beneficial consumptive uses, even if the use impacted navigation in the lower states.

⁶ Notably, the discontinued Oahe Irrigation Project was to irrigate more than 750,000 acres of land, supported by \$500 million from the federal government. The WEB Water System, which now serves fourteen South Dakota counties in the northeast and three North Dakota counties, was advanced out of the Oahe Project's cancellation. See also, [SDCL 46A-15-5](#) regarding the settlement of the state claims related to the unfilled federal obligations of the Pick-Sloan Missouri Basin Program.



Today, the U.S. Army Corp of Engineers manages the flow of the Missouri River through its Missouri River Basin Water Management Division, located in Omaha. Guided by its Master Manual, the Corp operates the storage and water release of the mainstem reservoir system based on eight Congressionally-authorized project purposes: flood control, navigation, hydroelectric power, irrigation, water supply, water quality control, recreation, and fish and wildlife.⁷

Yet, while governance over the management of the Missouri River and large-scale water projects often involves a complex intersection of federal and state law and policy, the state ultimately determines how water can be allocated and diverted from the natural flow of the Missouri River within the boundaries of the state.

Water Rights

The public trust doctrine establishes that water is fundamentally a public resource. The state, as a trustee, controls the water for the benefit of the public, with the Legislature deciding on how waters are to be beneficially used in the public interest.⁸ Title 46 (Water Rights) and Title 46A (Water Management) establish the framework regarding the beneficial use and management of water within the state. Because water from the Missouri River is considered surface water, the process to obtain a water right follows the same procedure as obtaining water rights from other sources. The Water Management Board, created by SDCL chapter 1-41, and the Water Rights Program of the Department of Agriculture and Natural Resources (DANR), are tasked with administering state water rights.

[SDCL 46-1-3](#) sets forth that "...all water within the state is the property of the people of the state, but the right to the use of water may be acquired by appropriation as provided by law." The doctrine of appropriation, sometimes referred to as "first in time-first in right," allocates water by permit, with a permit obtained earlier in time having priority over a new permit holder when water is scarce.⁹ All uses of water, except for certain domestic uses as defined in [SDCL 46-1-6](#), require a permit issued by the Water Management Board or, if an application is uncontested, the chief engineer through authority delegated by the board.¹⁰ Construction cannot begin on a project that stores or carries water until a permit to appropriate water has been issued.¹¹

The application for a water permit must include the water source, amount of water to be claimed, diversion point locations, annual period during which water may be used, type of use, a map of the diversion points, and any land to be irrigated.¹² A water permit may be issued, according to [SDCL 46-2A-9](#), if:

- There is reasonable probability that unappropriated water is available for the applicant's proposed use;
- The proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights;
- The proposed use is a beneficial use; and

⁷ *Master Water Control Manual*, United States Army Corp of Engineers, <https://www.nwd-mr.usace.army.mil/rcc/reports/mmanual/MissouriMainstemMasterManual2018text.pdf>

⁸ *Parks v. Cooper*, 2004 S.D. 27, 676 N.W.2d 823, 841.

⁹ SDCL 46-5-7. South Dakota has a hybrid system of appropriative and riparian water rights. The riparian doctrine, used by many Eastern states, generally establishes a landholder's right to use water that is in contact with or adjacent to the land. The riparian doctrine assumes a humid climate where precipitation easily supports agriculture and other uses, while the doctrine of appropriation assumes scarcity of water in arid climates and thus is more common in Western states. Consequently, with the variable climate between the state's east and west sides, the riparian system is used primarily for small domestic water uses, while the doctrine of prior appropriation is used for managing all other water uses. *Water Rights in South Dakota*, DANR, <https://danr.sd.gov/OfficeOfWater/WaterRights/default.aspx>

¹⁰ SDCL 46-1-9, 46-1-15 to 46-1-16; ARSD 74:02:01:03.

¹¹ SDCL 46-5-9.

¹² SDCL 46-5-11, ARSD 74:02:01:07.



- The permit is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board.

Beneficial use is defined in SDCL 46-1-6 as "any use of water within or outside the state, that is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public of this state in the best utilization of water supplies." Generally, beneficial uses can include water supply for domestic purposes, municipalities, rural water systems, irrigation, commercial and industrial purposes, recreation, fish and wildlife, and institutions.

After a water permit is issued, a project must complete construction within five years of approval, and the water put to beneficial use within an additional four years, subject to extensions that may be issued by the Water Management Board for specific purposes.¹³

Certain entities, such as municipalities, can apply for a future use permit to appropriate water.¹⁴ A future use permit reserves a specific amount of water within a defined area for future development. The holder of a future use permit must still undergo the regular water permitting process for actual construction of the project. A table of future use permits can be found on page 8.

Legislative Approval for Large Water Appropriations

[SDCL 46-5-20.1](#) requires that any application for an appropriation of water in excess of 10,000 acre-feet annually must be approved by the Legislature. The Water Management Board must present the application, with or without recommendation, to the Legislature for approval. Disapproval by the Legislature constitutes disapproval by the board. However, if the Legislature approves the application, the board must still conduct its normal permitting proceedings as legislative approval does not mandate approval for the permit by the board.¹⁵ Until 2023, the last application for legislative approval was in 1994, when the Lewis and Clark Rural Water System (now Regional Water System) requested a future use permit for 27,000 acre-feet of water from the Missouri: Elk Point aquifer.¹⁶ At its July 2023 meeting, the board considered a future use permit for 19,000 acre-feet from the Lewis and Clark Regional Water System. The board voted unanimously to present the future use permit to the Legislature.

Interstate Water Use and Interbasin Water Transfers

[SDCL 46-1-13](#) allows a water right to be granted for uses outside the state on the same basis and subject to the same terms and conditions as water rights are granted to persons for use of water within the state. Examples of such use include the WEB Water System, which serves three counties in North Dakota, and the Lewis and Clark Regional Water System, which serves counties in both Iowa and Minnesota.¹⁷

Interbasin water transfers, or the transfer of water from one river basin to another using non-natural means, are also a consideration when major water projects propose to divert water to different regions. Removing water from its basin of origin can cause concerns regarding economic, social, and environmental impacts, such as flow reduction, lowering of the water table, and aquatic habitat degradation.

¹³ SDCL 46-2A-8.

¹⁴ SDCL 46-5-38 to 46-5-39.

¹⁵ 1977 S.D. Op. Atty. Gen. 21.

¹⁶ 1994 S.D. Sess. Laws ch 250 (HJR 1002).

¹⁷ It should be noted that the Lewis & Clark Regional Water System sources groundwater through a system of wells from the Missouri: Elk Point aquifer. While the aquifer is hydrologically tied to the Missouri River, the Lewis and Clark system technically holds groundwater rights from the Missouri: Elk Point aquifer and not surface water rights from the Missouri River.



While nothing in state law prohibits interbasin transfers, they have been infrequently utilized in South Dakota with Missouri River water.¹⁸ No interbasin transfers are currently documented.¹⁹

Irrigation Limitations

[SDCL 46-5-6.1](#) requires the Board of Water Management to promulgate rules to set an acreage restriction for permits that appropriate water for irrigation from the Missouri River. [ARSD 74:02:01:05](#) sets the amount to be used at one cubic foot per second for each 70 acres; however, the board may approve additional amounts to make up for anticipated losses from evaporation, seepage, and other delivery system losses. Additionally, [ARSD 74:02:01:05.01](#) limits the volume of water applied to the land to two acre-feet per acre annually at the point of field application, unless the applicant presents data showing that the type of irrigation system to be used or the soil conditions warrant additional water, in which case the limit is three acre-feet per acre annually.

Tribal Water Rights

Tribal nations typically assert jurisdiction over water within reservation boundaries and are not subject to state water rights laws. However, jurisdictional issues over tribal water rights have long been a complex issue in the United States. In 1908, the United States Supreme Court in *Winters v. United States* established federally reserved water rights for tribal governments, sometimes referred to as Winters rights. Under the Winters Doctrine, when the federal government reserved land for Indian reservations, it also reserved enough water for the present and future needs of the tribes. In states that allocate water by the prior appropriation system, the rights are considered established on the date the federal government created the reservation, making them senior to most state rights. However, disputes arose as many tribal water rights were not quantified; consequently, the amount of water to which the tribes held rights for was not identified. Thus, a tribe must undergo quantification, either through adjudication or a negotiated settlement process involving the federal government and applicable states, to claim the reserved rights. No tribal nation within the boundaries of South Dakota has pursued quantification.²⁰ According to DANR, Crow Creek, Lower Brule, Oglala, Standing Rock, Rosebud, and Cheyenne River rely on Missouri River water.

Current Appropriation of Missouri River Water²¹

There are 251 existing water rights/permits that appropriate water from the natural flow of the Missouri River. The total volume currently appropriated is 287,718 acre-feet. The total appropriation based on pump rate is 1,254.18 cubic feet of water per second (cfs), which is 3.3% of the average flow at Sioux City. The Missouri River flowrate, on average, is typically around 20,000 cfs. There are 15 future use permits reserving 365,201 acre-feet of Missouri River water per year. Thus, with a 30.5 million acre-feet total capacity in the reservoir system, approximately 2.1% of the maximum storage capacity is allocated for current and future use.

¹⁸ One of the most notable proposals for an interbasin transfer was through the ETSI Pipeline Project, which planned to divert 50,000 acre feet of water per year from the Oahe Reservoir to Wyoming to supply a coal slurry pipeline. The South Dakota Legislature held a special session in 1981 to specifically authorize the South Dakota Conservancy District to obtain a water permit for the project, with the intent to sell and assign the permit to the out-of-state ETSI Pipeline Company. The project was subject to lengthy litigation, eventually resulting in a United States Supreme Court decision. See, *ETSI Pipeline Project v. Missouri*, 484 U.S. 495 (1988). For a historical perspective on the project and tension between basin states, see *South Dakota and the ETSI Experience*, William J. Janklow, available at:

<https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1014&context=new-sources-of-water-for-energy-development-and-growth-interbasin-transfers>.

¹⁹ For a map of interbasin water transfers, see *Interbasin water transfers in the United States and Canada*, Siddik, M.A.B., Dickson, K.E., Rising, J. et al. *Sci Data* 10, 27 (2023), <https://doi.org/10.1038/s41597-023-01935-4>.

²⁰ *Indian Water Rights Settlements*, Congressional Research Service, <https://crsreports.congress.gov/product/pdf/R/R44148>.

²¹ The Water Rights Division of the Department of Agriculture and Natural Resources provided information for this section.

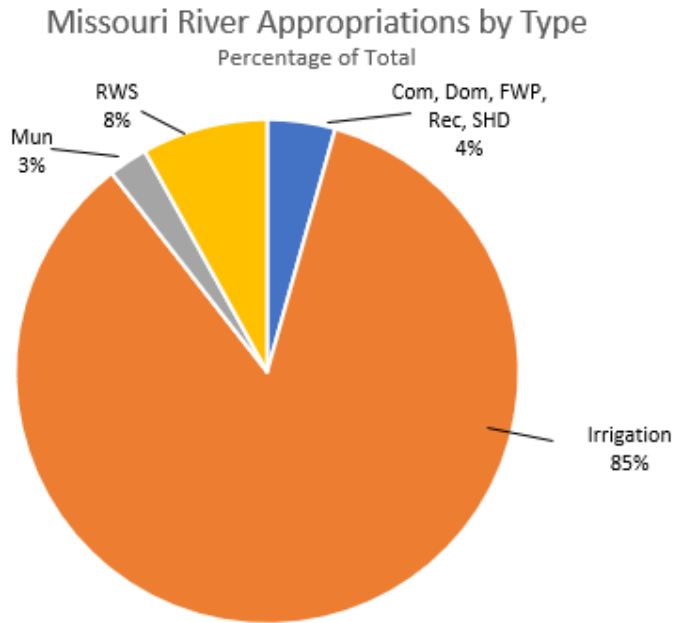


However, it is important to note that the volume actually used, as demonstrated in the table below, is significantly less. DANR compiles a database of all water rights that includes a map of diversion points, accessible [here](#).

Missouri River Allocations in South Dakota

Uses	No. of Permits	Total Volume Appropriated (acre-feet of water annually)	2022 Volume Reported (acre-feet of water annually)	Comment
Irrigation reported (2021)	214	186,483	51,423	83,972 acres authorized
Non-Irrigation*	37	101,235	61,049**	187.44 cfs
Reserved for Future Use ***	15	365,201		
TOTAL	266	651,493***	103,389	

*Municipal, rural water system, domestic, fish & wildlife, recreation, water distribution system.
 **Estimated based on reported use; when reporting not required that a 60% pump rate is utilized.
 ***Does not include a large appropriation held by the Bureau of Reclamation for an undeveloped Oahe Project for 1,042,560 acre-feet annually, based on continual pumping at 1,440 cfs.



Missouri Water Rights Licenses and Permits, Top 15 by Pump Rate, All Uses²²

Name/Business:	County:	Type of Use:	Priority Date:	Pump Rate (cfs)	If Irrigation (acres):
HARVEY/ANDREA SHEEHAN	SULLY	IRRIGATION	2/12/1991	149.4	12663.2
BOWERS DISTILLERY INC	HUGHES	IRRIGATION	6/7/2011	45.79	3456
GRAY GOOSE IRRIGATION DISTRICT	HUGHES	IRRIGATION	11/7/1963	35.01	2855
NACHTIGAL FARMS INC	HUGHES	IRRIGATION	3/24/1964	32.44	1848
HARTMAN & PAHL	SULLY	IRRIGATION	7/22/1976	29.41	2849
HARVEY/ANDREA SHEEHAN	SULLY	IRRIGATION	1/7/2019	28.9	962
STEFFEN BROS INC	SULLY	IRRIGATION	3/30/1966	26.2	1836.2
MID-DAKOTA RWS INC	HUGHES	RURAL WATER SYSTEM	5/11/1993	24.5	0
WEB WATER DEV ASSOC INC	WALWORTH	RURAL WATER SYSTEM	4/7/1976	22.4	0
HILLTOP IRRIGATION DISTRICT	BRULE	IRRIGATION	4/29/1976	22.2	1911
JAMES SUTTON JR	SULLY	IRRIGATION	11/18/1975	21.8	1523
NYSTROM FAMILY LAND LTD PARTNERSHIP	HUGHES	IRRIGATION	2/7/1964	21.67	1539
JAMES L SUTTON JR	SULLY	IRRIGATION	11/18/1975	17.9	1253
MISSOURI RIVER INVESTMENTS	SULLY	IRRIGATION	7/23/1973	17.78	1183.5
VALLEY FARM LLC	BUFFALO	IRRIGATION	8/4/1972	17.6	1232

Missouri Water Right Licenses and Permits, Top 15 by Pump Rate, Excluding Irrigation

Name/Business:	County:	Type of Use:	Priority Date:	Pump Rate (cfs):
MID-DAKOTA RWS INC	HUGHES	RURAL WATER SYSTEM	5/11/1993	24.5
WEB WATER DEV ASSOC INC	WALWORTH	RURAL WATER SYSTEM	4/7/1976	22.4
US FISH/WILDLIFE SERVICE	YANKTON	FISH AND WILDLIFE PROPAGATION	12/21/1961	16
B-Y WATER DISTRICT	BON HOMME	RURAL WATER SYSTEM	5/16/1994	15.03
CITY OF PIERRE	HUGHES	MUNICIPAL	6/18/2020	14.26
MCCOOK LAKE RECREATION ASSN	UNION	RECREATION	3/11/2004	13.85
RANDALL COMM WATER DIST	CHARLES MIX	RURAL WATER SYSTEM	5/14/1975	13.03
MCCOOK LAKE RECREATION ASSN	UNION	RECREATION	8/17/1979	12.89
WEST RIVER WATER DEV DIST	STANLEY	RURAL WATER SYSTEM	12/16/2009	10
B-Y WATER DISTRICT	YANKTON	RURAL WATER SYSTEM	10/15/1976	8.34
CITY OF MOBRIDGE	WALWORTH	MUNICIPAL	1/1/1906	6.75
CHEYENNE RIVER SIOUX TRIBE	DEWEY	RURAL WATER SYSTEM	8/24/1970	4.64
DEPT OF GAME FISH & PARKS	POTTER	FISH AND WILDLIFE PROPAGATION	9/2/1982	4.46
CITY OF CHAMBERLAIN	BRULE	MUNICIPAL	1/1/1951	3.5
AURORA BRULE RWS INC	BRULE	RURAL WATER SYSTEM	12/17/1979	3.33

²² The DANR database also includes incorporated, cancelled, denied, deferred, withdrawn, hold, and owner change statuses for water rights. For the purposes of the tables on this page, only water permits and water licenses were included. A water permit is issued for a project and allows the holder to construct the project and put the water to beneficial use within a time frame specified on the water permit. A water license is issued upon an inspection of the permitted water use system for the portion of the project that was developed.

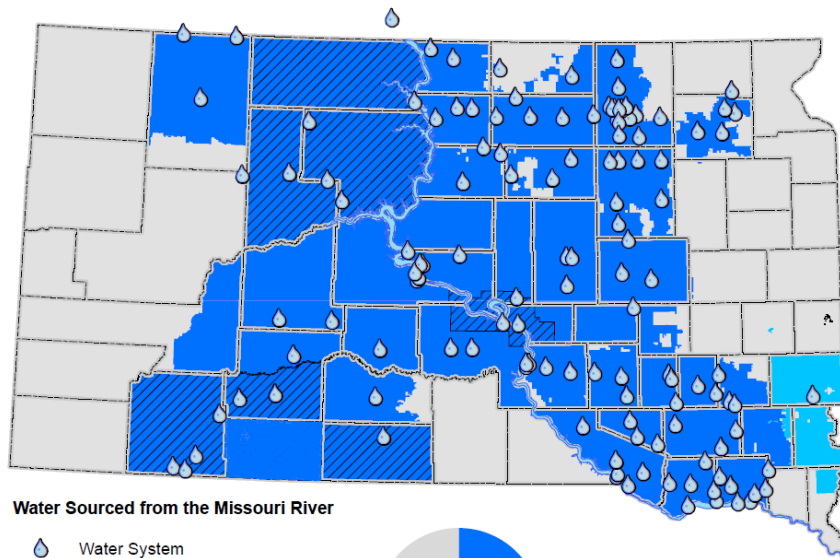


Missouri River Future Use Permits

Holder	Acre Feet Reserved
LAKE ANDES WAGNER IRRIGATION DISTRICT	96,000
EAST DAKOTA WATER DEVELOPMENT DISTRICT	91,500
LEWIS & CLARK REGIONAL WATER SYSTEM*	52,500
RAPID CITY	28,880
SIOUX FALLS	28,236
WEB WATER DEVELOPMENT ASSOCIATION	25,000
WESTER DAKOTA WATER DEVELOPMENT DISTRICT	10,000
RAPID VALLEY SANITARY DISTRICT	6,050
MITCHELL	5,765
WEST RIVER WATER DEVELOPMENT DISTRICT	5,515
BOX ELDER	2,100
MOBRIDGE	1,656
CLAY RURAL WATER SYSTEM	1,000
AURORA BRULE RWS	621
ELK POINT	378
TOTAL	365,201

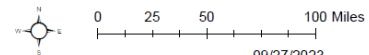
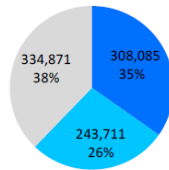
*Does not include water rights from the Missouri: Elk Point aquifer, which totals 72,563 acre-feet of water in current, future, and pending future permits. It is estimated that 61,388 acre-feet of those water appropriations are induced from the Missouri River by pumping at its well field, according to a S.D. Geological Survey.

Population Served by the Missouri River



Water Sourced from the Missouri River

- Water System
- Directly
- Indirectly
- Other Source
- Reservation Boundaries



09/27/2023



Impact of Future Projects

While the flow of the Missouri River through the state is minimally allocated, the needs of growing communities, as well as variable drought conditions that threaten current water supplies, have increased attention on the development of major water projects. The 2023 Legislature supported several projects that propose to divert water from the Missouri River, along with adding those projects to the statewide water plan.²³

Statewide Water Plan

South Dakota is required by law to maintain a state water plan. [SDCL 46A-1-1](#) states:

The general health, welfare, and safety of the people of the State of South Dakota are dependent upon the conservation, development, management, and optimum use of all this state's water resources. To achieve this objective it is essential that a coordinated, integrated, multiple use water resource policy be formulated and a plan developed to activate this policy as rapidly as possible. It is in the public interest that these functions be carried out through a coordination of all state agencies and resources.

The Board of Water and Natural Resources (not to be confused with the Board of Water Management) is tasked with submitting the state water plan, comprised of the State Water Resources Management System (SWRMS) and the State Water Facilities Plan, to the Governor and Legislature.²⁴ The SWRMS identifies large, costly water projects that require specific state or federal authorization and financing. Projects are included on the list after approval by the Legislature and the Governor. The projects included in the SWRMS and listed in SDCL 46-1-2.1 that propose to use water from the Missouri River are:

- CENDAK Irrigation Project – 1982, would supply Missouri River water to 474,000 acres in Hughes, Hyde, Hand, Spink, Beadle, and Faulk counties in central South Dakota (no recent development)
- Gregory County Pumped storage site – 1981, a proposed peak generation hydroelectric facility in northern Gregory County
- Lake Andes-Wagner/Marty II Irrigation Unit – 1975, originally for a 45,000-acre Lake Andes-Wagner Irrigation project and 3,000-acre Marty II Irrigation project (no recent development)
- Lewis and Clark Regional Water System – 1989
- Water Investment in Northern South Dakota project – 2023
- Western Dakota Regional Water System study – 2023

Of these projects, only the Lewis & Clark Regional Water System is currently operational.²⁵ However, the Mni Wiconi Rural Water System and the Mid-Dakota Rural Water System are also authorized in statute, but no longer on the SWRMS.

Of note, Water Investment in Northern South Dakota (WINS) and Western Dakota Regional Water System (WDRWS), along with Dakota Mainstem (not on the SWRMS), are studying the feasibility of major regional water projects. WINS proposes to expand on the current WEB Water System to provide water to Aberdeen and northern South Dakota. WDRWS would transport water to western South Dakota, including Rapid City. Dakota Mainstem would serve various communities in eastern South Dakota. While there is ample Missouri River water to supply the projects, obtaining federal authorization is key to securing federal funds to advance the projects.

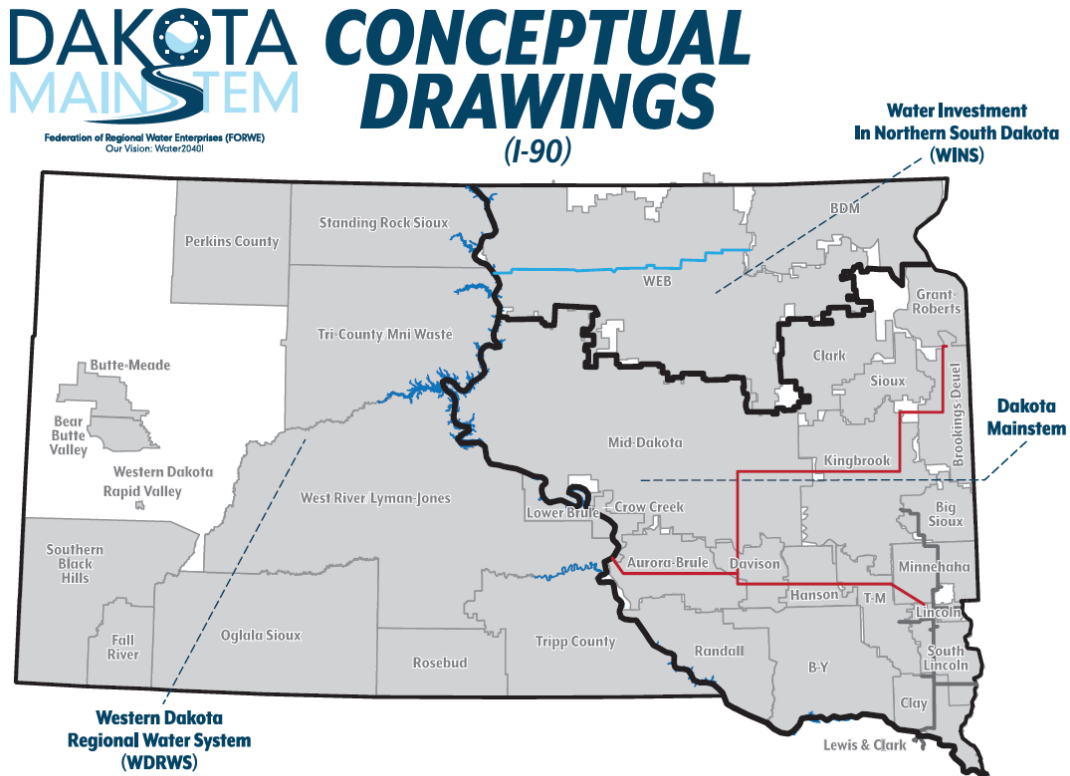
²³ 2023 S.D. Sess. Laws ch 149 (SB 17).

²⁴ SDCL 46A-1-2; SDCL 46A-1-10.

²⁵ 2022 Annual Report and 2023 State Water Plan, Board of Water and Natural Resources, <https://danr.sd.gov/Funding/EnvironmentalFunding/docs/2022%20ANNUAL%20BWNR-Final.pdf>.



As with other major water distribution systems in the state, like WEB, Mid-Dakota, Mni Waconi, and Lewis & Clark, federal authorization can be a lengthy process, taking years of meetings, studies, hearings, and engineering reports. However, without the federal cost-share, most major projects are unable to afford the significant infrastructure and construction costs needed to transport Missouri River water to more populous areas of the state.



DISCLAIMER: Pipeline routes depicted on the map for Dakota MainStem are conceptual, meant only to provide a visualization of the scope of the Project. Actual pipeline route determination will depend upon the participation and location of public water systems, right-of-way availability, and a myriad of engineering design factors. Therefore, any resemblance to these conceptual drawings to whatever is ultimately built is coincidental.

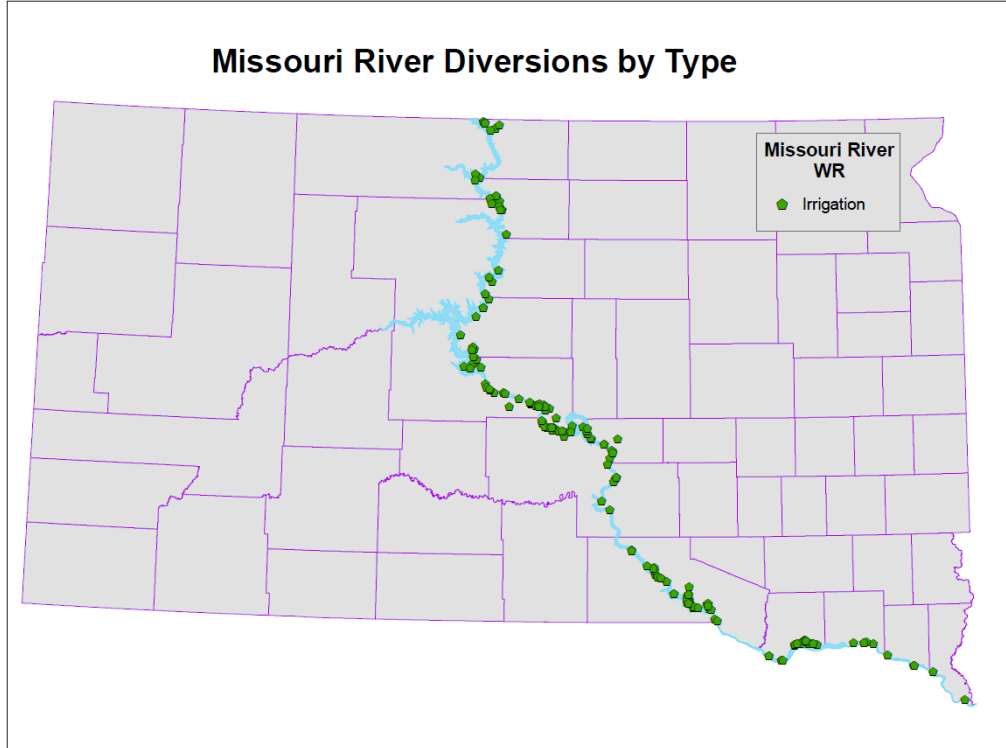
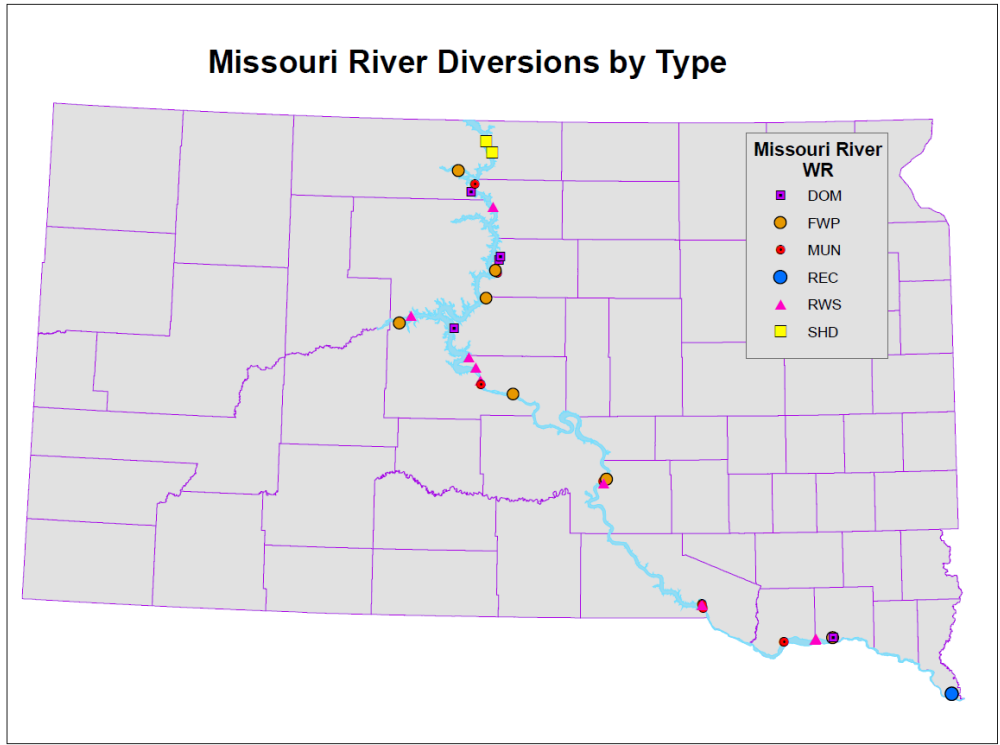
Conclusion

The Missouri River has been an integral part of the North American plains long before Lewis and Clark's Corps of Discovery Expedition. Although the management of the river and its competing purposes can be complex and often controversial, the state ultimately has authority to allocate water from the natural flows of the river that cross through its boundaries for public use through its state water rights process. Data shows that only a small portion of Missouri River water has been allocated for use. Nonetheless, as scarcity forces other states to look for alternative water supplies, future water projects within the state are being contemplated to take advantage of the bountiful supply of the Mighty Missouri.

This issue memorandum was written by Anna Madsen, Senior Research Analyst, on November 14, 2023, for the Legislative Research Council. It is designed to provide background information on the subject and is not a policy statement made by the Legislative Research Council.



Appendix²⁶



²⁶ Maps provided by the Water Rights Division of the Department of Agriculture and Natural Resources.

