



DANR
SOUTH DAKOTA

WATER MANAGEMENT BOARD
Meeting on December 7, 2022

Floyd Matthew Training Center
Joe Foss Bldg., 523 E Capitol Ave, Pierre SD

Any person(s) interested in speaking during the public comment period via remote connection can learn how at <https://boardsandcommissions.sd.gov> on the Water Management Board page.

Scheduled times are based on Central Time and are estimated start times.

Agenda items may be delayed due to prior scheduled items.

Live audio of the meeting is available at <https://www.sd.net>

December 7, 2022

9:30 AM Call to Order

Roll Call

Adopt Final Agenda

Conflicts Disclosures and Requests for State Board Waivers

Adopt October 5, 2022 and November 2, 2022 Board Minutes

Set March 7-8, 2023 meeting date and location

Public comment period in accordance with SDCL 1-25-1

Status and Review of Water Rights Litigation

Consider Adoption of Amendments to Rules in ARSD Article 74:51, Surface Water Quality – Shannon Minerich

Administer Oath to Department of Agriculture and Natural Resources Staff

Consider the Matter of the Town of Hermosa's Noncompliance with its Surface Water Discharge Permit – Ann Mines Bailey

10:00 AM Consider Findings of Fact, Conclusions of Law, and Final Decision in the matter of Water Permit Application No. 2016-1, SD Ellsworth Development Authority

10:15 AM Consider Water Permit Application No. 8651-3, Shared Resources – Nakaila Steen

10:45 AM Consider Deferred Water Permit Application No. 8516-3, Cedar Grove Hutterian Brethren Inc. – Mark Rath

LUNCH

Continue any prior agenda items not yet completed.

ADJOURN

WATER MANAGEMENT BOARD

Meeting on December 7, 2022

Board members are reminded they are subject to SDCL 3-23-1 to 3-23-5 (Disclosure Laws) which address the disclosure of any conflicts of interest a member may have regarding contracts with the State of South Dakota. Board members should report any potential conflicts to the board and seek a waiver where appropriate.

Notice is given to individuals with disabilities that the meeting is being held in a physically accessible location. Individuals requiring assistive technology or other services in order to participate in the meeting or materials in an alternate format should contact Brian Pontious, Nondiscrimination Coordinator, by calling (605) 773-5559 or by email at Brian.Pontious@state.sd.us as soon as possible but no later than two business days prior to the meeting in order to ensure accommodations are available.

WATER MANAGEMENT BOARD MEETING

December 7, 2022

Qualifications:
wi - well interference
wcr -well construction rules
iq - irrigation questionnaire
lf - low flow

No.	Name	Address	County	Amount	Use	Source	Qualifications
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Water Permit Applications to be Considered as Scheduled

8516-3	Cedar Grove Httm Brth	Platte	BL	11.11 cfs	1,236 acres	Torrey Lake	
8651-3	Shared Resources	Dell Rapids	MY	9,415 AF	rural water	Big Sioux:Moody Aquifer	3 special

Unopposed New Water Permit Applications Issued Based on the Chief Engineer Recommendations

2022-1	Golden Valley Water Co. LLC	Rapid City	MD	10.9 cfs	wds	1 well-Madison	wi, wcr, 3 special
2023-1	Bulldog Creek Campground	Sturgis	MD	0.022 cfs	commercial	1 well-Spearfish Formation	wi, 2 special
2024-1	Travis Linch	Belle Fourche	BU	0.055 cfs	commercial	1 well-Minnelusa	wi, 3 special
2718A-2	Daniel & Paulette Fanning	Martin	BT	no add'l	no add'l	1 well-Ogallala	wi, iq
2853-2	4 Faces LLC	Custer	CU	0.07 cfs	commercial	1 well-Minnelusa	wi, wcr, 2 special
2854-2	Kadoka Area School District	Kadoka	JA	0.044 cfs	institutional	1 well-Arikaree Aquifer	wi, 2 special
8197A-3	Mina North LLC	Aberdeen	BN	no add'l	wds,rws,com,geo	2 wells-Inyan Kara	wi, 4 special
8629-3	Ace Ready Mix	Sioux Falls	LN	0.44 cfs	industrial	1 well-Sioux Quartzite	wi, 2 special
8645-3	Poinsett Httm Brth	Estelline	HM	1.78 cfs	136 acres	1 well-Big Sioux:Brookings	wi, iq
8647-3	Lance Johnson	Plankinton	AU	47.6 AF	fish & wildlife	runoff	lf, 2 special
8648-3	Marquardt Family Limited Partnership	Yankton	YA	2.22 cfs	271 acres	1 well-Scotland Management Unit:Lower James Missouri	wi, iq
8649-3	Marquardt Family Limited Partnership	Yankton	YA	1.90 cfs	147 acres	2 wells-Lower James Missouri	wi, iq
8652-3	John G Yaggie	Yankton	YA	no add'l	14 acres	2 wells-Missouri:Elk Point	wi, iq
8653-3	Pleasant Dutch Dairy LLP	Willow Lake	CK	5.57 cfs	commercial	wetland	none
8656-3	Raymond or Pamela Epp	Mission Hill	YA	no add'l	143.61 acres	1 well-Missouri:Elk Point	wi, iq
8657-3	Randy Barondeau	Frederick	FA	83.4 AF	fwp & livestock	runoff	lf, 1 special
8658-3	Randy Barondeau	Frederick	FA	43.3 AF	fwp & livestock	runoff	lf, 1 special
8659-3	Dahlerup Family Trust	Aberdeen	YA	0.23 cfs	157 acres	1 well-Lower James Missouri	wi, iq
8660-3	Allard Trust & Walsh Farms	Elk Point	UN	2.22 cfs	160 acres	1 well-Missouri:Elk Point	wi, wcr, iq
8661-3	Nachtigal Farms	Harrold	HU	no add'l	202 acres	Missouri River	iq
8662-3	Thomas Lamb	Willow Lake	CK	1.78 cfs	120 acres	1 well-Vermillion E Fork: Antelope Lake	wi, wcr, iq, 1 special

The audio recording for this meeting is available on the South Dakota Boards and Commissions Portal at <https://boardsandcommissions.sd.gov/Meetings.aspx?BoardID=106>

MINUTES OF THE 238TH MEETING
OF THE WATER MANAGEMENT BOARD
FLOYD MATTHEW TRAINING CENTER
523 EAST CAPITOL AVENUE
PIERRE, SOUTH DAKOTA
OCTOBER 5, 2022

CALL TO ORDER: Chairman Bill Larson was not present when the meeting began. Vice Chairman Jim Hutmacher called the meeting to order at 9:30 a.m. Central Time. The roll was called, and a quorum was present.

Motion by Holzbauer, seconded by Bjork, to appoint Jim Hutmacher as acting chairman for this meeting. Motion carried.

The meeting was streaming live on SD.net, a service of South Dakota Public Broadcasting.

Vice Chairman Hutmacher welcomed Senator Duvall and Representative Weisgram to the meeting.

The following attended the meeting:

Board Members: Peggy Dixon, Leo Holzbauer, and Jim Hutmacher attended in person. Tim Bjork, Chad Comes and Bill Larson attended remotely. Rodney Freeman was absent.

Department of Agriculture and Natural Resources (DANR): Eric Gronlund, Chief Engineer, Ron Duvall, Mark Rath, and Kim Drennon, Water Rights Program; Joane Lineburg and Andrew Fox, Inspection, Compliance and Remediation Program.

Attorney General's Office: David McVey, board counsel; Ann Mines Bailey, Water Rights Program counsel.

Legislative Oversight Committee: Senator Mary Duvall and Representative Mike Weisgram.

Court Reporter: Carla Bachand, Capital Reporting Services.

Consider Findings of Fact, Conclusions of Law and Final Decision in the matter of Water Permit Application No. 2833-2 and Water Permit Application 2834-2: Brian and Blake Burnham.

Consider Water Permit Application No. 2016-1, South Dakota Ellsworth Development Authority: Matt Naasz, Glen Kane, Greg Erlandson, John Wetstein, Ken LeBon, Tom Norman, Brian Peterson.

ADOPT FINAL AGENDA: Vice Chairman Hutmacher announced that there was a change to the agenda. Hermosa has requested that the matter of the town's noncompliance with its Surface Water Discharge Permit scheduled at 1:00 p.m. be continued.

Jeff Hagg, attorney for the town of Hermosa, requested that the board continue the matter. He noted that settlement negotiations are currently taking place.

Vice Chairman Hutmacher noted that the board would act on the continuance request later in the meeting.

Mr. Larson joined the meeting remotely.

Motion by Holzbauer, seconded by Dixon, to adopt the agenda with the removal of the Hermosa matter. Motion carried unanimously.

CONFLICT DISCLOSURES AND REQUESTS FOR STATE BOARD WAIVERS: Vice Chairman Hutmacher stated that he knows the well driller in the matter of the application for renewal of South Dakota Well Driller License No. 285, but he does not believe there is a conflict.

Ms. Mines Bailey stated that the Water Rights Program had no objection to Vice Chairman Hutmacher participating during that hearing. No one in the audience objected.

ADOPT JULY 6, 2022, BOARD MEETING MINUTES: Motion by Larson, seconded by Dixon, to approve the minutes of the July 6, 2022, Water Management Board meeting. Motion carried unanimously.

DECEMBER 7-8, 2022, MEETING LOCATION: Vice Chairman Hutmacher noted that he will be unable to attend the December 7-8, 2022, meeting. Mr. Larson stated that he is scheduled to be in court that week, so will be unable to attend the December 7-8 meeting. Mr. Freeman was absent so his schedule for December 7-8 is unknown.

Mr. Duvall suggested that the board wait until later in the meeting to set a date for the December meeting to allow time for him to check for meeting room availability.

Vice Chairman Hutmacher stated that the board is scheduled to meet on the following dates in 2023: March 7-8, May 3-4, July 12-13, October 4-5, and December 6-7.

PUBLIC COMMENT PERIOD IN ACCORDANCE WITH SDCL 1-25-1: There were no public comments.

UPDATE ON DANR ACTIVITIES: No update.

STATUS AND REVIEW OF WATER RIGHTS LITIGATION: Mr. McVey reported that the only pending litigation is the Powertech appeal regarding the board's order denying the motion to amend the procedural order to resume the evidentiary hearing.

ADMINISTER OATH TO DANR STAFF: The court reporter administered the oath to DANR staff who were present and intended to testify during the meeting.

TOWN OF HERMOSA REQUEST FOR CONTINUANCE: Ann Mines Bailey, counsel for the DANR Surface Water Quality Program, stated that the Surface Water Quality Program agreed to the

continuance of this matter until the December board meeting.

Vice Chairman Hutmacher requested board action.

Motion by Bjork, seconded by Comes, to continue the hearing in the matter of the town of Hermosa's noncompliance with its Surface Water Discharge Permit until the December Water Management Board meeting. A roll call vote was taken, and the motion carried unanimously.

CANCELLATION CONSIDERATIONS: The board members received a board packet prior to the meeting, which included a table listing the proposed cancellations, the notices of cancellation, and the chief engineer's recommendations.

Eleven water rights and water permits were scheduled for cancellation. Mr. Duvall stated that the owners were notified of the hearing and the reasons for cancellation. The department received no comments or letters in response to the notices of cancellation.

The chief engineer recommended cancellation of the following water rights and water permits for the reasons listed.

Number	Original Owner	Present Owner(s) and Other Persons Notified	Reason
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DIVISION I WATER RIGHT

RT 813-1	Alimadad Jatoi	Jatoi Family	Abandonment/Forfeiture
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DIVISION II WATER PERMIT & WATER RIGHT

RT 1105-2	Donald Moody	Same	Abandonment
PE 2794-2	Brent or Pamela Veurink	Same	Abandonment

DIVISION III WATER PERMITS & WATER RIGHTS

RT 1912-3	Bon Homme Hutterian Brethren Inc.	Same (% Samuel Waldner)	Abandonment/Forfeiture
RT 2510A-3	Donna Johnson Revocable Living Trust	Same (% Lori Johnson)	Abandonment/Forfeiture
RT 2510B-3	Donna Johnson Revocable Living Trust	Same (% Lori Johnson)	Abandonment/Forfeiture
PE 4888B-3	Jacob & Bradley Den Herder	Same	Abandonment
RT 6940-3	Ken Less	James Jay Ryon, owner Doug Halvig, Farm Mgr Ken Less	Abandonment
RT 6941-3	Ken Less	James Jay Ryon, owner Doug Halvig, Farm Mgr Ken Less	Abandonment
PE 7970-3	David H Hoops	Same	Non-Construction
PE 8160-3	Scott Carlson	Same	Non-Construction

Motion by Larson, seconded by Bjork, to accept the chief engineer's recommendations for cancellation of the water rights and water permits for the reasons listed in the table. A roll call vote was taken, and the motion carried unanimously.

CONSIDER FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL DECISION IN THE MATTER OF WATER PERMIT APPLICATION NO 2833-2, BRIAN BURNHAM AND NO. 2834-2, BLAKE BURNHAM: David McVey stated that counsel for the Water Rights Program filed proposed Findings of Fact and Conclusions of Law, and Kevin Herrmann, the petitioner in opposition of the water permit applications, filed alternative proposed Findings in relation to Finding of Fact No. 39 and requested an additional qualification to the permit.

Mr. McVey stated that Mr. Herrmann's proposed finding is rejected in that it was not consistent with the motion and vote of the board at the hearing.

Mr. McVey stated that, based on the Findings of Fact and Conclusions of Law as prepared by the Water Rights Program counsel, the board enters its determination that Water Permit Application No. 2833-2 is granted with the following qualifications:

1. The wells approved under Water Permit No. 2833-2 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 2833-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Water Permit 2833-2 and Water Right No. 1260-2 may not be exercised simultaneously, and the maximum combined diversion rate authorized by Permit No. 2833-2 and Water Right No. 1260-2 may not exceed 1.85 cubic feet of water per second.

Mr. McVey stated that additionally, the board enters its determination that Water Permit Application No. 2834-2 is granted with the following qualifications:

1. The wells approved under Water Permit No. 2834-2 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 2834-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

Motion by Holzbauer, seconded by Dixon, to adopt the Findings of Fact, Conclusions of Law and Final Decision in the matter of Water Permit Application No. 2833-2, Brian Burnham and No. 2834-2, Blake Burnham. A roll call vote was taken, and the motion carried unanimously.

CONSIDER APPLICATION FOR RENEWAL OF SOUTH DAKOTA WELL DRILLER LICENSE NO. 285, MANIKOWSKI WELL DRILLING: Ann Mines Bailey, counsel for the Water Rights Program, stated that a notice of hearing was issued to Mr. Manikowski and Manikowski Well Drilling on September 2, 2022. Neither Mr. Manikowski nor his counsel were not present at the hearing.

Ms. Mines Bailey called Eric Gronlund, who was administered the oath earlier in the meeting.

Mr. Gronlund provided the following testimony in response to Ms. Mines Bailey's questions.

Mr. Gronlund is the chief engineer of the DANR Water Rights Program. As part of his responsibilities and obligations as chief engineer, Mr. Gronlund oversees the Well Driller Licensing Program. To obtain a well driller's license, there are statutory and administrative rule requirements regarding the application process. A well driller needs to apply, show five years of experience, and the applicant must pay fee and take a test. The well driller's license is effective for one year because, by statute, there is a renewal process in which renewals must be submitted by January 31 of each year. Renewal of a well driller's license requires an application, a fee, and continuing education. If a renewal application has been submitted, but not yet approved, the well driller is allowed to keep operating under the existing well driller's license.

Manikowski holds Well Driller License No. 285. Manikowski Well Drilling has been licensed by the state since 1966. The license representative is Byron Manikowski, and he has been the license representative since 1981. A license representative is responsible for the construction of a well and compliance with the well construction standards. Mr. Manikowski filed a renewal application for 2022.

Exhibit 1 is the application for renewal of South Dakota Well Driller License No. 285, which was received January 27, 2022. The application is included in the administrative file.

Ms. Mines Bailey moved admission of Exhibit 1. The exhibit was admitted into the record.

The Water Rights Program received a complaint regarding well construction performed by Manikowski Well Drilling, so Mr. Gronlund delayed the issuance of the license in an effort to get that issue resolved. Manikowski Well Drilling was allowed to continue to conduct well drilling during this time. The formal complaint was filed with the Water Rights Program on December 2, 2021; however, preceding that was correspondence with Water Rights staff through phone calls with the well owner. The Water Rights Program had no well log on file for the well referenced in the complaint. A well log was subsequently submitted by the well owner, Garrett Penfield.

Exhibit 2 is the letter of complaint submitted by Garrett Penfield.

Ms. Mines Bailey moved admission of Exhibit 2. The exhibit was admitted into the record.

Exhibit 3 is the water well completion report for the well that was drilled by Manikowski Well Drilling for Garrett Penfield with a completion date of October 8, 2019.

Ms. Mines Bailey moved admission of Exhibit 3. The exhibit was admitted into the record.

Well drillers are required to file well completion reports. In reviewing Mr. Penfield's well completion report, Mr. Gronlund determined that the report is not complete; it is missing information.

Mr. Penfield's well is completed into the Dakota Aquifer. The depth of the well is 1,440 feet. The type of construction used was the alternative construction method. There are board rules for alternative construction in situations where the water use is for non-commercial, domestic type purposes, the alternative well construction doesn't necessarily require the grouting of the well in the Dakota Aquifer if water is not flowing up on the outside of the casing after a reasonable time. It also affords the ability for a pump chamber, which basically is a larger diameter casing at a depth where artesian head pressure provides water to the pump, but a smaller diameter hole that penetrates the aquifer. The alternative form of well construction is not allowed in all aquifers; there is a rule that allows for it in the Dakota Aquifer and a rule that allows for it in the Inyan Kara Aquifer.

Mr. Penfield called the Water Rights Program in September 2021 and talked with staff engineers Whitney Kilts and Adam Mathiowetz. The well was pumping a lot of sand or mud. He could no longer get in contact with Mr. Manikowski. One of his pressing issues was that he was looking for NRCS funding, and he needed to have a properly constructed well to qualify for that funding. There was also an issue with who was responsible for submitting a water sample for analysis.

Exhibit 4 is the Water Rights Program file documentation. When there is an issue that staff believes needs to be memorialized, the staff person prepares a file documentation for future reference regarding the discussions that took place. This exhibit is included in the administrative file for License No. 285.

Ms. Mines Bailey moved admission of Exhibit 4. The exhibit was admitted into the record.

Staff listened to Mr. Penfield's concerns, then based on that, Adam Mathiowetz and Whitney Kilts contacted Mr. Byron Manikowski. Mr. Gronlund's take-away from that conversation with Mr. Manikowski is he admitted that the well never properly cleared up, that he had been busy drilling in North Dakota, but it was his intent to get back to that well this fall. Water Rights staff also asked Mr. Manikowski to contact Mr. Penfield because one of Mr. Penfield's concerns was that he had lost communication with Mr. Manikowski.

Exhibit 5 is a letter dated January 18, 2022, to Byron Manikowski, Manikowski Well Drilling from Mr. Gronlund.

Ms. Mines Bailey moved admission of Exhibit 5. The exhibit was admitted into the record.

The purpose of the letter was to inform Mr. Manikowski that the Water Rights Program received a complaint, what the issues in the complaint were, and setting forth the Well Construction Standards to get this matter resolved. Approximately 10 days after the letter was sent, Mr. Gronlund received a telephone call from Mr. Manikowski.

Exhibit 6 is a letter outlining the discussion Mr. Gronlund had with Mr. Manikowski on the previous day.

Vice Chairman Hutmacher admitted the exhibit into the record.

Mr. Gronlund's take-away from the conversation was the Mr. Manikowski intended to make the Penfield well matter right. The Water Rights Program required him to provide proof that he ordered the well casing for completion of a replacement of the well. Mr. Manikowski also committed to going out to the Penfield well and seeing if he could reduce the amount sediment in that well by possibly bring the gallonage down. It was also Mr. Gronlund's understanding that Mr. Manikowski would maintain communication with Mr. Gronlund or the Water Rights staff regarding this situation.

Mr. Gronlund stated that the Water Rights Program received an email from the casing supply company stating that Mr. Manikowski had placed an order, and the company put a mid-to-late June delivery date on receiving the well casing.

Exhibit 7 is a letter dated August 5, 2022, to Mr. Manikowski from Mr. Gronlund trying to get him to contact Mr. Gronlund immediately to discuss the status of his efforts to replace the Penfield well because Mr. Gronlund's efforts to contact him by phone were unsuccessful.

Ms. Mines Bailey moved admission of Exhibit 7. The exhibit was admitted into the record.

Mr. Gronlund stated that he tried to contact Mr. Manikowski by telephone at least three times. The Water Rights Program was expecting a June 2022 delivery date for pipe, so in mid-June Mr. Gronlund emailed the supply company, and after the second email the pipe supplier indicated that they would let Mr. Gronlund know when the pipe arrived. A couple weeks later Mr. Gronlund sent another email to the supply company, but never received a response. To this date, Mr. Gronlund has not been contacted by either the supply company or Mr. Manikowski.

The next step Mr. Gronlund took was to have discussions with Ms. Mines Bailey regarding the best way to bring this matter before the Water Management Board for action.

Exhibit 8 is an August 19, 2022, letter to Mr. Manikowski from the Office of the Attorney General and signed by Ms. Mines Bailey. This letter is part of the administrative file for Well Driller License No. 285.

Ms. Mines Bailey moved for admission of Exhibit 8. The exhibit was admitted into the record.

Exhibit 8 stated that if Mr. Manikowski does not contact Ms. Mines Bailey within 10 days of the letter, the Chief Engineer will commence an enforcement action and that the hearing would be scheduled before the Water Management Board at its October 5-6, 2022, meeting. Mr. Gronlund

stated that to his knowledge Mr. Manikowski did not contact Ms. Mines Bailey.

Mr. Gronlund stated that the DANR Drinking Water Program had contacted him in regard to a well that was supposedly drilled by Manikowski Well Drilling for the city of South Shore in 2019. The Drinking Water Program was trying to find out if the Water Rights Program had a well completion report on file. The Water Rights Program was unable to locate a well completion report for this well.

Exhibit 9 is a letter dated August 29, 2022, to Byron Manikowski from Adam Mathiowetz, Water Rights Program, in regard to obtaining a well completion report for the city of South Shore's well that was drilled in 2019.

Ms. Mines Bailey moved admission of Exhibit 9. The exhibit was admitted into the record.

Mr. Gronlund read the following sentence that was shown in bold in Exhibit 9: We require either the well completion report or contact from you stating that you were not the driller of South Shore's well by Wednesday, September 14th.

The Water Rights Program did not hear from Mr. Manikowski by September 14th.

The Water Rights Program subsequently moved forward with scheduling this matter for hearing before the Water Management Board.

Exhibit 11 is the Notice of Hearing dated September 2, 2022, scheduling the matter before the Water Management Board on October 5, 2022.

Ms. Mines Bailey moved admission of Exhibit 11. The exhibit was admitted into the record.

Exhibit 12 is the Recommendation of the Chief Engineer for Deferring Renewal of South Dakota Well Driller License No. 285, Manikowski Well Drilling, License Representative Byron Manikowski.

Ms. Mines Bailey moved admission of Exhibit 12. The exhibit was admitted into the record.

Mr. Gronlund's recommendation was for a deferral of the application to renew Mr. Manikowski's 2022 well driller license. Mr. Gronlund stated that initially he was trying to jump-start the matter to get Mr. Manikowski's attention so he would contact the Water Rights Program and the Water Rights Program could find out the status and move forward with rectifying the issues with the Penfield well.

Exhibit 10 is an Order dated September 2, 2022, to Manikowski Well Drilling Licensed Representative Byron Manikowski.

Ms. Mines Bailey moved admission of Exhibit 10. The exhibit was admitted into the record.

A Certification accompanied the Order, which certifies that the Notice of Hearing with recommendation and Order were sent via US mail with first class postage affixed on September 2, 2022. The certification also indicates who the Notice of Hearing with a recommendation and Order were sent to.

The substance of the Mr. Gronlund's Order was for Mr. Manikowski to immediately cease all South Dakota activities that require licensure until such time as the Water Management Board authorizes him to engage in that activity. The Water Rights Program did not hear from Mr. Manikowski in response to the order.

Mr. Gronlund stated that Adam Mathiowetz, staff engineer, made a site visit to the Penfield well site.

Exhibit 13 is a Water Rights Program File Documentation regarding Mr. Mathiowetz's site visit on September 20, 2022. The file documentation was written by Mr. Mathiowetz on October 3, 2022, following receipt of the analysis from the State Health Laboratory in regard to the well. This exhibit is part of the administrative file for Well Driller License No. 285.

Ms. Mines Bailey moved admission of Exhibit 13. The exhibit was admitted into the record.

Based on the site visit, the conclusions substantiated what the Water Rights Program had seen in photos of the well and had heard from Mr. Penfield. Attached to the file documentation are the lab results from the composite water sample taken by Adam Mathiowetz. The water sample was analyzed by the State Public Health Laboratory. ARSD 74:02:04:37 refers to the limit for mud or silt turbidity of 25 milligrams per liter or less, and the lab result came in at 438 milligrams per liter. The file documentation also included several photos of the dirty water and sediment.

Mr. Gronlund stated that in the past there were letters sent to Mr. Manikowski by the Water Rights Program about various issues regarding well completion reporting or grouting requirements.

Exhibit 14 is an October 16, 1986, letter to Byron Manikowski from then Chief Engineer, John Hatch. This letter is in the administrative file.

Ms. Mines Bailey moved for admission of Exhibit 14. The exhibit was admitted into the record.

This letter is in regard to two well completion reports filed by Manikowski Well Drilling that did not meet the grouting requirements in the Well Construction Standards.

Exhibit 15 is a December 5, 1989, letter to Byron Manikowski from then Chief Engineer, John Hatch.

Ms. Mines Bailey moved for admission of Exhibit 15. The exhibit was admitted into the record.

This letter states that Mr. Manikowski's application in 1989 for renewal of the South Dakota Well Driller's License was being delayed until acceptable well completion reports are received for five wells he constructed in 1988.

Exhibit 16 is an April 15, 1994, Water Rights Program file documentation of a telephone conversation that Ken Buhler, then staff engineer, had with Byron Manikowski. This document is included in the administrative file.

Ms. Mines Bailey moved for admission of Exhibit 16. The exhibit was admitted into the record.

This exhibit shows that the substance of the conversation between Mr. Buhler and Mr. Manikowski was regarding a well completion report for a well that was not grouted properly.

Mr. Gronlund stated that prior to the complaint filed by Mr. Penfield, his opinion of Manikowski Well Drilling was that he was a respected well driller. Mr. Gronlund said this matter was brought to the Water Management Board because there is an issue where Mr. Manikowski did not follow well completion construction standards in regard to the proper development of this well and he ultimately stopped communicating with the Water Rights Program.

Mr. Gronlund stated that at this time, his recommendation is for denial of the renewal of Well Driller License No. 285 for Manikowski Well Drilling. Since Mr. Manikowski will not communicate with the Water Rights Program and his actions regarding the Penfield well, Mr. Gronlund said he had no other choice.

Vice Chairman Hutmacher asked, if the Water Management Board denies Mr. Manikowski's Well Driller License, can he apply again in 2023 without any consequences.

Mr. Gronlund said he does not believe denial of his renewal license prohibits Mr. Manikowski from applying in 2023, but under SDCL 46-2A-13 the chief engineer has the ability to recommend denial or deferral, so the application would have to come back before the Water Management Board. Mr. Gronlund said his intent would be to bring it back to the board.

Vice Chairman Hutmacher asked if the Water Rights Program can make Mr. Manikowski fix the Penfield well. Mr. Gronlund said he believes that would have to be through the court. The Water Rights Program worked closely with Mr. Penfield throughout this process, and he agreed with the process the Water Rights Program took, but it was made clear to Mr. Penfield that the Water Rights Program couldn't force Mr. Manikowski to make this right and that Mr. Penfield would need to consult with legal counsel.

Mr. Larson asked why Mr. Gronlund recommended deferral. Mr. Gronlund stated that his recommendation has now changed to denial.

Ms. Dixon asked if Mr. Manikowski's Well Driller License expired in December 2021.

Mr. Gronlund responded that, technically, in the statutes there isn't a specific expiration date, but the well driller is required to file for renewal by January 31 and they are also required to pay the fee each calendar year, so in effect, the license is only good for a year. The Water Rights Program's past practice is to let the well driller keep operating. In this instance, Mr. Gronlund said he believed they were working toward resolution, which turned out not to be the case.

Motion by Bjork, seconded by Larson to deny the renewal of Well Driller License No. 285 for Manikowski Well Drilling. A roll call vote was taken, and the motion carried unanimously.

Ms. Mines Bailey will prepare an Order for this matter.

NEW WATER PERMIT APPLICATIONS: The pertinent qualifications attached to approved water permit applications throughout the hearings are listed below:

Well Interference Qualification

The well(s) approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this permit shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

Well Construction Rule Qualification No. 1

The well(s) authorized by Permit No. ___ shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.

Well Construction Rule Qualification No. 2

The well(s) authorized by Permit No. ___ shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

Irrigation Water Use Questionnaire Qualification

This permit is approved subject to the irrigation water use questionnaire being submitted each year.

Low Flow Qualification

Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

CONSIDER WATER PERMIT APPLICATION NO. 2016-1, SOUTH DAKOTA ELLSWORTH DEVELOPMENT AUTHORITY: Vice Chairman Hutmacher opened the hearing. He requested appearances.

Ann Mines Bailey, Assistant Attorney General, appeared on behalf of the Water Rights Program.

Greg Erlandson, attorney from Rapid City, appeared on behalf of the South Dakota Ellsworth Development Authority.

Matt Naasz, attorney from Rapid City, appeared on behalf of the intervenor, Black Hawk Water User District.

The parties waived opening statements.

Ms. Mines Bailey offered Exhibit 50, the administrative file for Water Permit Application No. 2016-1, South Dakota Ellsworth Development Authority. The administrative file contains the application, the request for amendment to the application, the report and revised report, the recommendation and revised recommendation, and the Affidavits of Publication along with all other correspondence that has been received regarding this matter.

There were no objections.

The exhibit was admitted into the record.

Ms. Mines Bailey called Kim Drennon, Water Rights Program staff engineer, who had previously been administered the oath.

In response to questioning by Ms. Mines Bailey, Ms. Drennon provided the following testimony.

Exhibit 51 is the curriculum vitae of Kim Drennon.

Ms. Mines Bailey offered Exhibit 51. There were no objections.

The exhibit was admitted into the record.

Ms. Drennon received a bachelor's degree from Dordt University in May 2015, passed the Fundamentals of Engineering exam that same month. That qualifies her as an engineer intern or engineer in training, which is a step in the process of receiving a P.E. license. She received a master's degree in Civil and Environmental Engineering from South Dakota School of Mines and Technology in December 2018.

Ms. Drennon has been employed at the Department of Agriculture and Natural Resources in the Water Rights Program since January 2019. She prepares technical reviews of applications, inspects dams that are owned by the state, answers constituent complaints and questions along with other activities, as described in her curriculum vitae. In her practice the focus has been primarily groundwater.

Ms. Drennon performed the technical review for Water Permit Application No. 2016-1.

Water Permit Application No. 2016-1 seeks to appropriate up to 1,600 acre-feet of water annually at a maximum diversion rate of 2.67 cubic feet of water per second, approximately 1,200 gallons per minute, from one well to be completed in the Madison aquifer for a water distribution system serving users in Meade and Pennington Counties.

During her technical analysis, Ms. Drennon reviewed the availability of unappropriated water for this application and the possibility of developing this application without unlawful impairment of existing water rights.

Ms. Drennon prepared a report for the application. She also prepared a revised report because the applicant amended the application by moving the proposed diversion location. The revised report was issued on July 11, 2022. On page 1 of the report, the citation that is numbered 5 on the report should be number 14. There was also a clerical issue with the citation system Ms. Drennon used, so there is a corrected references list included with the report, which was included in the board packet. There are changes to some of the owners and permits listed in Table 2 on page 5. There were no changes in the amounts appropriated or that would affect the estimate of total withdrawal.

The application is seeking an appropriation from the Madison Aquifer. The Madison Aquifer is composed of the Pahasapa Limestone and the Englewood Limestone, which are dolomite and limestone formations that were deposited during Lower Mississippian and Upper Devonian geologic

periods. The Madison Aquifer underlies approximately 210,000 square miles in various states in the United States. In South Dakota the Madison Aquifer stores approximately 692,000,000 acre-feet of available water. There is 380 feet of saturated thickness of aquifer material in this area. The aquifer is confined in this location, and in this area there is approximately 750 feet of head pressure above the top of the aquifer.

The Madison Aquifer is older and stratigraphically lower than the Greenhorn Formation. The Greenhorn Formation is a limestone formation that was deposited during the middle Cretaceous period, which well drillers use as a marker bed to identify where they are in the stratigraphic column.

SDCL 46-6-3.1 provides that applications proposing to withdraw from groundwater may be approved if there is a reasonable probability that recharge to the aquifer exceeds withdrawals. There is an exception in that statute that allows for water distribution systems which are proposing to withdraw from a formation lower than the Greenhorn Formation that the Water Management Board may approve an application for withdrawals of groundwater in excess of the average estimated annual recharge. In this case, the applicant will be a water distribution system, and the Madison aquifer is stratigraphically lower than the Greenhorn Formation.

Recharge is any means by which water flows into the aquifer. Withdrawal is an intentional removal of water from the aquifer. Ms. Drennon looked at recharge and withdrawal even though the statute makes an exception for this kind of project. She did a hydrologic budget and looked at the record of observation wells. A hydrologic budget is accounting for recharge and comparing recharge with withdrawals.

The Madison Aquifer receives recharge from infiltration of precipitation along the outcrop and infiltration of streamflow. The best study available to the Water Rights Program is a group of studies called Black Hills Hydrology Study. One study within this group estimated that recharge to the Madison Aquifer is 137,000 acre-feet per year in South Dakota.

In South Dakota most of the withdrawals are for various kinds of water distribution systems. There are some withdrawals for irrigation, commercial use, industrial use, domestic use, geothermal use, institutional use, and recreation. The estimated total withdrawal from the Madison Aquifer is 65,954 acre-feet per year in South Dakota. This amount includes future use permits. For irrigation permits, Ms. Drennon looked at the record of irrigation questionnaires that are submitted to the Water Rights Program each year. For permits that have more than 10 years of data she used the average reported irrigation withdrawal. There are some irrigation permits that have additional uses permitted. Ms. Drennon added an additional withdrawal to the those permits based on 60 percent times the pump rate of the permit. For non-irrigation permits, it was assumed the permit holders would withdraw the entire volume limit listed on the permit. For permits that do not have a volume limit but do have a diversion rate limit, Ms. Drennon assumed that the permit holders would pump at the maximum diversion rate 60 percent of the time. Sixty percent is a value that the Water Rights Program has established based on studying various water distribution systems and other users, and it is a value that the Water Management Board has accepted. For future use permits, Ms. Drennon assumed the permit holders would withdraw the entire volume as listed on the permit.

This analysis was conducted on a statewide basis. Ms. Drennon also looked at the aquifer in a more localized perspective for the information of the chief engineer and the Water Management Board. In

the end, Ms. Drennon relied on the statewide budget.

There are two local hydrologic budgets that cover the area of this application. The first is Carter et al. which is a part of the Black Hills Hydrology Study. The Carter et al. study estimated that recharge to the Madison Aquifer in Subarea 4, which is the location of this application, was 15,600 acre-feet a year. The Black Hills were divided into nine subareas based on what Carter et al. believed at the time was how the groundwater would flow. It was divided so that groundwater would not cross subarea boundaries at the time they did the report. The Water Rights Program has not adopted the use of those subareas for management.

For Subarea 4, using the same estimation methods as she did in the statewide budget, Ms. Drennon estimated a withdrawal of 26,738 acre-feet a year, including future use permits and pending, deferred or held permits, other than Application No. 2016-1.

For the Long and Putnam report, which the second local budget area that is available, they estimated a recharge of 24,400 acre-feet a year. Using the same methods as the statewide budget, Ms. Drennon estimated a withdrawal of 29,203 acre-feet a year within their subarea boundary.

The withdrawals are higher than the recharge estimates, but the observation well record indicates that there is still unappropriated water available.

The Water Rights Program maintains 25 observation wells completed into the Madison Aquifer. Observation well data shows that, in general, water levels rise during periods of higher than average precipitation and decline during periods lower than average precipitation. This means that water is flowing naturally out of the aquifer and, therefore, natural discharge is available to capture as withdrawals. Based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

Ms. Drennon also looked at the potential for unlawful impairment.

Exhibit 53 is a map showing the location of Water Permit Application No. 2016-1, the surrounding area, water rights, permits, observation wells, and future use permits.

Ms. Mines Bailey moved admission of Exhibit 53. The exhibit was admitted into the record.

Ms. Drennon stated that the proposed point of diversion is shown by a yellow triangle surrounded by a pink outline on Exhibit 53. The orange triangles are water rights and permits completed into the Madison Aquifer. The black circles with blue crosses are Water Rights Program observation wells completed into the Madison Aquifer. The cross-hatch area in purple in the lower right quadrant of the map indicates the area for Future Use Permit No. 2086-2 held by the city of Rapid City with a priority date of May 18, 1989. The pink area in the upper right side of the map indicated Future Use Permit No. 1833-2 held by Weston Heights Homeowners Association with a priority date of February 18, 1983. The blue cross-hatch area indicates Future Use Permit No. 1995-1 held by Black Hawk Water User District with a priority date of April 15, 2020.

The nearest existing water right to this application Water Right No. 1674-1, which is held by Black Hawk Water Use District and is located approximately 0.7 miles southwest of the application. The

nearest observation well to the point of diversion is PE-95C located 3.7 miles southwest of the application.

There are domestic wells in this area. Ms. Drennon determined the presence of domestic wells by using the Water Rights Program well completion report database. Not all domestic wells are included in the database because the Water Rights Program did not start requiring well drillers to submit well completion reports until in the late 1980s or early 1990s, so older wells may not be included in the database.

The nearest domestic well on file with the Water Rights Program is located approximately 2.5 miles southeast of this application. It is unlikely that there are other domestic wells in the Madison Aquifer in this area. The Madison Aquifer is very deep in this area, and there are higher aquifers and other water distribution systems that may be more accessible for a domestic water user.

To receive protection under the law a domestic well or water right must be an adequate well. ARSD 74:02:04:20(6) defines an adequate well as a well that completed so that the pump can be placed 20 feet below the top of the aquifer formation or, if the aquifer is thinner than that, as low as possible.

Ms. Drennon stated that there is a reasonable probability that South Dakota Ellsworth Development Authority can develop their application without unlawful impairments of existing water rights. This opinion is based on the fact that there are no complaints in Meade County regarding unlawful impairment of existing wells, the Madison Aquifer is highly transmissible in this area, there are 750 feet of hydraulic head lifting water above the top of the aquifer.

Transmissivity is the capability of the aquifer to convey water horizontally. An aquifer with high transmissivity will show low drawdown in nearby wells because the aquifer can recharge the area faster than an aquifer with low transmissivity.

The 750 feet of artesian head pressure fits into Ms. Drennon's analysis because to unlawfully impair an adequate well the applicant would have to drawdown the water approximately 770 feet before that rule would apply.

Ms. Drennon did calculations regarding the potential drawdown at the proposed point of diversion. She used the Theis equation, which is a standard equation groundwater engineers use, to estimate drawdown. She used an estimated transmissivity of 5,000 square feet per day, storage coefficient of 1.4×10^{-5} and a flow rate equating to the average annual discharge of 1,600 acre-feet a year. Over 27 years of pumping, the Theis equation indicates that without recharge in the area drawdown would be approximately 40 feet to the nearest water right.

Ms. Drennon reviewed the petition in opposition, and her understanding of the petition is that the petitioners are largely concerned about economic competition, including possible additional expenses due to drawdown in their wells. Exhibit 53 shows that there is overlap in the future use areas with the existing rights and there is overlap amongst the future use areas. She said this does not present any concern to her because they can still complete wells into their future use area without either well impacting the other.

Ms. Mines Bailey had no other questions of Ms. Drennon.

Responding to a question from Mr. Erlandson, Ms. Drennon stated that the opinions she presented today are based upon a reasonable degree of engineering certainty.

Responding to questions from Mr. Naasz, Ms. Drennon stated analyzing the applicant's need for the volume of water requested was not within the scope of her review. Ms. Drennon said she was aware that one of the purposes of the application is to provide water for PFOS and PFOA impacted homes in the Ellsworth Air Force Base area. She does not know how many PFOS and PFOA impacted homes have been identified. On page 2 of her report, Ms. Drennon indicates that the applicant is a water distribution system as defined in SDCL 46-1-6(17). That determination was made by Ms. Drennon and other staff engineers with the Water Rights Program. That determination was based on the understanding provided by Mr. Duvall and Mr. Gronlund. Ms. Drennon did not do an investigation into the system of wells, pipes, etc. currently existing in the area of the application. She does not know how far it is between the proposed well site and the PFOS and PFOA impacted homes.

Ms. Drennon stated the scope of her review was not to review SDCL 1-16J-7 to determine whether if the applicant has the legal authority to construct and operate a water distribution system.

Mr. Erlandson objected, citing foundation and it is a legal question.

Vice Chairman Hutmacher asked Mr. Naasz to restate the question.

Mr. Naasz asked the question again. Mr. Erlandson objected. Vice Chairman Hutmacher overruled the objection.

Ms. Drennon answered that she did not look at SDCL 1-16J-7 when determining that the application was a water distribution system.

Ms. Drennon said it is correct that the Carter localized hydrologic budget and the Long and Putnam localized hydrologic budget indicate that there is more withdrawal than recharge in the local area. If this application were to be granted, analyses of the localized hydrologic budgets in these areas would include an additional 1,600 acre-feet per year of withdrawal.

Mr. Naasz had no other questions of Ms. Drennon.

Redirect

Responding to questions from Ms. Mines Bailey, Ms. Drennon stated that when she receives an application to perform a technical analysis on, she reviews the application and assumes that the information on the application is correct. On this application, the applicant marked municipal and water distribution for the use of the water.

In response to questions from Mr. Erlandson, Ms. Drennon stated that SDCL 46-1-6(17) states "Water distribution system," a system of piping, valves, storage tanks, pumps, and appurtenances by which water is conveyed for domestic or municipal use by a common distribution system, including a municipality as defined in chapter 9-1-1, a nonprofit rural water supply company as defined in chapter 10-36A-1, a water user district as defined in chapter 46A-9-2, a sanitary district as defined in chapter 34A-5, or homes, including mobile homes as defined in chapter 32-3-1, and manufactured

homes as defined in chapter 34-34A-1.1 supplied by a common distribution system.

Ms. Drennon relied on her conclusion that the South Dakota Ellsworth Development Authority was a water distribution system.

Mr. Naasz had no questions on redirect.

Vice Chairman Hutmacher asked if there is recharge area to the Madison Aquifer besides the Black Hills. Ms. Drennon answered that there is recharge in Wyoming.

Ms. Mines Bailey had no further questions or witnesses.

Mr. Erlandson stated that parties have stipulated that the exhibits offered by Black Hawk Water User District and the South Dakota Ellsworth Development Authority are admissible, and the parties understand that the basis for Black Hawk Water User District's opposition is the fourth prong in SDCL 46-2A-9, which is public interest.

The exhibits were admitted into the record.

Mr. Erlandson called John Wetstein. The court reporter administered the oath to Mr. Wetstein.

Mr. Wetstein testified that he is a practicing hydrogeologist and civil engineer for Engineering Associates in Laramie, Wyoming. Exhibit 3A is Mr. Wetstein's resume, which was prepared by Mr. Wetstein, and it is accurate. Mr. Wetstein has a B.S. in geophysical engineering from Montana Tech, a B.S. and a M.S. in civil engineering from the University of Wyoming. Mr. Wetstein has over 30 years primarily in the groundwater field in well siting, well design, hydrogeologic studies, and small water and wastewater system designs.

Engineering Associates is a sub-consultant to KTM Engineers in Rapid City. Engineering Associates' task was to review the proposed well site for the potential of developing the requested groundwater flow and water quality for the proposed South Dakota Ellsworth Development Authority system. Engineering Associates proposed a hydrogeologic study to determine if the proposed design flow could adequately be produced by a Madison well in the area and the potential water quality.

Mr. Wetstein said the initial review is a study for previous published hydrogeologic studies in the area, a look at the DANR observation well information in the area, and mapping and developing a cross-section through the area to get a better visual understanding of the proposed well in relation to the geologic conditions. With the Madison Aquifer, since it is typically a nonproductive formation, the limestone is usually very tight intrinsically so you are looking for secondary enhancement features, primarily structural deformation due to folding and faults, and these are areas that would essentially break up that limestone. He also used infrared imagery to look for lineaments, which may show where a subsurface event, typically a fault, is located that doesn't manifest itself at the surface. Putting all that together and looking at the potential for secondary enhancement development, Mr. Wetstein concluded that the proposed well site would probably encounter a fracture system and be capable of producing the desired flow.

The location of the proposed well is shown in Figure 1 in Exhibit 1A. Mr. Wetstein was given the

location of that well by Terry Cash, an engineer with KTM Engineers, after discussions with Ellsworth Development Authority. The proposed well location was provided based upon the availability of property to put a well that would support the system, and this area happens to be one of the best areas to drill a well. There are two anticlines that are offset, and the well location is in the middle of them. The formation is shallower in this area and the distance from the recharge, which is typically precipitation onto the outcropping Madison plus where streams cross the Madison, is very close so the water quality should be very good. The depth to the Madison is relatively shallowed compared to going further east, so the construction costs are less.

Mr. Wetstein stated that previous localized recharge studies show the aquifer is over-appropriated, but that would show up in the observation well records. At the point where it became over-appropriated, that aquifer should have started to become mined; in essence, the static water level should have been declining for a number of years. It has remained steady and fluctuating with the recent precipitation moisture activity. Mr. Wetstein stated that to him that says the recharge is capable of keeping up with the current demand and future demand. It is Mr. Wetstein's opinion that there is a reasonable probability that unappropriated water is available for the proposed use, and he believes there would be minimal impact to the surrounding wells if this proposed well is developed.

Responding to questions from Mr. Naasz, Mr. Wetstein stated that the location of the proposed well was selected prior to the initiation of his report. He believes KTM Engineering chose the location of the proposed well, but he was not privy to discussions that took place between KTM Engineering and Ellsworth Development Authority. The location of the proposed well was based on the availability of property upon which to construct the well. Through the process the location of the proposed well site changed. Mr. Wetstein stated that his understanding is that the landowner, who is in the process of developing that particular parcel, asked that the well be moved to a different area.

Exhibit 2A is Mr. Wetstein's supplemental report. In the supplemental report, Mr. Wetstein says, "Stated another way, this decision indicates that an increase in operating expenses may result from interference between wells is not considered an adverse impact." Mr. Wetstein said it has not been determined at this point whether drawdown at the Black Hawk Water User District's Madison well could increase operating costs. In general, the lack of or decreased head pressure could result in increased pumping costs. Mr. Wetstein said he agrees that, based on the amount requested by the applicant, there could be drawdown at the Black Hawk Water User District's No. 5 well, and a consequence of that drawdown is that the pump may need to be lowered further into that well, which could cause additional operating costs.

Mr. Wetstein said he would expect a typical residential home to use approximately 100 gallons per resident per day.

Mr. Erlandson objected a question by Mr. Naasz asking if Mr. Wetstein knows how many PFOS/PFOA impacted homes the proposed diversion seeks to serve. The objection was sustained.

In response to questions from Mr. Naasz, Mr. Wetstein stated that he does not know how far the proposed well site is from the PFOS/PFOA impacted homes.

This concluded questioning by Mr. Naasz.

Ms. Mines Bailey had no questions of Mr. Wetstein.

Redirect

Responding to questions from Mr. Erlandson, Mr. Wetstein stated that South Dakota's statutes regarding adverse impact do not view lowering of the hydraulic head as an impact. He said in his opinion, just because there is a lowered pumping level in the well, that is not a negative impact to the point that the pump can still be lowered and still withdraw the water. They want to fully develop the aquifer, so if you were going to limit someone's production potential based on the hydraulic head, you would be leaving an unknown magnitude of undeveloped groundwater that would now be unusable based on the fact that the pumping level has been lowered in an existing well. If one of the criteria happened to be whether or not a water user's operation and maintenance costs would be increased by the granting of a water permit possibly affecting their system, then in certain areas that would limit many water permit being granted.

There were no other questions of Mr. Wetstein.

Mr. Erlandson called Glen Kane who was administered the oath by the court reporter. Mr. Kane testified that he is the managing director of the South Dakota Ellsworth Development Authority. He is a native South Dakotan. He has spent 35 years in the building development business in the Black Hills and he is very active in the community and economic development, home building industry. He served as the local president and state president and spent 12 years on the National Homebuilders board. In 2009 he was appointed to the first board of the South Dakota Ellsworth Development Authority by Governor Rounds, and he served two years on that board. He was then asked to come on board as a contractor to be the managing director, and he has been in that capacity since.

The South Dakota Ellsworth Development Authority is a government corporate body created by the South Dakota Legislature in 2009. South Dakota Ellsworth Development Authority's main mission is to make sure that the state of South Dakota is a good host to Ellsworth Air Force Base and the Department of Defense. Within that mission, Ellsworth Development Authority does several different things.

Ellsworth Development Authority built, owns and operates a wastewater treatment plant that has two customers; Ellsworth Air Force Base and the city of Box Elder. The plant was built for a joint use. Ellsworth Air Force Base's plant had run its useful life and Box Elder was operating on lagoons. Having one treatment plant will save millions of dollars over the life of a treatment plant instead to two treatment plants. Ellsworth Development Authority has purchased 4,000 acres of property around the Air Force Base, either easements or fee simple, in the flight path to address encroachment issues. Ellsworth Development Authority is getting ready to complete the Liberty Center, a very large fitness center. This was built because with the B-21 expansion coming to the base. Currently, Air Force men and women were exercising inside a hanger. The hanger will go back to its original use. The Liberty Center is located outside the Base so the community can also use it. The Ellsworth Development Authority was instrumental in the Powder River expansion. A closed air support site was built by the Ellsworth Development Authority on the Powder River so when planes take off from Ellsworth they don't have to fly to Arizona to do training. The Ellsworth Development Authority is also very active in the community and community relations. The Ellsworth Development Authority tries to leverage the assets it gets from Ellsworth into the community by looking at the big picture, and it has done that very successfully in the past.

Mr. Kane stated that there are zones on the end of the runway at Ellsworth Air Force Base. The zones are in place so that in case there would be a catastrophic event of a plane going down it would not take out a daycare or a residential neighborhood or whatever it might be. One of the tasks the Ellsworth Development Authority was asked to do by the Ellsworth Air Force was to look at incompatible uses around the Base, and that is the reason those 4,000 acres worth of easements or fee simple property were purchased around the Base. This was done for the health and safety of the people around the Base and for the pilots.

In 2005 Ellsworth Air Force Base was placed on the Base Realignment and Closure list. That basically said Ellsworth Air Force Base was going to be shut down. At that time, the Ellsworth Development Authority did not exist. Many people in the community fought to get the Base off the Base Realignment and Closure list, and they were successful in doing that. After that, a checklist of things that need to be done to keep the Air Force Base off the list was created, and that checklist is currently being used.

One of the things on the checklist is the health and safety of people on and around the Air Force Base. Water Permit Application No. 2016-1 is directly related to the health and safety of people on and around the Base. Approval of this water permit will help these people and also avoid issues in a potential future Base Realignment and Closure.

Mr. Kane said the Ellsworth Development Authority was asked by the Air Force to come up with a viable solution to get good quality source water to the PFOS/PFOA affected people. PFOS/PFOA is a forever chemical. It was used as a lubricant and in firefighting foam. At the time it was deemed to be safe. It turned out to be a health hazard. It was determined that PFOS/PFOA was in the shallow groundwaters around the Air Force Base. A lot of people around the Base have shallow wells, so they were basically drinking water contaminated with PFOS/PFOA. Ellsworth Development Authority entered into an Environmental Service one-year agreement with the Air Force a year ago in September. The agreement was to design and estimate the cost of a project to provide good source water to those affected by PFOS. Ellsworth Development Authority looked at a number of alternatives in order to find the best water source. Once that was determined, it was realized that there is a big gap between Black Hawk and Box Elder that is not served. There are large segments of people in that area that are still hauling water, and Ellsworth Development Authority realized there is an opportunity to help a lot of people. People in Ashland Heights haul water. The proposed water line will go right by that area, so this would be a great opportunity for these people to get clean drinking water. Box Elder is contemplating supplementing their supply with this water. Ellsworth Development Authority is also working with Box Elder to wheel through their system to the other side of Box Elder because there are PFOS people affected there. Mr. Kane said he sees this going even further east into New Underwood at some point in time.

Mr. Kane said the initial purpose of this water permit is to serve PFOS affected people. There are dozens of properties that are affected. If this permit is granted, the residents of Box Elder will also benefit.

Mr. Kane said there was a lot of discussion on a regional water plan in the Black Hills region. This has spawned a lot of discussion in connecting Rapid Valley, Rapid City, the area to then north. There has been discussion of bring Missouri River water to the Black Hills region, so some day, if that

happens, at least there will be a system to tie into. There is a regional study taking place at this time.

When the first phase of the Environmental Service contract was completed, Ellsworth Development Authority moved into Phase 2, and signed an Environment Service contract with the Air Force to do this project. This allows Ellsworth Development Authority to receive Air Force funding to construct the project.

Exhibit 5A is a map, prepared by KTM Engineering, showing the proposed water line for the distribution system. That well site was chosen because the Air Force asked Ellsworth Development Authority to find the best water source available within reason. The route was secondary based on the fact that a willing property owner was needed to work with Ellsworth Development Authority on a well site in that area. The distribution system follows the section lines and will end up connecting to Box Elder's system, then wheel through their system to some other PFOS affected properties to the east side of Box Elder. The Air Force gave the Development Authority two years to spend the money.

Mr. Kane met with every property owner that is affected by PFOS. They have an interest in getting clean, safe water. In order for the Air Force to move forward with the Environmental Service contract, they needed to have at least 50 percent of the people that were affected by the PFOS to sign on to the project. Mr. Kane said 100 percent of the people he met with agreed to sign on to the project.

Responding to questions from Mr. Naasz, Mr. Kane stated that the proposed well site is 14 miles from the PFOS/PFOA impacted homes, and there are 140 individuals in this area.

Mr. Kane said he agrees that SDCL 1-16J-7 identifies the powers of the South Dakota Ellsworth Development Authority. It specifically allows South Dakota Ellsworth Development Authority to construct, own and operate a wastewater treatment facility. The statute does not authorize the Development Authority to construct, own and operate a water distribution system, and it also does not authorize the Development Authority to buy land or do a lot of things the Development Authority does.

Most of the directors of the South Dakota Ellsworth Development Authority live in the Black Hills region. One director lives in the White River area. The directors are appointed by the Governor and approved by the Legislature. Mr. Kane stated that, to his knowledge, none of the current directors live in an area that would be served by this proposed project.

The new Environmental Service Agreement with the Air Force provides \$17,000,000 in funding for this project. The total estimated cost of the project is \$30,000,000. Ellsworth Development Authority has submitted a funding application to the Board of Water and Natural Resources grant funds for the project. The board has deferred action the funding application until after the Water Management Board acts on water permit application.

Mr. Kane stated that 60 gallons of water per minute would be needed for the PFOS/PFOA affected residents. The water permit application seeks to appropriate 1,200 gallons per minute.

Mr. Naasz asked if Ellsworth Development Authority needs approval from Meade County to utilize

the section lines for the distribution lines. Mr. Erlandson objected citing relevance. Vice Chairman Hutmacher overruled the objection.

Mr. Kane answered that Ellsworth Development Authority has applied for the permit to utilize the section lines, and that hearing is scheduled for October 11, 2022. He said that was another reason the Board of Water and Natural Resources deferred action on the funding application. Part of the section line was vacated in the past. Ellsworth Development Authority is in discussions with the landowners regarding easements for the distribution system to be placed on land where the section lines have been vacated; the easements are not in place at this time.

Redirect

In response to questions from Mr. Erlandson, Mr. Kane stated that said there a lot of moving parts to solve the PFOS issue. If the project is not constructed within the required time, Ellsworth Development Authority would not only lose funding, but it would also lose its water permit. Ellsworth Development Authority signed the Environmental Service Agreement with the Air Force, understanding that if the bids come back and it turns out to be a \$40,000,000 project, there won't be enough money to construct the project.

Mr. Kane stated that he had a conversation with Mark Mayer, DANR Drinking Water Program, who gave him the idea of regionalization concept. Because of that conversion, Ellsworth Development Authority is now sponsoring a study for the region for water and wastewater.

Responding to questions from Mr. Naasz, Mr. Kane said a water permit is needed in order to solve the PFOS/PFOA issue. The PFOS/PFOA issue can be solved with a water permit for 60 gallons per minute. Mr. Kane did not have discussions with the DANR Water Rights Program or staff about the possibility of future use permit from the Water Management Board rather than a permit to appropriate water.

In response to a question from Mr. Erlandson, Mr. Kane said the decision to request a permit for 1,200 gallons of water per minute was made because a well is needed that will produce enough water to address the PFOS/PFOA issue as well as serve the needs of others in that region.

Responding to questions from the board, Mr. Kane said there is a study currently being done regarding bringing Missouri River water to the Black Hills area.

Ellsworth Air Force Base currently gets water from Pactola, wheeled through Rapid City.

Mr. Kane said part of the agreement with the Air Force is that Ellsworth Development Authority will own and operate the proposed water distribution system. The people that were affected by PFOS demanded not to be part of a municipality, they were afraid of annexation, and there were several other issues.

The Air Force visited with Rapid City and Rapid Valley, worked with the Corps of Engineers, and looked at several different options. The reason the municipalities did not work was because with the restrictions the Air Force has on this money, they can't pay for operations or maintenance.

Mr. Kane said he has not had discussions with West Dakota Water Development District regarding

this project.

There were no other questions of Mr. Kane.

Mr. Erlandson called Rita Krebs who was administered the oath by the court reporter. Ms. Krebs testified remotely.

Responding to questions from Mr. Erlandson, Ms. Krebs stated that she is an environmental restoration program manager at Ellsworth Air Force Base. She manages cleanup of soil and groundwater contamination. Her main duty is to manage impacts from PFAS, which are manmade chemicals in everyday items such as Teflon and scotch guard. PFAS were also a component in firefighting foam, which was formerly used by the Air Force to extinguish fires in real incidents as well as during training exercises. Two of the best known PFAS substances are PFOS and PFOA.

Ms. Krebs has B.S. degree in geology and a M.S. degree in geology and geological engineering from South Dakota School of Mines and Technology. She is a licensed professional geoscientist in the state of Texas. She has over 20 years of experience in environmental cleanups, and she has worked for the Air Force Civil Engineer Center at Ellsworth Air Force Base since 2010.

Ellsworth Air Force Base has a very successful partnership with South Dakota Ellsworth Development Authority dating back when they were first formed in 2009. South Dakota Ellsworth Development Authority built the regional wastewater treatment plant, which solved a huge problem for Ellsworth Air Force Base and the city of Box Elder. Ellsworth Development Authority also handled a lot of encroachment problems at the Base. The B1 Bomber is so loud there is a big noise problem, and Ellsworth Development Authority solved those problems. They purchased restricted easements for land in the crash zone for safety purposes.

Ms. Krebs said the work that South Dakota Ellsworth Development Authority has done for the Base and the surrounding community really means that the Air Force trusts them to do what's in the best interest for both the Base and the surrounding community. Ms. Krebs said her professional partnership with the Ellsworth Development Authority started in 2019.

Ms. Krebs stated that in 2018, the Air Force was collecting samples trying to determine the presence or absence of contamination in the soil and groundwater. Based on the sample results, it looked like the contamination could be migrating off-Base to shallow drinking water wells in the community. In September 2018, an off-Base water survey began looking for private drinking water wells. Most of that work was done in 2018 and 2019. It was discovered that there were 23 drinking water wells with PFOS and PFOA above EPA's 2016 lifetime health advisory. Those 23 wells serve 28 properties and 94 residences. One of those properties is a mobile home park that has approximately 70 mobile homes, but the capacity is there for over 100 mobile homes on that property. It is estimated that over 280 people have been impacted. Once the Air Force learned that those drinking water wells were impacted, it started an emergency action to provide bottled water to those people immediately. Once the emergency action was started, the Air Force started working right away to get them off bottled water because it is so inconvenient for those people. Twenty household treatment systems were provided, and a large treatment system was built at the mobile home park to treat their water. Once those interim actions were in place, the Air Force started looking at a long-term solution to get them a good, clean, reliable source of water. In 2020 an Engineering Evaluation and Cost Analysis was

started to identify alternatives, the costs, the estimated timeframe, and in July 2020 the document was issued for public comment for 30 days. In January 2021 the Air Force signed an Action Memorandum to document the decision that was made following that process. That decision was to basically to expand the city of Box Elder's municipal system by adding a new wells and distribution lines. At that point South Dakota Ellsworth Development Authority was the Air Force's backup, or Plan B.

After that, another impacted area was identified. There were also difficulties coming to an agreement with the city of Box Elder, so a second Engineering Evaluation and Cost Analysis was completed to analyze an alternative that was not considered in the first analysis. Once that document was complete, it was issued for public comment in June 2021. The Air Force made its decision and documented that in an Action Memorandum in January 2022. The decision was to have South Dakota Ellsworth Development Authority design, construct, own and operate a new community water system. Following that decision, the Air Force entered into an Environmental Services Agreement with South Dakota Ellsworth Development Authority on September 1, 2021, for them to design the system. On September 21, 2022, the Air Force entered into a second Environmental Services Agreement with South Dakota Ellsworth Development Authority, where the Air Force provides partial funding for them to build the system.

One of the reasons the Air Force's talks with the city of Box Elder fell through is because of engineering requirements like fire flow. A certain amount of water needs to be stored to respond to a house fire. A certain number of hydrants are required along the system. It was determined that the Air Force's environmental restoration funds could not pay for those requirements. Another reason was the Air Force had been meeting with the impacted residents, and most of the impacted people are located between the city of Box Elder and the city of Rapid City, but they are not annexed into either city. These people were very concerned about being annexed because that would increase their property taxes and even if the city of Box Elder were to relax the annexation requirements, their water bill would be twice the amount the in-town customers pay. The majority of the impacted residents expressed concern that they were being penalized even though it is not their fault that their wells are contaminated.

The Air Force looked at several other options. A no action alternative was evaluated, which would mean keeping the pump and treat systems, which was estimated to cost \$11,000,000 to keep them operating for 30 years. The Air Force met with the city of Rapid City in 2019. The city chose not to participate at that time because it would not be cost-effective for the city to expand their distribution system that far to the east and it would take resources away from their primary customers. The Air Force also looked at purchasing the impacted properties; however, the Department of Defense has very strict guidelines for how the Air Force can purchase property, and a lot of the properties would not fall into that category of being able to be purchased. The Air Force also looked at drilling a new deep well for every impacted property.

Ms. Krebs said the Air Force did not look at trying to partner up with other existing water user districts, such as Black Hawk Water User District. At the time, it was believed that Black Hawk Water User District was too far away from the impacted residents. Rapid Valley reached out to the Air Force, but they wanted either the Ellsworth Air Force Base's water rights or manage the water rights for the Air Force Base and, for National Security purposes, that could not happen.

One-on-one meetings were held twice with each of the impacted property owners, and the property owners seemed to feel like Mr. Kane heard their concerns and was going to deal with their concerns, and they seemed to trust Mr. Kane.

Ms. Krebs stated that she believes, should the board grant this water permit, it is in the best interest of South Dakota Ellsworth Development Authority and those impacted users. She said Ellsworth Development Authority is implementing an Air Force restoration decision, and she really hopes Ellsworth Development Authority can get a good, safe drinking water source to those impacted residents that the Air Force has affected.

Responding to questions from Mr. Naasz, Mr. Krebs stated that several alternatives are included in the 2020 Engineering Evaluation and Cost Analysis as possible restoration solutions for the impacted area, but none of the restoration alternatives mention activity west of Elk Vale Road. Ms. Krebs does not know how far Elk Vale Road is from the proposed well site location. The June 2021 Engineering Evaluation and Cost Analysis was prepared after identifying an area near New Underwood that needed to be restored. This area is east of Elk Vale Road and Ellsworth Air Force Base.

The 2020 Engineering Evaluation and Cost Analysis mentions an alternative for South Dakota Ellsworth Development Authority constructing a well and it indicates that the well would preferably be located in Area A, which is east of Elk Vale Road. Ms. Krebs stated that at the time the 2020 and 2021 Engineering Evaluation and Cost Analysis were prepared, it was not anticipated that the proposed alternative to the PFOS issue would be located eight to ten miles west of Elk Vale Road. The Air Force's decision was to go with South Dakota Ellsworth Development Authority, and it did not stipulate where the well would be located. The Air Force became aware that the proposed well would be located 10 miles west of Ellsworth Air Force Base and that Black Hawk Water User District has a high-capacity well less than a mile away from the proposed well. Ms. Krebs said the Air Force did not engage Black Hawk Water User District in conversations about this project; however, South Dakota Ellsworth Development Authority did. Ms. Krebs said she does not know if Black Hawk Water User District requires annexation into a municipality before providing water. The Air Force did not facilitate any conversations between the impacted residents and Black Hawk Water User District.

Exhibit 4A is an August 10, 2022, letter from Ms. Judy Lopez, Director of the Air Force Civil Engineering Center, to the Water Management Board. Ms. Krebs said she is aware the letter states that Black Hawk Water User District is not a government entity; she is now aware that Black Hawk Water User District is a government entity. On September 22, 2022, Black Hawk Water User District submitted a response to the Air Force regarding the August 20, 2022, letter to Mr. Larson, and on October 3, 2022, the Air Force submitted a reply to Black Hawk Water User District's response. In the September 22, 2022, letter, Black Hawk Water User District requested an opportunity to discuss this project with the Air Force. Ms. Krebs said she talked to Black Hawk Water User District about this project a couple of times. She said Mr. LeBon reached out to her, but she does not recall the date.

In the October 3, 2022, letter to Black Hawk Water User District, Ms. Lopez states that the Air Force declines Black Hawk Water User District's offer to have a meeting regarding this project.

John McCuen stated that he is an attorney with the Air Force Environmental Law Field Support

Center, which provides a full spectrum of environmental legal support to Air Force commands and installations throughout the United States and overseas. He specifically provides environmental restoration support to Ms. Krebs and the organization she works for. Ms. McCuen said Ms. Krebs has not been authorized to talk about the recent letter. The request for her appearance did not address that letter, and because it is an Air Force person appearing in litigation, there is a process that has to be followed to get permission for her to provide testimony and exhibits. Mr. McCuen said he had requested that permission and was told “no,” so Ms. Krebs cannot go into details about issues in the most recent letter.

Mr. Erlandson said Mr. McCuen represents Ms. Krebs. He had to go through a procedure to get authorization for Ms. Krebs to testify before the Water Management Board, and one of the conditions the Air Force attaches is that she must be represented by counsel to make sure she does not exceed the scope of her involvement in the project and authority.

Mr. Naasz apologized and said he was not aware of the parameters that were set. He said the letter is part of the administrative record, and it will speak for itself. Mr. Naasz had no further questions of Ms. Krebs.

In response to questions from Mr. Erlandson, Ms. Krebs stated that she visited with Mr. LeBon, Black Hawk Water User District, about the district’s possible involvement in this project. The Air Force ultimately declined the invitation to meet with Black Hawk and instead decided to continue working with South Dakota Ellsworth Development Authority on the project. The U.S. Air Force has approved of the budgeting and the initial financing for a great deal of this project based upon where the project is presently to be located.

There were no other questions of Ms. Krebs.

Mr. Bjork asked why Ellsworth Development Authority chose a project with a well that is ten miles away.

Mr. Erlandson recalled Mr. Kane who stated that the Air Force asked the Ellsworth Development Authority to find good source. The engineering team determined the constructing a well that is 14 miles away is the best source water available within the area. This is the reason Ellsworth Development Authority decided to make this a regional project. It wouldn’t make sense to install 14 miles of water line and drill a well for 60 gallons per minute, but if Ellsworth Development Authority can install this well, provide an alternative water source to Box Elder and all the people along the way, and leverage \$17,000,000 in Air Force money in South Dakota, it starts to make sense.

Mr. Bjork said if this is going to be a regional system, more of the regional players need to be involved, specifically, the West Dakota Water Development District. The water development district is a government player in all of these activities, and they are elected officials so Ellsworth Development Authority should take a look at the region if there is to be a regional water system.

Mr. Erlandson had no other witnesses.

Mr. Naasz called Ken LeBon who was administered the oath by the court reporter. Mr. LeBon testified that he the manager of Black Hawk Water User District. He has been involved in the Black

Hawk Water User District for the last 22 years. Black Hawk Water Company was created in 1949 and in 1996 became a water user district. Mr. LeBon said Black Hawk Water User District is a regional water system that provides water to Black Hawk, the city of Summerset, the city of Piedmont, Stagebarn Subdivision, and Pine Hills. The water user district has approximately 4,000 customers.

The Black Hawk Water User District board of directors is made up of individuals that live in the district and are customers of the water user district.

Exhibit 200 is the Black Hawk Water User District's Future Use Water Permit No. 1995-1. Mr. LeBon stated that Black Hawk Water User District applied for the future user permit because the interest in receiving water east of Black Hawk. The water source for the future use permit is the Madison Aquifer. The last page of Exhibit 200 is a map showing the location of the Future Use Permit area.

Mr. LeBon said he is familiar with the proposed pipeline route of the applicant. The pipeline route is proposed to run on the section line from east to west through the center of the Black Hawk Water User District future use permit area. The eastern boundary of the future use permit area is Haines Avenue, which is approximately four miles west of Elk Vale Road.

Exhibit 201 is a Black Hawk Water User District water system planning map. Before the map was created, Black Hawk Water User District had identified some reservoir and well sites, so the water user district asked its engineers, AE2S, to design this map, which includes elevations, so the water user district could start planning for development in that area. Mr. LeBon pointed out the location of Well No. 5 on the map. Well No. 5 is less than a mile from the proposed well site of the applicant. Exhibit 201 was created by AE2S in 2017. Black Hawk Water User District wanted to establish where wells and reservoirs could be placed in the area. Prior to the creation of the map, Mr. LeBon met with Salvador Ranches to establish a location for a reservoir and some well sites. The infrastructure identified on the map, both existing and proposed, east of Interstate 90 are within the Black Hawk Water User District future use permit area. Mr. LeBon pointed out on the map the location of Black Hawk Water User District's current Marble Mountain Reservoir, which is approximately a mile south of the section line that the pipeline would be on and approximately 2.5 miles east of where the proposed South Dakota Ellsworth Development Authority well. Exhibit 201 includes potential infrastructure, and the Marble Mountain Reservoir, which was constructed in 2007, is existing infrastructure.

Mr. LeBon said he is familiar with the report of Mr. Wetstein for this matter.

Mr. Naasz asked Mr. LeBon what his concerns are regarding the possibility of drawdown at the Anderson Well if the proposed well is completed and put into production.

Mr. Erlandson objected stating that Mr. Naasz may be going into the area of expert testimony, which would be prohibited under Rule 702 of the rules of evidence and in violation of the Board's Order of that any experts be disclosed with their opinions being given prior to this hearing. On September 23, 2022, no such disclosures were made by Black Hawk Water User District and no reports were given, so anything that goes beyond Rule 701 for opinion testimony by lay witnesses should not be allowed. Rule 701 says that lay witness testimony is limited to items rationally based on the witness'

perception, helpful to clearly understand the witness's testimony, and not based on scientific, technical, or other specialized knowledge within the scope of Rule 702. Mr. Erlandson said he believes Mr. Naasz's question is going directly into that prohibition, and he objects.

Mr. Naasz said he can define his questions well enough that they are in fact based on Mr. LeBon's rational perception and not any expertise opinions.

Mr. McVey said if Mr. Naasz can construct his questions in a manner that doesn't conflict with Rule 702 he can proceed.

In response to a question from Mr. Naasz, Mr. LeBon stated that he has been a certified water operator for approximately 12 years.

Mr. Naasz asked Mr. LeBon what the result is, as relates to cost, in decreased head pressure in a well.

Mr. Erlandson objected stating that the question is a clear violation of Rule 701. It doesn't matter if it's based on his perception so long as he is talking about scientific, technical, or other specialized knowledge, which is exactly what this is, and it has to be excluded.

Vice Chairman Hutmacher sustained the objection.

Responding to questions from Mr. Naasz, Mr. LeBon stated that Black Hawk Water User District obtains its revenue from the water customers, so ultimately, the customers would be required to pay for any increased operating costs associated with drawdown in the Anderson Well as a result of this application.

Exhibit 202 is the Black Hawk Water User District 2021 Drinking Water Report, which states that the water user district serves more than 3,750 customers an average of 490,000 gallons of water per day. Mr. LeBon stated that at this time approximately 4,000 customers are served. Mr. LeBon helped prepare Exhibit 202 in his capacity as the manager of the Black Hawk Water User District.

Mr. LeBon stated that he first became aware of the proposed well to be located just over one-half miles from the current Anderson Well in January 2022. Some landowners had called asking if Black Hawk Water User District was requesting permission to survey on their property. The landowners had received letters KTM Engineering requesting permission to survey.

Mr. LeBon said he is familiar with the Water Permit No. 1991-1 for Black Hawk Water User District's existing well located approximately four miles northwest of Black Hawk. The water user district initially applied for 1,120 acre-feet of water per year, 800 gallons per minute. The Water Management Board approved Water Permit No. 1991-1 for 760 acre-feet of water per year.

Mr. Naasz asked Mr. LeBon why the diversion amount was decreased. Mr. Erlandson objected citing relevance.

Vice Chairman Hutmacher sustained the motion.

Mr. Naasz asked Mr. LeBon if the Water Rights Program has required Black Hawk Water User

District to establish the need for water prior to recommending approval of a permit. Mr. Erlandson objected citing relevance.

Vice Chairman Hutmacher sustained the objection.

Mr. Naasz asked if Mr. LeBon recalls a June 2019 email between Mitch Kannenberg and Mr. Gronlund with the Water Rights Program requesting Black Hawk Water User District to reduce the amount of water requested in Water Permit Application No. 1991-1.

Mr. Erlandson objected citing relevance.

Vice Chairman Hutmacher asked Mr. Naasz to explain where this line of questioning is going. Mr. Naasz said he could make an offer of proof.

Mr. Naasz asked Mr. LeBon if he recalls that email. Mr. LeBon answered that he recalls the email. The Water Rights Program was questioning the need for the volume of water requested in Water Permit Application No. 1991-1.

In response a question from Ms. Mines Bailey, Mr. LeBon said the application was for a current well.

Responding to a question from Mr. Naasz, Mr. LeBon stated that Black Hawk Water User District is a public entity.

In response to questions from Mr. Erlandson, Mr. LeBon said it is correct that he was invited by Glen Kane and members of the South Dakota Ellsworth Development Authority to discuss working together on a potential solution to the issues being discussed today. Mr. Erlandson stated that Mr. LeBon was invited more than once to meet with Mr. Kane, in fact at one point Mr. LeBon met with Mr. Kane and himself.

Mr. Naasz objected citing confidential settlement negotiations.

Vice Chairman Hutmacher sustained the objection.

Mr. Erlandson asked Mr. LeBon if it is correct that solutions were offered to Mr. LeBon to work together that ultimately the Black Hawk Water User District rejected. Mr. LeBon answered that Black Hawk Water User District was asked to come back with a proposal, which they did, and the proposal was turned down.

Mr. Erlandson said the proposal was 180 degrees different than what Ms. LeBon tentatively agreed to and agreed to present to the Black Hawk Water User District board. Mr. LeBon said he presented what was discussed during the meeting to the Black Hawk Water District board, and the board came back with their own proposal to Ellsworth Development Authority.

Responding to questions from Mr. Erlandson, Mr. LeBon said the Black Hawk Water User District has a reservoir east of Interstate 90 and water lines going toward the section line where Ellsworth Development proposes to put its water line. Black Hawk Water User District is not serving any customers in the future use permit area.

Mr. Erlandson asked if it is correct that Mr. LeBon has been given many opportunities to work with Ellsworth Development Authority and for one reason or another no agreement has been reached between the two entities. Mr. LeBon stated that every time Black Hawk Water User District met with Ellsworth Development Authority nothing changed; it was always that Ellsworth Development Authority needs to own and operate the well and they need to own everything.

Mr. Naasz asked Mr. LeBon how the proposed alternatives that were discussed would ultimately impact the operating costs for Black Hills Water User District.

Mr. Erlandson objected citing that the question calls for expert testimony.

Vice Chairman Hutmacher sustained the objection.

Mr. Naasz asked if the alternatives that were suggested would require Black Hawk Water User District to spend money. Mr. LeBon answered that it would require Black Hawk Water User District to spend money, and Black Hawk Water User District and its customers would have been responsible for the increased cost.

There were no further questions from the parties or the board members.

Mr. Naasz called Tom Norman who was administered the oath by the court reporter.

Mr. Norman stated that he owns property on the east side of Interstate 90 at Exit 52, and he was the previous owner of the Southwest quarter of Section 32 in Township 3 North of Range 7 East. Mr. Norman stated that Exhibit 203 is the Declaration of Covenants and Restrictions on the property he previously owned. The first sentence of Section 1.01 states, "All lots in the restricted property shall be used exclusively for private residential purposes." The first line of Section 1.03 states, "None of the restricted property shall be used for commercial activity..." Mr. Norman said he is one of the declarants of these covenants and restrictions.

Mr. Naasz asked if it is Mr. Norman's understanding of these covenants that there are no exceptions for constructing a well or reservoir on this property.

Mr. Erlandson objected.

Vice Chairman Hutmacher overruled the objection.

Mr. Norman answered that there are no exceptions.

In response to questions from Mr. Naasz, Mr. Norman stated that his signature is on page 4 of the covenants and restrictions. Mr. Norman also filed comments regarding this matter. In the comments, Mr. Norman indicates that Black Hawk Water User District should control the water in this area because the district is already controlling the water in three communities. Mr. Norman said there is water from Black Hawk Water User District at the end of his driveway. He commented that the bulk of this water will go to developers east of the Air Force Base.

There were no further questions of Mr. Norman from the parties or board members.

Mr. Naasz had no other witnesses.

Rebuttal

Ms. Mines Bailey called Eric Gronlund who had been administered the oath by the court reporter earlier in the meeting.

In response to questions from Ms. Mines Bailey, Mr. Gronlund testified that he is the Chief Engineer in the DANR Water Rights Program. Mr. Gronlund stated that he is familiar with SDCL 46-6-6.1 as it pertains to artesian head pressure. Based on that statute, the Water Management Board is not required to protect head pressure. Mr. Gronlund said his understanding of the statute is that the board is supposed to take into consideration but doesn't necessarily have to maintain artesian head pressure as a means of delivery.

Mr. Gronlund said he is aware of the board's past decisions, and he is familiar with the board's Findings of Fact and Conclusions of Law for Water Permit Application No. 2313-2, Coca Cola Bottling Company of the Black Hills, which was a case that came before the Water Management Board in the mid-1990s. The water permit application considered by the Water Management Board for No. 2313-2 dealt with Coca Cola Bottling Company of the Black Hills applying for additional diversion rate authority and potentially an additional well to what they currently had. The city of Rapid City contested the application, and the Water Management Board held a contested case hearing regarding that matter. Based on the proximity of their well, the city of Rapid City was concerned about the decrease in artesian head pressure and potentially the additional costs associated with pumping and/or having to replace or lower the pump. Mr. Gronlund read the following portion of Conclusion of Law No. 4, "The city of Rapid City has intentionally set its pump at approximately 320 feet below the level. Approximately 1,000 additional feet of head pressure is available below the place at which Rapid City has set its well. To accept the Rapid City argument that no pumping should be allowed which lowers the head pressure below the level at which its pump is set would mean Rapid City could reserve 1,000 feet of head pressure for itself." He also read Conclusion of Law No. 5, "The board also concludes that Rapid City attempted reservation of 1,000 feet of head pressure is not consistent with SDCL 46-1-4, which states that the general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable. Furthermore, it would constitute waste of water under the same statute."

Mr. Gronlund stated that in his opinion, if the board denies this application for the purpose of protecting the 750 feet of artesian head pressure, it will constitute a waste.

Responding to questions from Mr. Naasz, Mr. Gronlund stated that it is his understanding that the Water Management Board has the ability to take head pressure under consideration.

Mr. Naasz ask if a lack of artesian head pressure should result in increased operating costs to customers of a water distribution system and residents of the state, would it be fair game under the public interest component. Mr. Gronlund said it is up to the Water Management Board to make that decision. He said the board can take artesian head pressure into consideration, but it does not necessarily have to consider it as a means of delivery. Mr. Gronlund said that is backed up by the

board's past decision, but he does not believe the board is bound by its past decision.

Mr. Naasz asked what investigation the Water Rights Program did regarding the amount of water needed by the applicant. Mr. Gronlund said he is not aware of any investigation on the amount of water needed by the applicant.

Redirect

In response to a question from Ms. Mines Bailey, Mr. Gronlund stated that the applications that the Water Rights Program receives are signed under a penalty of perjury, so when an applicant makes a representation or makes a request for a certain amount of water, unless there is a red flag, it is not investigated.

In response to a question from Mr. Naasz, Mr. Gronlund said he recalls the testimony of Mr. LeBon regarding Water Permit Application No. 1991-1. In 2019 Mr. Gronlund sent an email to Mitch Kannenberg inquiring in about the amount of water requested in the application. Mr. Gronlund said it is his understanding that as a result of his inquiry the permitted amount of water was reduced.

In response to a question from Ms. Mines Bailey, Mr. Gronlund said the amount of water requested was 1.78 cubic feet of water per second, 800 gallons per minute, and the volume of water equated to about 87 percent of continual pumping. The Water Rights Program commonly implements a 60 percent general rule. Mr. Gronlund said the email reflects that he was questioning whether that was really the amount needed. Based on that, the Black Hawk Water User District changed the amount requested. The email also discussed the past water use of Black Hawk Water User District as being between 600 and 650 gallons per minute.

Ms. Mines Bailey asked Mr. Gronlund if there was anything about the volume requested in South Dakota Ellsworth Development Authority's application that raised a red flag. Mr. Gronlund said when he was dealing with the consultant for Black Hawk Water User District, they had existing permits and reporting requirements that he was able to base that off of. Since this was a new application, he did not have that information for the Ellsworth Development Authority application.

Mr. Gronlund stated that there is a licensing process. The applicant obtains a water permit that authorizes the permit holder to construct and start using the water. There are construction timeframes associated with that. When the project is completed or the time to complete construction of works is up, there is a state investigation or inspection, which is verification that system is constructed and the extent that it constructed. Based on that, the water license is issued for that amount.

Ms. Mines Bailey asked Mr. Gronlund what the Water Rights Program advises applicants when they are completing an application with regard to the volume of water they are requesting for a new use. Mr. Gronlund said it is standard practice regardless of the type of use staff tells the applicant if they apply for a greater amount, it is handled at licensing where the volume is reduced to the amount that is developed.

In response to a question from Mr. Erlandson, Mr. Gronlund stated that his recommendation is to grant Water Permit No. 2016-1 for the amount of water that was requested. Nothing he heard during the hearing has changed his recommendation.

Mr. Comes said the Water Rights Program issues a license for the amount that the developed water works or infrastructure can handle, but is the water right also reduced to the licensed amount or is the water right still granted for the original application amount. Mr. Gronlund said a water permit is initially issued. The water permit authorizes the permit holder to construct and start using the water. At the time of licensing, after the state has verified the system is constructed and the extent it is constructed, the permit holder is issued a water license, which now becomes the permit holder's water right and quantifies the amount of water the permit holder is entitled to.

Mr. Naasz recalled Mr. LeBon and asked what his concerns are regarding this project globally as the manager of Black Hawk Water User District. Mr. LeBon stated that one of his main concerns is that where the wells and water lines are proposed to be located is within Black Hawk Water User District. Those would be Black Hawk Water User District's customers and that is revenue that will be taken away. Black Hawk Water User District has spent a lot of money in that area developing the future use map and planning for that area. The last well Black Hawk Water User District installed was to ensure there would be enough water for the future, and now it will be taken away. Black Hawk Water User District has a future use permit, a new well and a \$3.8 million loan and now the growth of the water user district will be stunted from this new well in the future use area. The only way Black Hawk Water User District can grow is to the east.

Mr. Erlandson asked if it is correct that when Mr. LeBon was in negotiations with his client he was given options that would specifically address future growth and Black Hawk Water User District customers. Mr. LeBon answered that is correct, but he was also given the option that if Black Hawk Water User District didn't agree to what Mr. Erlandson's client was saying to them, the well would be moved to Haines Avenue. Mr. Erlandson said he disagreed with Mr. LeBon's characterization of that but said Black Hawk Water User District has had many opportunities to try to come to an agreement and ultimately they were not able to agree.

Mr. Naasz had no other witnesses.

The parties offered closing statements.

Vice Chairman Hutmacher requested board action.

Mr. Bjork said this application makes him a little uneasy. One of the things the board has not discussed is regionalization. Water is becoming a very precious commodity so we should be looking at how to share the water rather than compete. Mr. Bjork said we have to start being a little bit more frugal, which leads to the fact that the board is being asked for 1,600 acre-feet of water to solve a much smaller problem that does not require that amount of water. The applicant is proposing a huge infrastructure system to move that water 10 to 15 miles to solve that problem. He said it seems that the applicant is applying for a lot more water than what is needed to solve the problem, and he is concerned with waste and the competition amongst several small, fractured water systems.

Mr. Holzbauer said he agrees with Mr. Bjork. He said he has a problem with the principal of it because other people in the state might need to use the other 600 gallons per minute, so he is a little leery about approving this water permit at the requested volume.

Motion by Larson, seconded by Comes, to approve Water Permit Application No. 2016-1, South Dakota Ellsworth Development Authority subject to the qualifications of the Chief Engineer.

Mr. Comes said he empathizes with Mr. Bjork, and he believes regionalization is the future. He believes the Chief Engineer has made a recommendation consistent with the statutes.

Mr. Holzbauer said he disagrees with the way Ellsworth Development Authority went after that amount of water, but he is not in disagreement with the need for the use of that water.

Ms. Dixon said she is trying to reconcile in her mind the importance of Ellsworth Air Force Base and the amount of water requested by Ellsworth Development Authority.

Vice Chairman Hutmacher said he sees this as a turf battle and he is hopeful that the parties could settle this, but that is not for the Water Management Board to address. The board is obligated by statute to approve the permit if the water is available, and it may be too much water, but the amount will be adjusted during licensing. He said he does not believe the board has a choice because the availability has been proven.

A roll call vote was taken, and the motion carried with Comes, Dixon, Holzbauer, Larson, and Hutmacher voting aye. Bjork voted no.

Ms. Mines Bailey will prepare proposed Findings of Fact, Conclusions of Law and Final Decision by November 10. Objections and alternative Findings of Fact and Conclusions of Law are due by November 21.

NEXT MEETING DATE: Motion by Comes, seconded by Holzbauer, to hold the next board meeting November 30, 2022, and December 1, 2022, in Pierre. Motion carried.

ADJOURN: Vice Chairman Hutmacher declared the meeting adjourned at 2:45 p.m.

A court reporter was present for the hearings and a transcript of the proceedings may be obtained by contacting Carla Bachand, PO Box 903, Pierre, SD 57501, phone number (605) 224-7611, or email pcbachand@pie.midco.net.

Approved December 7, 2022.

Water Management Board

ATTENDANCE SHEET
WATER MANAGEMENT BOARD

Date Oct. 5, 2022

NAME (PLEASE PRINT)	MAILING ADDRESS	CITY, STATE & ZIP	ITEM OF INTEREST
Ken LeBon	PO Box 476	Black Hawk SD 57718	
Matt Naatz	PO Box 3045	Rapid City SD 57702	SOEDA
Glen Kane	PO Box 477	Rapid City SD 57702	SOEDA
Greg Eclandson	333 W Blvd	" "	" "
JOHN WEISTEIN	P.O. Box 2022	CARAMEL WY 82073	" "
Brian Bannan	29605 314th Ave	Winnier SD	
Brian Peterson	7512 Redridge Drive	Black Hawk	BHWD
Tom Narnes	P.O. Box 767	Black Hawk	BHWD
Mitlenwisgram	114 Port Charlotte F	Fort Pierre	oversight
Mary Duvall	Box 453	Pierre	"
Donna Linburg	205 Hyde Road	Pierre	SO DNR
Andrew Fox	DNR	Pierre	SO DNR

WATER MANAGEMENT BOARD MEETING

October 5, 2022

Qualifications:
 wi - well interference
 wcr - well construction rules
 iq - irrigation questionnaire
 lf - low flow

Unopposed New Water Permit Applications Issued Based on the Chief Engineer Recommendations

No.	Name	Address	County	Amount	Use	Source	Qualifications
2019-1	Poss Ranch Inc	Sturgis	MD	2.0 cfs	65 acres	Belle Fourche River	lf, iq, 1 special
2020-1	Bear Butte Valley Water Inc	Sturgis	MD	1.40 cfs	rws	1 well-Madison Aquifer	wi, wcr, 3 special
2021-1	Riverview LLP	Morris MN	CN	0.50 cfs	commercial	5 wells-Fox Hills Aquifer	wi, wcr, 4 special
2848-2	Rapid Valley Sanitary Dist.	Rapid City	PE	1.56 cfs	rws	1 well-Madison Aquifer	wi, wcr, 3 special
2849-2	Tripp Co Water User Dist.	Winner	TR	4,000 AF	rws-future use	Ogallala Aquifer	3 special
3178B-3	Mark LaBrie	Frankfort	SP	no add'l	no add'l	2 wells-Tulare East James	wi, iq, 1 special
8521A-3	Terry Brandenburg	Clear Lake	DU	no add'l	no add'l	Lake Alice	iq, 4 special
	Legacy Trust						
8626-3	Tri-Cross Renewable Energy LLC	Viborg	TU	0.10 cfs	commercial	1 well-Niobrara Aquifer	wi, wcr, 2 special
8630-3	Margaret A Dailey	Jefferson	UN	1.33 cfs	54 acres	1 well-Missouri:Elk Point	wi, wcr, iq,1 special
8635-3	Big Watt Digital SD LLC	Humacao PR	SU	0.67 cfs	commercial	1 well-Inyan Kara Aquifer	wi, wcr, 2 special
8636-3	Arnie Beisch	Waubay	RB	no add'l	15 acres	2 wells-Coteau Lakes	wi, iq, 1 special
8637-3	Wilde Air Service LLC	Volga	KG	0.056 cfs	commercial	1 well-Vermillion East Fork	wi, wcr, 2 special
8638-3	Darrel or Karen Jongeling	Brookings	HM	1.11 cfs	120 acres	1 well-Big Sioux Brookings	wi, wcr, iq
8639-3	James Bondesen	Hurley	TU	2.0 cfs	no add'l	2 wells-Upper Vermillion Miss	wi, wcr, iq,1 special
8640-3	City of Volga	Volga	BG	1.11 cfs	municipal	2 wells-Big Sioux:Brookings	wi, wcr, 2 special
8641-3	Derrick Skogsberg	Benbrook TX	UN	1.78 cfs	160 acres	1 well-Lower Vermillion Miss	wi, wcr, iq
8642-3	John & Melissa Schutte	Canton	LN	no add'l	16.5 acres	Big Sioux River	lf, iq, 1 special
8643-3	Blumengard Htn Brth	Faulton	FA/ED	4.21 cfs	295 acres	runoff – Hamak Dam	lf, iq, 1 special
8644-3	Riverview LLP	Morris MN	HM	120 AF	commercial	3 wells-Altamont	wi, 4 special
8645-3	Poinsett Htn Brth	Estelline	HM	1.78 cfs	136 acres	1 well-Big Sioux:Brookings	wi, iq
8646-3	Residence Parcel Trust	Sioux Falls	MA	18.56 AF	rec, fwp	runoff-unnamed tributary	lf, 1 special
8653-3	Pleasant Dutch Dairy LLP	Willow Lake	CK	5.57 cfs	commercial	wetland	none
8655-3	By Lane Well	Yankton	YA	1.60 cfs	67 acres	1 well-Lower James Missouri	wi, wcr, iq,1 special

The audio recording for this meeting is available on the South Dakota Boards and Commissions Portal at <https://boardsandcommissions.sd.gov/Meetings.aspx?BoardID=106>

MINUTES OF THE 239TH MEETING
WATER MANAGEMENT BOARD
TELEPHONE CONFERENCE CALL
523 EAST CAPITOL AVENUE
PIERRE, SOUTH DAKOTA
NOVEMBER 2, 2022

CALL TO ORDER: Vice Chairman Jim Hutmacher called the meeting to order at 10:30 a.m. CentralTime. The roll was called, and a quorum was present.

The meeting was streaming live on SD.net, a service of South Dakota Public Broadcasting.

The following participated in the meeting:

Board Members: Tim Bjork, Peggy Dixon, Rodney Freeman, Leo Holzbauer, and Jim Hutmacher. attended in person. Chad Comes and Bill Larson were absent.

Department of Agriculture and Natural Resources (DANR): Ron Duvall, Water Rights Program.

Attorney General's Office: David McVey, board counsel; Ann Mines Bailey, Water Rights Program counsel.

ADOPT FINAL AGENDA: Motion by Freeman, seconded by Bjork, to adopt the agenda. Motion carried unanimously.

CONFLICT DISCLOSURES AND REQUESTS FOR STATE BOARD WAIVERS: None.

PUBLIC COMMENT PERIOD IN ACCORDANCE WITH SDCL 1-25-1: There were no public comments.

SET DECEMBER MEETING DATE AND LOCATION: At the October meeting, the board adopted a motion to hold the next meeting on November 30 and December 1, 2022.

Motion by Bjork, seconded by Holzbauer, to change the date of the next meeting to December 7-8, 2022, in Pierre. A roll call vote was taken, and the motion carried unanimously.

ADJOURN: Motion by Freeman, seconded by Bjork, to adjourn the meeting. A roll call vote was taken, and the motion carried unanimously.

Approved December 7, 2022.

Water Management Board
Notice of Public Hearing to Adopt Rules

A public hearing will be held by the Water Management Board on December 7, 2022, at 9:30 AM Central Time, at the Matthew Environmental Education and Training Center, 523 East Capitol Avenue, Pierre, South Dakota, to consider the adoption and amendment of proposed rules numbered ARSD:

- 74:51:01 Surface Water Quality Standards Appendix B;
- 74:51:01:53 Criteria for irrigation waters;
- 74:51:01:01 Definitions;
- 74:51:02:04 Uses of certain lakes;
- 74:51:03:05 Missouri River and certain small tributaries' beneficial uses; and
- 74:51:03:07 Big Sioux River and certain tributaries' uses.

The following is a summary of the proposed changes:

- 74:51:01 Surface Water Quality Standards Appendix B - Update/adopt cadmium criteria, other corrections to errors;
- 74:51:01:53 Criteria for irrigation waters - update Irrigation beneficial use criteria to seasonal (April 1 through October 31);
- 74:51:01:01 Definitions - remove a definition that is no longer used and renumber definitions;
- 74:51:02:04 Uses of certain lakes - corrections to uses of certain lakes; remove breached reservoirs and lakes that no longer exist from the chapter;
- 74:51:03:05 Missouri River and certain small tributaries' beneficial uses - update the to/from location for the change in coldwater permanent and warmwater permanent fish life propagation use; and
- 74:51:03:07 Big Sioux River and certain tributaries' uses - corrections to errors in spelling and to/from locations.

The Department of Agriculture and Natural Resources (DANR) has identified revisions and corrections to the Surface Water Quality Standards that are necessary and appropriate to ensure the standards meet the needs of the federal Clean Water Act and the state of South Dakota.

Persons interested in presenting data, opinions, and arguments for or against the proposed rules may appear in-person at the hearing or mail them to the Department of Agriculture and Natural Resources, Surface Water Quality Program, Attn: Shannon Minerich, 523 E Capitol Ave, Pierre, SD, 57501-3182, or submit on DANR's One Stop for Public Notices at <https://danr.sd.gov/public/default.aspx>. All written comments must reach the Surface Water Quality Program by November 27, 2022, to be considered.

Persons may participate virtually by visiting the Boards and Commissions portal at: <https://boardsandcommissions.sd.gov/Meetings.aspx?BoardID=106> and clicking on the "Remote Participation Information link."

After the public hearing, the Water Management Board will consider all written and oral comments it receives on the proposed rules. The board may modify or amend a proposed rule at that time to include or exclude matters that are described in this notice. The final water quality standards adopted by the board must be submitted to the United States Environmental Protection Agency (EPA) pursuant to the federal Clean Water Act for review and approval. If the EPA disapproves any portion of the water quality standards, EPA has the authority to promulgate federal standards for South Dakota.

This hearing is being held in a physically accessible place. Please notify the DANR at least 48 hours before the public hearing if special arrangements must be made at the public hearing. To request special arrangements or copies of the proposed rules and supporting documentation, call or write to Shannon Minerich, Surface Water Quality Program, Joe Foss Building, 523 East Capitol, Pierre, South Dakota, 57501-3182; phone (605) 773-3351. Copies of the proposed rules and supporting documentation can also be obtained by visiting DANR's One-Stop Public Notice website at <https://danr.sd.gov/public/default.aspx> or the state of South Dakota's One-Stop for Administrative Rules at <https://rules.sd.gov>.

Published at the approximate cost of \$_____.

74:51:01:01. Definitions. Words and phrases defined in SDCL 34A-2-2, have the same meaning when used in chapters 74:51:01 ~~to~~ through 74:51:03, inclusive. Terms and abbreviations which are not specifically defined shall be construed in conformance with the context and in relation to the applicable section of the standards or the statute concerned. In addition, terms used in chapters 74:51:01 ~~to~~ through 74:51:03, inclusive, are defined as follows:

(1) "Attainable beneficial uses," those beneficial uses which, at a minimum, can be achieved by the imposition of effluent limits required under §§ 74:51:01:07, 74:51:01:08, and 74:51:01:17 ~~to~~ through 74:51:01:21, inclusive, and cost-effective and reasonable best management practices for nonpoint source control;

(2) "Aquatic life," an organism dependent on the water environment to either propagate or survive, or both;

(3) "Aquatic community," an association of interacting populations and stages of aquatic life in a given water body or habitat;

(4) "Best management practices," "BMPs," schedules of activities, prohibitions of practice, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters of the state on a voluntary basis, including treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge, waste disposal, or drainage from raw material storage;

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(5) "Bioaccumulative pollutants," those pollutants which are taken up, retained, or accumulated in the bodies of organisms and are transferred by ingestion in increasing concentrations in the predator organisms to the point that one or more organisms in the food chain suffer significant harm;

(6) "Bioassay," a procedure in which the responses of organisms are used to detect or measure the presence or effect of one or more substances, wastes, effluents, or environmental factors, alone or in combination;

(7) "Biochemical oxygen demand," a standardized laboratory test used to determine the relative oxygen requirements of waters and wastewaters;

(8) "Biological integrity," the ability to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitat of the region;

(9) "Black Hills Trout Management Area," defined by the South Dakota Department of Game, Fish and Parks as all the waters in the Black Hills within the following boundary: from the South Dakota-Wyoming state line and the Redwater River (inclusive) to U.S. Highway 85, then south on U.S. Highway 85 to I-90, then southeast on I-90 to U.S. Highway 16T (16B in Rapid City), then south on U.S. Highway 16T to S.D. Highway 79, then south on S.D. Highway 79 to Maverick Junction, then west on Highway 18 to Edgemont, then northwest along the Burlington Northern Railroad to the South Dakota-Wyoming state line, then north along the state line to the point of the beginning;

(10) "Board," Water Management Board;

(11) "°C," degrees centigrade, a measure of temperature;

(12) "Coldwater aquatic life," aquatic life including fish of the family Salmonidae, for example, trout and salmon;

(13) "Coldwater marginal fish life propagation," a beneficial use assigned to surface waters of the state which support aquatic life and are suitable for stocked catchable-size coldwater fish during portions of the year, but which, because of critical natural conditions including low flows, siltation, or warm temperatures, are not suitable for a permanent coldwater fish population. Warmwater fish may also be present;

(14) "Coldwater permanent fish life propagation," a beneficial use assigned to surface waters of the state which are capable of supporting aquatic life and are suitable for supporting a permanent population of coldwater fish from natural reproduction or fingerling stocking. Warmwater fish may also be present;

(15) "Commerce and industry," a beneficial use assigned to surface waters of the state which are suitable for use as cooling water, industrial process water, navigation, and production of hydroelectric power;

(16) "Criterion," a designated concentration of a substance, measure of a physical factor, or narrative statement that, when not exceeded, will protect an organism, a biological community, or a prescribed beneficial use or water quality;

(17) "Designated beneficial uses," those beneficial uses specified in chapters 74:51:02 and 74:51:03 for each water body or segment whether or not they are being attained;

(18) "Domestic water supply," a beneficial use assigned to surface waters of the state which are suitable for human consumption, culinary or food processing purposes, and other household purposes after suitable conventional treatment;

~~(19) "EPA methods," **Methods for Chemical Analysis of Waters and Wastes**, 1983, Environmental Protection Agency, Analytical Quality Control Laboratory;~~

(20) "Epilimnion," in a thermally-stratified waterbody, the upper stratum of the water column. This layer is generally above the thermocline and is typically uniformly warm, circulating, and well mixed;

(21) "Existing beneficial uses," those uses actually attained in surface waters of the state on March 27, 1973, whether or not they are so designated;

(22) "°F," degrees Fahrenheit, a measure of temperature;

(23) "Fish and wildlife propagation, recreation, and stock watering," a beneficial use classification assigned to all surface waters of the state that may support recreation in and on the water and fish and aquatic life, when sufficient quantities of water are present for sufficient duration to support those uses; that provide habitat for aquatic and semiaquatic wild animals and fowl; that

provide natural food chain maintenance; and that are of suitable quality for watering domestic and wild animals;

(2423) "Geometric mean," the n th root of a product of n factors;

(2524) "Handbook 69," **Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure**, recommendations of the National Committee on Radiation Protection, **National Bureau of Standards Handbook 69**, (August 1963);

(2625) "Hypolimnion," in a thermally-stratified waterbody, the bottom layer of water column. This layer is generally below the thermocline and is typically less well mixed (at times, stagnant), colder than the epilimnion, and often of essentially uniform temperature;

(2726) "Immersion recreation," a beneficial use assigned to surface waters of the state which are suitable for uses where the human body may come in direct contact with the water, to the point of complete submersion and where water may be accidentally ingested or where certain sensitive organs such as the eyes, ears, and nose may be exposed to water;

(2827) "Impact," a man-induced change in the chemical, physical, or biological quality or condition of surface waters of the state;

(2928) "Impairment," a detrimental effect on the aquatic community caused by an impact that prevents attainment of the designated use;

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(~~30~~29) "Irrigation," a beneficial use assigned to surface waters of the state which are suitable for irrigating farm lands, ranch lands, gardens, and recreational areas;

(~~31~~30) "Lake," a pond, reservoir, or other body of water, created by either natural or artificial means, but not a pond or appurtenance that is used for the treatment and disposal of wastes and that is permitted for such uses;

(~~32~~31) "Limited-contact recreation," a beneficial use assigned to surface waters of the state which are suitable for boating, fishing, and other water-related recreation other than immersion recreation where a person's water contact would be limited to the extent that infections of eyes, ears, respiratory or digestive systems, or urogenital areas would normally be avoided;

(~~33~~32) "Metalimnion," in a thermally stratified waterbody, the middle layer of a water column generally encompassing the thermocline, is typically somewhat mixed and influenced by the epilimnion;

(~~34~~33) " $\mu\text{g/L}$," micrograms per liter, a measure of concentration;

(~~35~~34) " mg/L ," milligrams per liter, a measure of concentration;

(~~36~~35) "micromhos/cm," micromhos per centimeter, a measure of electrical conductivity;

(~~37~~36) "Nonpoint source," a source of pollution that is not defined as a point source;

(3837) "Parameter," a chemical, physical, or biological characteristic which affects the use of surface waters of the state;

(3938) "pCi/L," picocuries per liter, a measure of radioactive concentration;

(4039) "Segment," a continuous stretch of water found between two points in the bed of a stream;

(4140) "Sodium adsorption ratio," a calculated value that evaluates the sodium hazard of irrigation water based on the Gapon equation and expressed by the mathematical expression:

$$\text{Sodium Adsorption Ratio} = \frac{\text{Na}^+}{\sqrt{\frac{\text{Ca}^{+2} + \text{Mg}^{+2}}{2}}}$$

where Na^+ , Ca^{+2} , and Mg^{+2} are expressed as milliequivalents per liter;

(4241) "Spawning bed," a place where fish spawn;

(4342) "Stream," a river, creek, tributary, or other watercourse;

(4443) "Surface water of the state," lakes, ponds, streams, rivers, wetlands, and any other body or accumulation of water on the land surface that is considered to be waters of the state, but not waste treatment systems, including treatment ponds, lagoons, leachate collection ponds, or stormwater retention ponds designed to meet the requirements of the CWA;

(4544) "Thermocline," in a thermally-stratified waterbody, the depth range characterized by a rapid change in temperature with depth. A thermocline generally separates a well-mixed surface layer (epilimnion) and a more uniform bottom layer (hypolimnion);

(4645) "Thirty-day average," the arithmetic mean of a minimum of 3 consecutive grab or composite samples taken on separate weeks in a 30-day period;

(4746) "Toxic pollutant," a pollutant or combination of pollutants, including disease-causing agents, which, upon exposure, ingestion, inhalation, or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available, cause death, disease, behavioral abnormality, cancer, genetic mutation, physiological malfunctions including reproductive malfunction, or physical deformity, in an organism or its offspring;

(4847) "Warmwater aquatic life," aquatic life including the Ictaluridae, Centrarchidae, and Cyprinidae families of fish, for example, catfish, sunfish, and minnows, respectively;

(4948) "Warmwater marginal fish life propagation," a beneficial use assigned to surface waters of the state which will support aquatic life and more tolerant species of warmwater fish naturally or by frequent stocking and intensive management but which suffer frequent fish kills because of critical natural conditions;

(~~50~~49) "Warmwater permanent fish life propagation," a beneficial use assigned to surface waters of the state which support aquatic life and are suitable for the permanent propagation or maintenance, or both, of warmwater fish. Stocked coldwater fish may also be present;

(~~51~~50) "Warmwater semipermanent fish life propagation waters," a beneficial use assigned to surface waters of the state which support aquatic life and are suitable for the propagation or maintenance, or both, of warmwater fish but which may suffer occasional fish kills because of critical natural conditions;

(~~52~~51) "Weekly average temperature," the mathematical mean of multiple, equally spaced daily temperature measurements over a 7-day consecutive period, with a minimum of three data points equally spaced throughout each day;

(~~53~~52) "Wetlands," those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions including swamps, marshes, bogs, and similar areas;

(~~54~~53) "Zone of mixing," an area in a stream where an effluent or discharge mixes with the upstream water.

Source: SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; 5 SDR 21, effective September 21, 1978; transferred from § 34:04:02:01, effective July 1, 1979; 10 SDR 145, effective July 4, 1984; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 14 SDR 86, effective December 24, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:02:01, July 1, 1996; 24

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SDR 10, effective July 20, 1997; 25 SDR 98, effective January 27, 1999; 31 SDR 29, effective
September 13, 2004; 35 SDR 253, effective May 12, 2009; 41 SDR 109, effective January 12, 2015.

General Authority: SDCL 34A-2-93.

Law Implemented: SDCL 34A-2-93.

74:51:01:53. Criteria for irrigation waters. The criteria of parameters for irrigation waters and their allowable variations that are not included under § 74:51:01:55 and Appendix B, unless set under § 74:51:01:24, are as found in the following table and only apply April 1 – October 31:

Parameter	Criteria	Unit of Measure	Special Conditions
Conductivity at 25°C	$\leq 2,500$	micromhos/cm	30-day average
	$\leq 4,375$	micromhos/cm	daily maximum
Sodium adsorption ratio	≤ 10		see definition

Source: SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; transferred from § 34:04:02:43, effective July 1, 1979; 10 SDR 145, effective July 4, 1984; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 14 SDR 86, effective December 24, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:02:43, July 1, 1996; 24 SDR 10, effective July 20, 1997; 47 SDR 110, effective April 27, 2021.

General Authority: SDCL 34A-2-10, 34A-2-11, 34A-2-93.

Law Implemented: SDCL 34A-2-10, 34A-2-11.

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER POLLUTION CONTROL PROGRAM

TOXIC POLLUTANT CRITERIA

Chapter 74:51:01

APPENDIX B

SEE: § 74:51:01:55

Source: 19 SDR 111, effective January 31, 1993; transferred from Chapter 74:03:02, Appendix C, July 1, 1996; transferred from Chapter 74:51:01, Appendix A, 24 SDR 10, effective July 20, 1997; 25 SDR 98, effective January 27, 1999; 31 SDR 29, effective September 13, 2004; 35 SDR 253, effective May 12, 2009; 41 SDR 109, effective January 12, 2015; 42 SDR 103, effective January 19, 2016; 47 SDR 110, effective April 27, 2021.

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾**FOR TOXIC POLLUTANTS - ARSD 74:51:01**

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
Acenaphthene	83329	70	90		
Acenaphthylene (PAH) ⁽⁶⁾	208968				
Acrolein	107028	3	400	3	3
Acrylonitrile ⁽⁴⁾	107131	0.061	7.0		
Aldrin ⁽⁴⁾	309002	0.0000007 7	0.0000007 7	3.0	
Alpha-Hexachlorocyclohexane (HCH) ⁽⁴⁾	319846	0.00036	0.00039		
Anthracene (PAH) ⁽⁵⁾	120127	300	400		
Antimony	7440360	5.6	640		
Arsenic ⁽⁴⁾	7440382	0.018 ⁽¹¹⁾	0.14 ⁽¹¹⁾	340	150
Asbestos ⁽⁴⁾	1332214	7,000,000 fibers/L			
alpha-BHC ⁽⁴⁾	319846	0.0026	0.0049		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾

FOR TOXIC POLLUTANTS - ARSD 74:51:01

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
beta-BHC ⁽⁴⁾	319857	0.0091	0.017		
Benzene ⁽⁴⁾	71432	0.58	16		
Benzidine ⁽⁴⁾	92875	0.00014	0.011		
Benzo(a)Anthracene ⁽⁴⁾	56553	0.0012	0.013		
Benzo(a)Pyrene ⁽⁴⁾	50328	0.00012	0.00013		
Benzo(b)Fluoroanthene ⁽⁴⁾	205992	0.0012	0.0013		
Benzo(k)Flouoroanthene ⁽⁴⁾	207089	0.012	0.013		
Beryllium	7440417	4			
beta-Hexachlorocyclohexane (HCH)	319857	0.0080	0.014		
Bis(2-Chloro-1-methylethyl) Ether	108601	200	4,000		
Bis(2-Chloroethyl) Ether ⁽⁴⁾	111444	0.030	2.2		
Bis(2-Ethylhexyl)Phthalate ⁽⁴⁾	117817	0.32	0.37		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾

FOR TOXIC POLLUTANTS - ARSD 74:51:01

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
Bis(Chloromethyl) Ether ⁽⁴⁾	542881	0.00015	0.017		
Bromoform ⁽⁵⁾	75252	7.0	120		
Butylbenzyl Phthalate ⁽⁴⁾	85687	0.10	0.10		
Cadmium	7440439			2.0 <u>1.8</u> ⁽⁷⁾	0.25 <u>0.72</u> ⁽⁷⁾
Carbon Tetrachloride ⁽⁴⁾	56235	0.4	5		
Chlordane ⁽⁴⁾	57749	0.00031	0.00032	2.4	0.0043
Chlorine	7782505			19	11
Chlorobenzene	108907	100	800		
Chlorodibromomethane ⁽⁴⁾	124481	0.80	21		
Chloroform ⁽⁴⁾	67663	60	2,000		
Chlorophenoxy Herbicide (2,4-D)	94757	1,300	12,000		
Chlorophenoxy Herbicide (2,4,5-TP) [Silvex]	93721	100	400		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾**FOR TOXIC POLLUTANTS - ARSD 74:51:01**

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
2-Chloronaphthalene	91587	800	1,000		
2-Chlorophenol	95578	30	800		
3-Methyl-4-Chlorophenol	59507	500	2,000		
Chromium(III)	16065831			570 ⁽⁷⁾	74 ⁽⁷⁾
Chromium(VI)	18540299			16	11
Chrysene ⁽⁴⁾	218019	0.12	0.13		
Copper	7440508	1,300		13 ⁽⁷⁾	9.0 ⁽⁷⁾
Cyanide	57125	4 ⁽⁸⁾	400 ⁽⁸⁾	22 ⁽¹²⁾	5.2 ⁽¹²⁾
Diazinon	333415	0.17	0.17		
4,4'-DDD ⁽⁴⁾	72548	0.00012	0.00012		
4,4'-DDE ⁽⁴⁾	72559	0.000018	0.000018		
4,4'-DDT ⁽⁴⁾	50293	0.000030	0.000030	1.1	0.001
Dibenzo(a,h)Anthracene ⁽⁴⁾	53703	0.00012	0.00013		
1,2-Dichlorobenzene	95501	1,000	3,000		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾**FOR TOXIC POLLUTANTS - ARSD 74:51:01**

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
1,3-Dichlorobenzene	541731	7	10		
1,4-Dichlorobenzene	106467	300	900		
3,3'-Dichlorobenzidine ⁽⁴⁾	91941	0.049	0.15		
Dichlorobromomethane ⁽⁴⁾	75274	0.95	27		
1,2-Dichloroethane ⁽⁴⁾	107062	9.9	650		
1,1-Dichloroethylene	75354	300	20,000		
2,4-Dichlorophenol	120832	10	60		
1,2-Dichloropropane ⁽⁴⁾	78875	0.90	31		
1,3-Dichloropropene ⁽⁴⁾	542756	0.27	12		
Dieldrin ⁽⁴⁾	60571	0.0000012	0.0000012	0.24	0.056
Diethyl Phthalate	84662	600	600		
2,4-Dimethylphenol	105679	100	3,000		
Dimethyl Phthalate	131113	2,000	2,000		
Di-n-Butyl-Phthalate	84742	20	30		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾

FOR TOXIC POLLUTANTS - ARSD 74:51:01

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
Dinitrophenols	25550587	10	1,000		
2-Methyl-4,6-Dinitrophenol	534521	2	30		
2,4-Dinitrophenol	51285	10	300		
2,4-Dinitrotoluene ⁽⁴⁾	121142	0.049	1.7		
1,2-Diphenylhydrazine ⁽⁴⁾	122667	0.03	0.2		
alpha-Endosulfan	959988	20	30	0.22	0.056
beta-Endosulfan	33213659	20	40	0.22	0.056
Endosulfan Sulfate	1031078	20	40		
Endrin	72208	0.03	0.03	0.086	0.036
Endrin Aldehyde	7421934	1	1		
Ethylbenzene	100414	68	130		
Fluoranthene	206440	20	20		
Fluorene ⁽⁵⁾	86737	50	70		
Heptachlor ⁽⁴⁾	76448	0.0000059	0.0000059	0.52	0.0038

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾**FOR TOXIC POLLUTANTS - ARSD 74:51:01**

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
Heptachlor epoxide ⁽⁴⁾	1024573	0.000032	0.000032	0.52	0.0038
Hexachlorobenzene ⁽⁴⁾	118741	0.000079	0.000079		
Hexachlorobutadiene ⁽⁴⁾	87683	0.01	0.01		
gamma-Hexachlorocyclohexane (HCH) [Lindane]	58899	4.2	4.4	0.95	
Hexachlorocyclohexane (HCH) – Technical ⁽⁴⁾	608731	0.0066	0.010		
Hexachlorocyclopentadiene	77474	4	4		
Hexachloroethane ⁽⁴⁾	67721	0.1	0.1		
Indeno(1,2,3-cd)pyrene ⁽⁴⁾	193395	0.0012	0.0013		
Isophorone ⁽⁴⁾	78591	34	1,800		
Lead	7439921			65 ⁽⁷⁾	2.5 ⁽⁷⁾
Mercury	7439976	0.050	0.051	1.4	0.77 ⁽⁸⁾
Methyl Chloride ⁽⁵⁾	74873				

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾

FOR TOXIC POLLUTANTS - ARSD 74:51:01

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
Methylmercury	22967926		0.3 mg/kg		
Methoxychlor	72435	0.02	0.02		0.03
Methyl Bromide	74839	100	10,000		
Methylene Chloride ⁽⁴⁾	75092	20	1,000		
N-Nitrosodimethylamine ⁽⁴⁾	62759	0.00069	3.0		
N-Nitrosodi-n-Propylamine ⁽⁴⁾	621647	0.0050	0.51		
N-Nitrosodiphenylamine ⁽⁴⁾	86306	3.3	6.0		
Nickel	7440020	610	4,600	470 ⁽⁷⁾	52 ⁽⁷⁾
Nitrobenzene	98953	10	600		
Nonylphenol	84852153			28	6.6
Pentachlorobenzene	608935	0.1	0.1		
Pentachlorophenol	87865	0.03	0.04	19 ⁽⁶⁾	15 ⁽⁶⁾
Phenanthrene ⁽⁵⁾	85018				
Phenol	108952	4,000	300,000		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾**FOR TOXIC POLLUTANTS - ARSD 74:51:01**

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
Polychlorinated Biphenyls, PCBs ⁽⁴⁾⁽⁹⁾		0.000064	0.000064		0.014
Pyrene	12900	20	30		
Selenium	7782492	170	4,200	⁽¹⁰⁾	5.0 ⁽⁸⁾
Silver	7440224			3.2 ⁽⁷⁾	
1,2,4,5-Tetrachlorobenzene	95943	0.03	0.03		
2,3,7,8-Tetrachlorodibenzo-p- dioxon (Dioxin) ⁽⁴⁾	1746016	5.0E-9	5.1E-9		
1,1,2,2-Tetrachloroethane ⁽⁴⁾	79345	0.2	3		
Tetrachloroethylene ⁽⁴⁾	127184	10	29		
Thallium	7440280	0.24	0.47		
Toluene	108883	57	520		
Toxaphene ⁽⁴⁾	8001352	0.00070	0.00071	0.73	0.0002
1,2-Trans-Dichloroethylene	156605	100	4,000		

SOUTH DAKOTA SURFACE WATER QUALITY STANDARDS⁽¹⁾**FOR TOXIC POLLUTANTS - ARSD 74:51:01**

Pollutant	CAS Number	Human Health Value Concentrations in µg/L		Freshwater Aquatic Life Value Concentrations in µg/L Uses 2-3-4-5-6-9	
		Use 1 ⁽²⁾	Uses 2-3-4-5-6- 9 ⁽³⁾	Acute (CMC)	Chronic (CCC)
1,2,4-Trichlorobenzene	120821	0.071	0.076		
1,1,1-Trichloroethane	71556	10,000	200,000		
1,1,2-Trichloroethane ⁽⁴⁾	79005	0.55	8.9		
Trichloroethylene ⁽⁴⁾	79016	0.6	7		
2,4,5-Trichlorophenol	95954	300	600		
2,4,6-Trichlorophenol ⁽⁴⁾	88062	1.5	2.8		
Vinyl Chloride ⁽⁴⁾	75014	0.022	1.6		
Zinc	7440666	7,400	26,000	120 ⁽⁷⁾	120 ⁽⁷⁾

SOUTH DAKOTA**Surface Water Quality Standards⁽¹⁾
for Toxic Pollutants**

⁽¹⁾ The aquatic life values for arsenic, cadmium, chromium (III), chromium (VI), copper, lead, mercury (acute), nickel, selenium, silver and zinc given in this document refer to the dissolved amount of each substance unless otherwise noted. All surface water discharge permit effluent limits for metals shall be expressed and measured in accordance with § 74:52:03:16.

⁽²⁾ This human health value is based on two routes of exposure - ingestion of contaminated aquatic organisms and drinking water.

⁽³⁾ This human health value is based on one route of exposure - ingestion of contaminated aquatic organisms only.

⁽⁴⁾ This substance is classified as a carcinogen with the value based on an incremental risk of one additional instance of cancer in one million persons (10^{-6}).

⁽⁵⁾ Those chemicals which are not individually classified as carcinogens but which are contained within a class of chemicals with carcinogenicity as the basis for the criteria derivation for that class of chemicals; an individual carcinogenicity assessment for these chemicals is pending.

⁽⁶⁾ For pH-dependent criteria, the value given is an example only and is based on a pH of 7.8. Criteria for each case must be calculated using the following equation taken from National Recommended Water Quality Criteria: 2002 (EPA-822-R-02-047, November 2002):

$$\text{Chronic} = e^{[1.005(\text{pH}) - 5.134]}$$

$$\text{Acute} = e^{[1.005(\text{pH}) - 4.869]}$$

(7) For hardness-dependent criteria in ug/L, the value given is an example only and is based on a CaCO_3 hardness of 100 mg/L. Criteria for each case must be calculated using the following equations taken from National Recommended Water Quality Criteria:

<http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm#hhtable>, ~~June 2013~~:

Cadmium, ug/L

$$\text{Chronic} = (*0.909 \text{ CF})e^{(0.7409 - 0.7977[\ln(\text{hardness})] - 4.719 - 3.909)}$$

$$\text{Acute} = (*0.944 \text{ CF})e^{(1.0166 - 0.9789[\ln(\text{hardness})] - 3.924 - 3.866)}$$

*Conversion factors are hardness-dependent. The values shown are with a hardness of 100 mg/L as calcium carbonate (CaCO_3). Conversion factors (CF) (from total to dissolved) for any hardness can be calculated using the following equations:

$$\text{Chronic: CF} = 1.101672 - [(\ln \text{ hardness})(0.041838)]$$

$$\text{Acute: CF} = 1.136672 - [(\ln \text{ hardness})(0.041838)]$$

Chromium (III), ug/L

$$\text{Chronic} = (0.860)e^{(0.8190[\ln(\text{hardness})] + 0.6848)} \quad \text{Acute} = (0.316)e^{(0.8190[\ln(\text{hardness})] + 3.7256)}$$

Copper, ug/L

$$\text{Chronic} = (0.960)e^{(0.8545[\ln(\text{hardness})]-1.702)} \quad \text{Acute} = (0.960)e^{(0.9422[\ln(\text{hardness})]-1.700)}$$

Lead, ug/L

$$\text{Chronic} = (*0.791 \text{ CF})e^{(1.273[\ln(\text{hardness})]-4.705)}$$

$$\text{Acute} = (*0.791 \text{ CF})e^{(1.273[\ln(\text{hardness})]-1.460)}$$

*Conversion factors are hardness-dependent. The values shown are with a hardness of 100 mg/L as calcium carbonate (CaCO₃). Conversion factors (CF) (from total to dissolved) for any hardness can be calculated using the following equations:

$$\text{Acute and Chronic: CF} = 1.46203 - [(\ln \text{ hardness})(0.145712)]$$

Nickel, ug/L

$$\text{Chronic} = (0.997)e^{(0.8460[\ln(\text{hardness})]+0.0584)} \quad \text{Acute} = (0.998)e^{(0.8460[\ln(\text{hardness})]+2.255)}$$

Silver, ug/L

$$\text{Acute} = (0.85)e^{(1.72[\ln(\text{hardness})]-6.59)}$$

Zinc, ug/L

$$\text{Chronic} = (0.986)e^{(0.8473[\ln(\text{hardness})]+0.884)} \quad \text{Acute} = (0.978)e^{(0.8473[\ln(\text{hardness})]+0.884)}$$

⁽⁸⁾ These criteria are based on the total-recoverable fraction of the metal.

- (9) This criterion applies to total pcbs, (e.g. the sum of congener or all isomer or homolog or Aroclor analyses).
- (10) The $(0.996)CMC = 1/[f_1/CMC_1) + (f_2/CMC_2)]$ where f_1 and f_2 are the fractions of total selenium that are treated as selenite and selenate, respectively, and CMC1 and CMC2 are 185.9 $\mu\text{g/L}$ and 12.82 $\mu\text{g/L}$, respectively.
- (11) This criterion for arsenic refers to the inorganic form only.
- (12) This criterion for cyanide is expressed as free cyanide.

74:51:02:04. Uses of certain lakes. Lakes covered by §§ 74:51:02:02 and 74:51:02:03 include the following:

County	Waterbody	State Lake Identifier	Uses
Aurora	Crystal	LJA-Lake-340-000	6
	Fish	LJA-Lake-655-000	6
	Frazer, also known as Fraser Dam	LJA-Lake-18-000	5
	Hansons	FTR-Lake-5652-000	6
	Jail Pond, also known as Plankinton Community Fishing Pond	LJA-Lake-774-000	6
	New Stickney, also known as Nelson	LJA-Lake-772-000	4
	Old Stickney	LJA-Lake-55-000	6
	Patton	FTR-Lake-5113-000	3
	White	FTR-Lake-5129-000	6
	Wilmarth	LJA-Lake-233-000	4
Beadle	Bergers	MJA-Lake-638-000	5
	Byron	MJA-Lake-531-000	5,10
	Cavour	MJA-Lake-532-000	6
	Mud, includes Conners and Spring	MJA-Lake-531-001	6
	Ravine	MJA-Lake-540-000	5
	Staum	MJA-Lake-354-000	5
	Stoney Run	MJA-Lake-317-000	6
Bennett	Allan Dam	UWH-Lake-19-000	3
	Allen	LIW-Lake-143-000	2

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Bad Hair	MWH-Lake-38-000	5
	Cedar Creek No. 1	LIW-Lake-9-000	2
	Cedar Creek No. 2	LIW-Lake-9-001	2
	Jacquot, also known as Risse	MWH-Lake-41-000	4
	LaCreek National Wildlife Refuge Pool 1	LIW-Lake-289-000	6
	LaCreek National Wildlife Refuge Pool 2	LIW-Lake-292-000	6
	LaCreek National Wildlife Refuge Pool 3	LIW-Lake-291-000	6
	LaCreek National Wildlife Refuge Pool 4	LIW-Lake-290-000	6
	LaCreek National Wildlife Refuge Pool 5	LIW-Lake-147-000	6
	LaCreek National Wildlife Refuge Pool 6	LIW-Lake-286-000	6
	LaCreek National Wildlife Refuge Pool 7	LIW-Lake-288-000	6
	LaCreek National Wildlife Refuge Pool 8	LIW-Lake-287-000	6
	LaCreek National Wildlife Refuge Pool 9	LIW-Lake-28-000	6
	LaCreek National Wildlife Refuge Pool 10	LIW-Lake-27-000	5
	Little White River Project Dam	LIW-Lake-8-000	4
	Scharman	MWH-Lake-68-000	4
Bon Homme	Bucholz WPA	LCL-Lake-62-000	6, no 7
	Clear	LCL-Lake-9-000	6
	Cosby WPA	LCL-Lake-60-000 <u>LCL-Lake-60-001</u>	6, no 7
	Hieb WPA	LCL-Lake-60-000	6, no 7
	Henry	LJA-Lake-588-000	4

County	Waterbody	State Lake Identifier	Uses
	Kloucek	LJA-Lake-490-000	6
	Schaefer WPA	LCL-Lake-63-000	6, no 7
	Tyndall Kids Pond	LCL-Lake-71-000	6
Brookings	Campbell	MBS-Lake-234-000	6
	East 81 Lake	MBS-Lake-233-001	4
	Goldsmith	MBS-Lake-236-000	6
	Hendricks	LQP-Lake-23-000	5
	Johnson Pond, also known as Interstate Urban Fishing Pond	MBS-Lake-278-000	5
	Oak	LQP-Lake-68-000	6
	East Oakwood	MBS-Lake-215-001	5
	North Oakwood, also known as Johnson Lake	MBS-Lake-215-702	5
	West Oakwood, also known as Tetonkaha	MBS-Lake-215-700	5
	Sinai	MBS-Lake-232-000	4
Brown	Elm	ELM-Lake-5-000	1,4
	Elm River No. 1	ELM-Lake-190-001	1,6
	Elm River No, 2, also known as Ordway Dam	ELM-Lake-190-001 <u>ELM-Lake-190-000</u>	1,6
	Elm River No. 4	ELM-Lake-190-002	1,6
	Frederick	ELM-Lake-189-000	6
	Pigors	MUD-Lake-281-000	5
	Richmond	UJA-Lake-831-000	4

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Sand, which includes Mud Lake and Columbia Road Reservoirs	UJA-Lake-803-000	6
	Tacoma Park	UJA-Lake-1218-000	6
	Tollefson	MJA-Lake-343-000	6
	Wiley Park	UJA-Lake-836-000	6
	Willow Creek Dam	ELM-Lake-11-000	1,5
Brule	American	FTR-Lake-5577-000	6
	Sharping	FTR-Lake-5167-000	6
	Sixteen	FTR-Lake-5436-000	6
	Wanalain	FTR-Lake-5333-000	5
	Wells	CRW-Lake-141-000	5
Buffalo	Koch	CRW-Lake-454-000	5
Butte	Newell	LBF-Lake-528-000	4
	Newell City Pond	LBF-Lake-479-000	3
	Orman Dam, also known as Belle Fourche Reservoir	LBF-Lake-768-000	4,10
Campbell	Campbell	WMC-Lake-891-000	5
	Chester, also known as Boor	ULO-Lake-460-000	6
	Pocasse	ULO-Lake-302-000	4
Charles Mix	Academy	FTR-Lake-5208-000	4
	Andes	FTR-Lake-6099-000	6
	Dante	LCL-Lake-33-000	4
	Dowd	FTR-Lake-6087-000	6

County	Waterbody	State Lake Identifier	Uses
	Geddes	FTR-Lake-6083-000	5
	Platte	FTR-Lake-5745-000	6
	Song Hawk	LCL-Lake-47-000	4
	Wagner	LCL-Lake-64-001	5
Clark	Antelope Lake	MBS-Lake-65-701	5
	Bailey	UBS-Lake-88-000	6
	Fordham	MJA-Lake-91-000	6
	Indian Springs	MBS-Lake-65-000	4
	Logan, also known as Paine	MJA-Lake-188-000	6
	Reid	UBS-Lake-76-000	6
	Round	UBS-Lake-76-001	6
	Willow	MBS-Lake-121-003	6
Clay	Burbank	LCL-Lake-52-000	5
Codington	Bramble Pond	UBS-Lake-639-000	6
	Dry	UBS-Lake-106-001	6
	Grass	UBS-Lake-106-000	6
	Kampeska	UBS-Lake-171-000	1,4
	Kampeska Trout Pond	UBS-Lake-171-001	4
	Pelican	UBS-Lake-173-000	5
	Punished Woman	UMN-Lake-610-000	5
	Round	UMN-Lake-610-001	6
Corson	Bohle	GRA-Lake-632-000	5
	East McIntosh	GRA-Lake-16-000	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	East Morristown, also known as Railroad Dam	CED-Lake-55-000	5
	Kellers	ULO-Lake-74-000	5
	Mallard	GRA-Lake-993-000	5
	McGee	GRA-Lake-513-000	5
	West McIntosh	GRA-Lake-184-000	6
	West Morristown	CED-Lake-41-000	5
	Pudwell, also known as McCarthy	GRA-Lake-511-000	4
	Tetanka	GRA-Lake-914-000	4
	Trail City	ULO-Lake-765-000	5
Custer	Berner Dam	MCS-Lake-165-000	6
	Bitmore, also known as Lakota	MCS-Lake-2-000	3
	Bismarck	MCS-Lake-7-000	3
	Butler	MCS-Lake-17-000	3
	Center	MCS-Lake-1-000	2
	Custer Municipal	MCS-Lake-24-000	3
	Legion	MCS-Lake-3-000	3
	Pilgrim	MCS-Lake-182-000	3
	Stockade	MCS-Lake-12-000	3
	Sylvan	MCS-Lake-4-000	2
Davison	Mitchell	LJA-Lake-623-000	1,4
Day	Amsden	MUD-Lake-22-000	4
	Anderson	UBS-Lake-248-000	6

County	Waterbody	State Lake Identifier	Uses
	Bitter	UBS-Lake-409-000	4
	Blue Dog	UBS-Lake-411-003	4
	Campbell Slough	UBS-Lake-196-001	6
	Enemy Swim	UBS-Lake-196-000	4
	Minnewasta	UBS-Lake-411-705	5
	North Waubay	UBS-Lake-411-700	5
	Pickeral	UBS-Lake-358-000	4
	Pierpont	MUD-Lake-43-000	4
	Rush	UBS-Lake-411-001	6
	South Waubay	UBS-Lake-411-000	5
	Unnamed lake west of Bristol in Sections 26, 27 and 35 in T122N, R58W	MUD-Lake-351-002 and 011	4
Deuel	Alice	UMN-Lake-710-000	5
	Briggs	LQP-Lake-6-000	6
	Bullhead	UBS-Lake-320-000	5
	Clear	MBS-Lake-138-000	6
	Cochrane	LQP-Lake-56-000	4
	Coteau South	MBS-Lake-131-000	6
	Fish	LQP-Lake-14-000	6
	Francis	LQP-Lake-34-000	6
	Ketchum	MBS-Lake-133-000	5
	Lone Tree	LQP-Lake-1-000	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Oliver	LQP-Lake-8-000	6
	Round	UBS-Lake-320-001	6
	School	UBS-Lake-322-001	6
Dewey	Adams	LMO-Lake-871-000	5
	Dewberry	LMO-Lake-1087-000	4
	Eagle Butte	LMO-Lake-999-000	4
	Firesteel	GRA-Lake-525-000	6
	Goose Creek	LMO-Lake-1141-000	5
	Isabel	GRA-Lake-613-000	1,4
	Jewett	LMO-Lake-831-000	6
	Lantry	LMO-Lake-755-000	4
	Little Moreau No. 1	LMO-Lake-1058-000	4
	Little Moreau No. 2	LMO-Lake-1057-000	2
	Little Moreau No. 3	LMO-Lake-1106-000	6
	Peach	LMO-Lake-767-000	6
	Rockcowen	LMO-Lake-759-000	5
	Whitehorse	LMO-Lake-1835-000	5
Douglas	Armour Kids Fishing Pond	LCL-Lake-21-000	6
	Corsica	LCL-Lake-16-000	5
Edmunds	Bowdle-Hosmer	WMC-Lake-125-000	6
	Kraft	NFS-Lake-918-000\	6
	Loyalton, also known as Stafford	NFS-Lake-874-000	5
	North Scatterwood	SNK-Lake-435-000	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Mina, also known as Parmley	SNK-Lake-23-001	4
	Pieton	NFS-Lake-1008-000	6
	Rosette	SNK-Lake-26-000	6
Fall River	Angostura	ANR-Lake-4-000	4,10
	Boehart	MCS-Lake-180-000	6
	Coffee	ANR-Lake-62-000	5
	Coldbrook	MCS-Lake-5-000	2
	Cottonwood Springs	MCS-Lake-6-000	4
	Crow, also known as Crowe	HAT-Lake-6-000	5
	Dukes	HAT-Lake-26-000	4
	Ebersol	MCS-Lake-91-000	5
	Edgemont Airport North Pond	ANR-Lake-72-000	3
	Edgemont Airport South Pond	ANR-Lake-72-001	5
	Ellison	ANR-Lake-74-000	5
	Fiddle Creek Dam	ANR-Lake-50-000	4
	Five, also known as Fire	ANR-Lake-75-000	5
	Indians South 1	HAT-Lake-25-000	4
	Limestone Butte, also known as Oelrichs Dam	UWH-Lake-6-000	6
	Old Pioneer	UWH-Lake-139-000	5
	Otto	ANR-Lake-68-000	2
	Ray	MCS-Lake-179-000	5
	Sandoz	UWH-Lake-85-000	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Sherberth	MCS-Lake-167-000	5
	Sides	MCS-Lake-130-000	5
	South East Highway Canyon	UWH-Lake-53-000	5
	Vanderberg	MCS-Lake-181-000	5
	White	MCS-Lake-76-000	5
	Williams	ANR-Lake-22-000	5
Faulk	Cresbard	NFS-Lake-820-000	5
	Faulkton	SNK-Lake-196-000	5
	Hamak	NFS-Lake-826-000	6
	Latham	SNK-Lake-202-000	6
	Scatterwoods, also known as Scatterwood South	SNK-Lake-435-001	6
	Voegler	SNK-Lake-209-000	6
Grant	Blue Cloud Abbey	UMN-Lake-827-000	5
	Farley	UMN-Lake-517-000	6
	Hunter Granite Quarry	UMN-Lake-850-000	2
	LaBolt	UMN-Lake-1584-000	4
	Summit	UMN-Lake-697-000	5
Gregory	Berry	PON-Lake-89-000	4
	Burch, also known as Dixon	FTR-Lake-5039-000	5
	Burke	FTR-Lake-3197-000	5
	Fairfax	FTR-Lake-5880-000	5
	Herrick, also known as Spendor	PON-Lake-75-000	5

County	Waterbody	State Lake Identifier	Uses
	Ponca, also known as Indian	PON-Lake-142-000	5
	Star	PON-Lake-222-000	6
Haakon	Kroetche	LCH-Lake-374-000	4
	Ottumwa	BAD-Lake-1145-000	6
	Sunshine	BAD-Lake-204-000	4
	Waggoner	BAD-Lake-2426-000	1,4
Hamlin	Clear	UBS-Lake-175-001	6
	Dry	MBS-Lake-405-001	6
	Florence	MBS-Lake-405-002	6
	John, also known as St. John	MBS-Lake-176-701	6
	Marsh	MBS-Lake-160-000	6
	Mary	MBS-Lake-176-002	6
	Norden	MBS-Lake-176-001	6
	Poinsett	MBS-Lake-405-000	5
Hand	Crystal City Park	TUR-Lake-65-000	6
	Dakotah	TUR-Lake-14-000	3
	Jones	TUR-Lake-64-000	5
	Louise	TUR-Lake-155-000	5
	Pearl	MJA-Lake-28-000	5
	Rose Hill	MJA-Lake-614-000	4
Hanson	Alexandria Quarry	LJA-Lake-565-000	2
	Eli	LJA-Lake-678-000	5
	Ethan	LJA-Lake-621-000	5

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County	Waterbody	State Lake Identifier	Uses
	Fulton	LJA-Lake-539-000	6
	Hanson	LJA-Lake-425-000	5
	Long	LJA-Lake-714-000	6
Harding	Buffalo, also known as Gardener <u>Gardner</u>	SFG-Lake-581-000	4
	Hanson	NFG-Lake-184-000	3
	Jacobi	SFG-Lake-64-000	3
	Ledger East	SFM-Lake-64-000	6
	Ledger West	SFM-Lake-563-000	5
	Painter	ULM-Lake-220-000	3
	Phillips	UMO-Lake-561-000	3
	Rabbit Creek Dam	UMO-Lake-567-000	5
	Vessey Dam	NFG-Lake-295-000	3
Hutchinson	Dimock	LJA-Lake-34-000	5
	Menno	LJA-Lake-52-000	5
	Silver	VER-Lake-103-000	6
	Tripp	LCL-Lake-24-000	5
Hyde	Boehm	CRW-Lake-891-000	5
	Chapelle	FTR-Lake-3578-001	5
	Holabird	MKN-Lake-242-000	6
	Mission, also known as Stephan or as Ambrose	CRW-Lake-1035-000	6
	Peno	CRW-Lake-48-000	5
	Quirk	CRW-Lake-843-000	5

County	Waterbody	State Lake Identifier	Uses
Jackson	Andrews	BAD-Lake-850-000	6
	Bashen, also known as Bresham	BAD-Lake-854-000	4
	Belevidere	BAD-Lake-1438-000	5
	Brooke No. 1	BAD-Lake-1301-000	4
	Cottonwood Range	BAD-Lake-903-000	4
	Ditmar, also known as Dithmer	MWH-Lake-239-000	5
	Freeman	BAD-Lake-1459-000	4
	Kadoka	BAD-Lake-2118-000	6
	May	MWH-Lake-295-000	5
	Poor Bear	MWH-Lake-60-000	2
	Wheeler No. 1	BAD-Lake-2639-000	4
	Wheeler No. 2	BAD-Lake-2288-000	4
Jerauld	Crow	CRW-Lake-767-000	6
Jones	Draper Dam	MED-Lake-32-000	5
	Murdo	BAD-Lake-2898-000	4
	Murdo Railroad Dam	LWH-Lake-1079-002	5
	National Grasslands Trout Dam		3
	Okaton	BAD-Lake-2188-000	5
	Richland	BAD-Lake-280-000	4
Kingsbury	Agnew	MJA-Lake-419-000	6
	Albert	MBS-Lake-176-000	6
	Arlington Kid's Pond	MBS-Lake-624-000	6
	Badger	MBS-Lake-12-000	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Cherry	LKT-Lake-96-000	6
	Henry	LKT-Lake-55-003	6
	Iroquois	MJA-Lake-640-000	6
	Osceola	MJA-Lake-322-000	6
	Spirit	LKT-Lake-95-000	6
	Thisted	MBS-Lake-11-000	6
	Thompson	LKT-Lake-55-000	4
	West 81 Lake, also known as Twin	MBS-Lake-233-000	4
	Whitewood	LKT-Lake-55-002	6
Lake	Badus	MBS-Lake-238-000	6
	Bourne Slough	LBS-Lake-135-004	6
	Brandt	LBS-Lake-135-001	4
	Green	MBS-Lake-221-000	6
	Herman	LBS-Lake-136-000	5
	Long	LBS-Lake-137-000	6
	Madison	LBS-Lake-135-000	4
	Mud Lakes	MBS-Lake-243-000	6
	Round	LBS-Lake-135-002	6
	Winfred	VER-Lake-134-000	6
Lawrence	Columbia	RED-Lake-24-000	3
	Coxes	RED-Lake-6-000	1,2
	Dalton	MCE-Lake-3-000	2
	Dumont Ponds	RAP-Lake-35-000	3

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County	Waterbody	State Lake Identifier	Uses
	Iron Creek	RED-Lake-8-000	2
	Mirror 1	RED-Lake-5-000	2
	Mirror 2	RED-Lake-5-001	
	Reausaw	MCE-Lake-4-000	3
	Roubaix	MCE-Lake-5-000	2
	Strawberry Hill Pond	LBF-Lake-800-000	3
	Swede Gulch Beaver Pond	RAP-Lake-57-000	3
	Yates Ponds	RED-Lake-10-000	2
Lincoln	Alvin	LBS-Lake-180-000	4
	Pattee Creek Watershed Reservoir No. 1, also known as Lakota	LBS-Lake-181-000	4
	Pattee Creek Watershed Reservoir No. 2	LBS-Lake-42-000	5
Lyman	Brakke	MED-Lake-667-000	4
	Byre	MED-Lake-25-000	4
	Dybing	MED-Lake-654-000	4
	Fate	MED-Lake-638-000	4
	Fenenga	FTR-Lake-6328-000	6
	Jackson	LWH-Lake-2307-000	6
	Kennebee	MED-Lake-760-000	6
	Knudtson	MED-Lake-564-000	5
	Larson	FTR-Lake-4666-000	5

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	National Grasslands Dam (Ft. Pierre National Grassland Dam), also known as Trout	BAD-Lake-320-000	4
	Reliance	FTR-Lake-3897-000	4
McCook	Baureles, also known as Schultz	LJA-Lake-751-001	6
	Forsch	LJA-Lake-749-000	6
	Gross	LJA-Lake-745-000	6
	Jansen	LJA-Lake-298-000	6
	Lerhman	LJA-Lake-725-000	6
	Sabers	LJA-Lake-374-000	6
	Schimmels	LJA-Lake-743-001	6
	Tuschens	LJA-Lake-743-000	6
	Vermillion	VER-Lake-62-000	4
McPherson	Eureka No. 1	WMC-Lake-1372-002	5
	Eureka No. 2	WMC-Lake-1372-000	5
	Hillview	WMC-Lake-133-002	6
	Leola	UJA-Lake-756-000	6
	Long	WMC-Lake-521-000	6
	Rau, also known as Rath	WMC-Lake-774-003	6
	Twin	WMC-Lake-526-000	6
	Wolff	ULO-Lake-683-000	5
Marshall	Abraham	WWR-Lake-260-000	6
	Almos	UJA-Lake-917-003	6

County	Waterbody	State Lake Identifier	Uses
		<u>UJA-Lake-917-701</u>	
	Buffalo North	UJA-Lake-917-800	5
	Buffalo South	UJA-Lake-917-000	5
	Bullhead	UJA-Lake-866-022	5
	Cattle/Kettle Lake System	UJA-Lake-866-000	6
	Clear	UJA-Lake-917-001	4
	Cottonwood	UJA-Lake-882-000	5
	Crystal, also known as Howley	UJA-Lake-416-000	6
	Dumarce	UJA-Lake-881-000	6
	Emma	UJA-Lake-60-000	6
	Flat	WWR-Lake-78-000	6
	Four Mile	UJA-Lake-866-007	6
	Goodbird	UJA-Lake-890-000	6
	Grays, also known as Grey	UJA-Lake-891-000	6
	Hickman	UJA-Lake-458-000	5
	High	WWR-Lake-63-000	5
	Hills	UMN-Lake-304-000	6
	Hoop	UJA-Lake-880-001	6
	Horseshoe	UJA-Lake-866-015	6
	Isabella	UJA-Lake-917-005	6
	Island	UJA-Lake-900-000	6
	Long	UJA-Lake-892-000	6
	Lost	UJA-Lake-866-021	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Martha	UJA-Lake-967-000	6
	Mud	UJA-Lake-891-001	6
	Nine Mile	UJA-Lake-882-001	5
	Red Iron North	UJA-Lake-917-004	6
	Red Iron South	UJA-Lake-917-002	4
	Roy	UJA-Lake-866-001	4
	Sarah	UJA-Lake-329-000	6
	Simons	UJA-Lake-259-000	6
	Six Mile	UJA-Lake-882-005	6
	Turtle Foot	UMN-Lake-305-000	6
	Two Island	UJA-Lake-882-006	6
	White	WWR-Lake-42-000	4
Meade	Bear Butte	LBF-Lake-42-000	5
	Bonita	LBF-Lake-403-000	5
	Choate	CHE-Lake-204-000	6
	Curlew	MCE-Lake-6-000	4
	Durkee	CHE-Lake-516-000	1,4
	Follet	LBF-Lake-100-000	5
	Ft. Meade Bureau of Land Management	LBF-Lake-43-000	3
	Herford	LBF-Lake-516-000	5
	Lundgren	LBF-Lake-208-000	5
	Maurine	UMO-Lake-256-000	5
	Mud Butte	CHE-Lake-111-000	5

County	Waterbody	State Lake Identifier	Uses
	Opal	CHE-Lake-200-000	5
	Pinnocle	CHE-Lake-147-000	5
	Red Owl	CHE-Lake-179-000	5
	Sulphur	CHE-Lake-54-000	5
	Tisdale	MCE-Lake-44-000	5
Mellette	Blackpipe	MWH-Lake-255-000	4
	Deiss	LIW-Lake-21-000	5
	Rohloff	LIW-Lake-43-000	4
	Sinclair	LWH-Lake-2311-000	6
	White River, also known as Putranele	LIW-Lake-207-000	4
Miner	Carthage	MJA-Lake-598-000	4
Minnehaha	Baltic	LBS-Lake-276-000	6
	Beaver	LBS-Lake-70-000	6
	Clear	LBS-Lake-232-000	6
	Covell	LBS-Lake-90-000	6
	Dell Rapids	LBS-Lake-289-000	6
	Diamond	LBS-Lake-223-000	5
	Garretson	LBS-Lake-287-000	6
	Grass	LBS-Lake-82-000	6
	Island	LBS-Lake-213-000	5
	Loss	VER-Lake-10-000	6
	Lost	LBS-Lake-60-000	6
	Scott	LBS-Lake-65-000	6

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Twin Lakes	LBS-Lake-204-000	4
	Wall	LBS-Lake-95-000	5
Moody	Allen	LBS-Lake-123-000	6
	Flandreau	LBS-Lake-110-001	6
	Lester Anderson GPA	LBS-Lake-225-000	6, no 7
Pennington	Alexander, also known as Medicine Mountain Boy Scout Camp	MCS-Lake-72-000	2
	Big Foot	BAD-Lake-2220-000	6
	Bloom	BAD-Lake-482-000	5
	Bruce	MCE-Lake-54-000	5
	Canyon	RAP-Lake-3-000	1,2
	Caspers Dam	BAD-Lake-2647-000	5
	Cement Plant	RAP-Lake-34-000	2
	Conata	MWH-Lake-402-000	6
	Deerfield	RAP-Lake-31-000	2
	Eisenbaum	LCH-Lake-627-000	6
	Farmingdale Dam	RAP-Lake-56-000	5
	Farmingdale National Grasslands	RAP-Lake-8-000	3
	Gage	BAD-Lake-484-000	5
	Hamann	LCH-Lake-54-000	5
	Hanlon	MCS-Lake-184-000	3
	Hoffman	LCH-Lake-71-000	5
	Horsetheif	MCS-Lake-8-000	2

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Imby	UWH-Lake-151-000	6
	Johnson	BAD-Lake-476-000	6
	Kellam Dam	MCE-Lake-108-000	5
	Koopman Dam	MCS-Lake-40-000	3
	Major	MCS-Lake-9-000	3
	Mako Sica	MCE-Lake-56-000	5
	Missle Allotment	BAD-Lake-2213-000	4
	New Underwood	MCE-Lake-8-000	4
	New Wall No. 1	MCE-Lake-9-000	4
	Newton Fork	MCS-Lake-10-000	2
	North White Water	BAD-Lake-1907	4
	Old Wall	MCE-Lake-214-000	5
	Owonka	MCE-Lake-219-000	6
	Pactola	RAP-Lake-1-000	1,2,10
	Pierce	LCH-Lake-108-000	5
	Quinn Dam	BAD-Lake-613-000	5
	Quinn Township Dam	BAD-Lake-2236-000	5
	Rapid City	RAP-Lake-27-000	5
	Richardson	LCH-Lake-159-000	6
	Roosevelt Pond	RAP-Lake-37-000	5
	Scanlon	MCS-Lake-48-000	3
	Schroeder	LCH-Lake-626-000	6
	Schulte	MCE-Lake-217-000	5

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
	Sheridan	MCS-Lake-11-000	2
	Slate Creek	RAP-Lake-33-000	3
	Smith Dam	LCH-Lake-73-000	5
	Table 71 Dam	MCE-Lake-116-000	5
	Tennyson Dam	BAD-Lake-2235-000	5
	Teuber Dam	LCH-Lake-94-000	5
	U.S.D.A. Trout Dam	BAD-Lake-3556-000	3
	White	MCE-Lake-134-000	5
	Wicksville	MCE-Lake-10-000	4
Perkins	Ada Dam	UMO-Lake-354-000	6
	Coal Springs	LMO-Lake-1689-000	4
	Cole	SFG-Lake-913-000	4
	Dam No. 73 (on National Grasslands)	SFG-Lake-1020-000	3
	Flat Creek	GRA-Lake-767-000	5
	Imogene	UMO-Lake-224-000	6
	Jensen	SFG-Lake-902-000	3
	Johnson	NFG-Lake-81-000	3
	Lemmon State	GRA-Lake-392-000	5
	Lewton	SFG-Lake-873-000	5
	Marshfield	SFG-Lake-897-000	5
	Meadow	SFG-Lake-983-000	6
	Owen Lake	LMO-Lake-397-000	5
	Peek	GRA-Lake-1002-000	6

County	Waterbody	State Lake Identifier	Uses
	Perkins	LMO-Lake-408-001	5
	Reidy	GRA-Lake-92-000	6
	Rowhotham	LMO-Lake-408-000	5
	Seymour	UMO-Lake-40-000	6
	Shadehill	SFG-Lake-1017-000	4,10
	Sorum Dam	UMO-Lake-25-000	5
	Viking	NFG-Lake-166-000	5
	Vobedja	NFG-Lake-132-000	6
	Week's Dam	SFG-Lake-747-000	3
	White Butte	GRA-Lake-683-000	6
	Whitehill	SFG-Lake-752-000	5
Potter	Gorman	LLO-Lake-2397-000	5
	Hurley	LLO-Lake-2201-000	4
	Potts	LLO-Lake-2378-000	5
	Simon	LLO-Lake-2144-000	5
Roberts	Big Stone	UMN-Lake-720-000	4,10
	Drywood North	UMN-Lake-476-000	6
	Drywood South	UMN-Lake-476-005	6
	Hurricane	UBS-Lake-207-000	6
	Mud	BDS-Lake-182-000	6
	One Road	UBS-Lake-345-031	6
	Traverse	BDS-Lake-181-000	4,10
	Whitestone	UMN-Lake-667-000	5

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
Sanborn	Letcher	LJA-Lake-653-000	6
	Prior, also known as Woonsocket City Park	LJA-Lake-531-000	6
	Twin	LJA-Lake-290-000	5
Oglala Lakota	Denby	UWH-Lake-25-000	2
	Kyle	UWH-Lake-17-000	4
	Oglala	UWH-Lake-101-000	4
	White Clay	UWH-Lake-1-000	4
	Wolf Creek	UWH-Lake-152-000	2
Spink	Bierman	SNK-Lake-372-000	4
	Cottonwood	TUR-Lake-498-000	6
	Dudley	MJA-Lake-461-000	4
	Mirage Dam	MJA-Lake-605-000	4
	Redfield	TUR-Lake-1-000	6
	Timber Creek Dam	MJA-Lake-644-000	6
	Twin	TUR-Lake-589-000	5
Stanley	Hayes	BAD-Lake-3119-000	5
	Red Plum	BAD-Lake-3555-000	5
	Smith Pond (Ft. Pierre National Grassland)	FTR-Lake-3716-000	3
Sully	Cottonwood	LLO-Lake-2428-000	5
	Fuller	LLO-Lake-2464-000	5

County	Waterbody	State Lake Identifier	Uses
	Okobojo	LLO-Lake-2524-000	6,10
	Post	MKN-Lake-148-000	6
	Sully	LLO-Lake-2457-000	6
Todd	Beads	LIW-Lake-161-000	4
	Boarding School	LIW-Lake-161-000 <u>KYP-Lake-4-000</u>	4
	Chases Woman	LIW-Lake-110-000	2
	Colombe	KYP-Lake-2-000	5
	Eagle Feather, <u>also known as Parmlee</u>	LIW-Lake-23-000	4
	Enemy Woman	LWH-Lake-1878-000	6
	Ghost Hawk	LIW-Lake-106-000	3
	He Dog	LIW-Lake-25-000	4
	Heifer	LIW-Lake-105-000	5
	Hidden Timber	KYP-Lake-34-000	6
	Indian Scout	LIW-Lake-107-000	5
	Ironwood	LIW-Lake-109-000	3
	Mission	KYP-Lake-284-000	5
	Omaha Boy	LIW-Lake-283-000	5
	Parmlee		5
	Rosebud	LIW-Lake-108-000	2
	Sharps		2
	Spotted Tail	LIW-Lake-282-000	3
	Swift Bear	LIW-Lake-123-000	4

SURFACE WATER QUALITY

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County	Waterbody	State Lake Identifier	Uses
Tripp	Beaulieu	LWH-Lake-458-000	6
	Big Dog Ear	KYP-Lake-4-000	6
	Carter	LWH-Lake-2310-000	5
	Dog Ear	KYP-Lake-116-000	5
	Irwin	FTR-Lake-3116-000	6
	King	LWH-Lake-529-000	5
	Lone Tree	LWH-Lake-126-000	5
	Rahn	KYP-Lake-122-000	4
	Roosevelt	PON-Lake-203-000	4
	Sinkler	LWH-Lake-1372-000	6
	Snow	LWH-Lake-801-000	6
	Sully	FTR-Lake-5029-000	5
	Sundahl	KYP-Lake-95-000	5
	Witten	LWH-Lake-2309-000	5
	Woolheizer	KYP-Lake-136-000	5
Turner	Marion Kid's Pond	VER-Lake-293-000	6
	Swan	VER-Lake-113-000	5
Union	Cole	LBS-Lake-283-000	6
	McCook	LCL-Lake-5-000	4
	Mud	LCL-Lake-74-000	8 only
	Nixon	LBS-Lake-233-000	6
Walworth	Hiddenwood	WMC-Lake-1312-000	5
	Molstad	ULO-Lake-370-000	4

County	Waterbody	State Lake Identifier	Uses
	Spring	LLO-Lake-239-000	6
	Swan	LLO-Lake-512-000	6
Yankton	Beaver, also known as State	LJA-Lake-371-000	6
	Marindahl	VER-Lake-276-000	4
	Westside Kid's Pond	LCL-Lake-69-000	6
	Yankton	LCL-Lake-72-000	4
Ziebach	Bedner	LMO-Lake-29-000	6
	Buffalo	LCH-Lake-204-000	4
	Glad Valley	GRA-Lake-271-000	5
	Matter	LMO-Lake-197-000	6
	Miller	LCH-Lake-541-000	4
	Rattlesnake	CHE-Lake-676-000	6
	Trent Dam	LMO-Lake-677-000	6

Source: SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; transferred from § 34:04:03:04, effective July 1, 1979; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:03:04, July 1, 1996; 41 SDR 109, effective January 12, 2015; SL 2015, ch 56, § 1, effective May 1, 2015; 47 SDR 110, effective April 27, 2021.

General Authority: SDCL 34A-2-10, 34A-2-11, 34A-2-93.

Law Implemented: SDCL 34A-2-10, 34A-2-11.

74:51:03:05. Missouri River and certain small tributaries' beneficial uses. Stream segments of the Missouri River and certain small tributaries covered by § 74:51:03:02 include the following:

Water Body	From	To	Beneficial Uses	County
Missouri River	Iowa Border	Big Bend <u>Oahe</u> Dam	1,4,7,8,11	Buffalo Lyman <u>Hughes/Stanley</u>
Missouri River	Big Bend <u>Oahe</u> Dam	North Dakota border	1,2,7,8,11	Campbell\Corson
American Creek	Lake Francis Case	Lake Wanalin	6,8	Brule
American Crow Creek	Lake Francis Case	Interstate 90	6,8	Lyman
Bull Creek	Lake Frances Case	the confluence with the West Branch Bull Creek in S25, T100N, R74W	6,8	Tripp
West Branch Bull Creek	Bull Creek	S23, T99N, R74W of the fifth principal meridian	6,8	Tripp
Artichoke Creek	Lake Oahe	S35, T117N, R79W	6,8	Sully
Cedar Creek	Lake Sharpe	S22, T108N, R76W	6,8	Lyman
Chapelle Creek	Lake Sharpe	S36, T111N, R75W	6,8	Hughes

SURFACE WATER QUALITY

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Water Body	From	To	Beneficial Uses	County
Choteau Creek	Lewis and Clark Lake	S34, T96N, R63W	5,8	Charles Mix
Dante Creek	Choteau Creek	Dante Lake	6,8	Charles Mix
Dry Choteau Creek	Choteau Creek	S.D. Highway 50	6,8	Charles Mix
Crow Creek	Lake Francis Case	S18, T107N, R67W	5,8	Jerauld
Elm Creek	Crow Creek	West Fork Elm Creek	6,8	Buffalo
West Fork Elm Creek	Elm Creek	Stephan Lake	6,8	Hyde
Smith Creek	Crow Creek	Crow Lake	6,8	Jerauld
Emanuel Emanuel Creek	Lewis and Clark Lake	S20, T94N, R60W	5,8	Bon Homme
Little Cheyenne Creek	Lake Oahe	Lake Hurly	5,8	Potter
Medicine Creek	Lake Sharpe	U.S. Highway 83	6,8	Lyman
Medicine Knoll Creek	Lake Sharpe	confluence with its north and south forks	6,8	Hughes
North Fork Medicine Knoll Creek	confluence with South Fork Medicine Knoll Creek	S7, T114N, R74W	6,8	Sully

SURFACE WATER QUALITY

74:51

Water Body	From	To	Beneficial Uses	County
South Fork Medicine Knoll Creek	confluence with North Fork Medicine Knoll Creek	S16, T112N, R74W	6,8	Hughes
Oak Creek	Lake Oahe	S20, T21N, R28E	6,8	Corson
Okobojo Creek	Lake Oahe	U.S. Highway 83	6,8	Sully
Pease Creek	Lake Francis Case	Lake Geddes	6,8	Charles Mix
Platte Creek	Lake Francis Case	S21, T100N, R67W	6,8	Charles Mix
Ponca Creek	Nebraska border	U.S. Highway 183	5,8	Tripp
Willow Creek	Ponca Creek	S32, T96N, R70W	5,8	Gregory
Snake Creek (Charles Mix County)	Lake Francis Case	Lake Academy	6,8	Charles Mix
Snake Creek (Corson County)	Lake Oahe	Trail City R.R. Lake	6,8	Corson
Spring Creek	Lake Pocasse	U.S. Highway 83	5,8	Campbell
Spring Creek	U.S. Highway 83	State Highway 271	6,8	Campbell
Swan Creek	Lake Oahe	Rieger Creek	5,8	Walworth
Swan Creek	Rieger Creek	Swan Lake	6,8	Walworth
Rieger Creek	Swan Creek	S18, T122N, R76W	6,8	Walworth
South Fork Whetstone Creek	Lake Francis Case	Coon Creek	5,8	Gregory

SURFACE WATER QUALITY

74:51

Source: SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; transferred from § 34:04:04:04, effective July 1, 1979; 10 SDR 145, effective July 4, 1984; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 14 SDR 86, effective December 24, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:04:04, July 1, 1996; 24 SDR 10, effective July 20, 1997; 41 SDR 109, effective January 12, 2015; 47 SDR 110, effective April 27, 2021.

General Authority: SDCL 34A-2-10, 34A-2-11, 34A-2-93.

Law Implemented: SDCL 34A-2-10, 34A-2-11.

Note: Certain other segments in the Missouri River Basin are covered in §§ 74:51:03:06 through 74:51:03:26, inclusive.

SURFACE WATER QUALITY

74:51

74:51:03:07. Big Sioux River and certain tributaries' uses. Stream segments of the Big

Sioux River and certain tributaries covered by § 74:51:03:02 include the following:

Water Body	From	To	Beneficial Uses	County
Big Sioux River	Missouri River	Sioux Falls Diversion Ditch	5,7,8	Minnehaha
Big Sioux River	Sioux Falls Diversion Ditch	S2, T104N, R49W of the fifth principal meridian	1,5,7,8	Minnehaha
Big Sioux River	S2, T104N, R49W	Brookings-Moody County Line	1,5,8	Brookings/ Moody
Big Sioux River	Brookings-Moody County Line	Lake Kampeska	5,8	Codington
Big Sioux River	Lake Kampeska	S28, T121N, R52W	5,8	Grant
Bachelor Creek	Big Sioux River	S28, T106N, R50W	6,8	Moody
Battle Creek	Big Sioux River	S16, T107N, R52W	6,8	Lake
Beaver Creek (Lincoln County)	Big Sioux River	S9, T98N, R49W	6,8	Lincoln
Beaver Creek (Minnehaha County)	Split Rock Creek	South Dakota - Minnesota border	6,8	Minnehaha
Four Mile Creek	Beaver Creek (Minnehaha County)	South Dakota - Minnesota border	6,8	Minnehaha

Water Body	From	To	Beneficial Uses	County
Springwater Creek	Beaver Creek (Minnehaha County)	South Dakota - Minnesota border	6,8	Minnehaha
Big Ditch Creek	Big Sioux River	S1,T91N, R50W	5,8	Union
Big Ditch Creek	S1,T91, R50W	S21, T92N, R50W	6,8	Union
Brule Creek	Big Sioux River	confluence of its east and west forks	6,8	Union
East Brule Creek	confluence with Brule Creek	S3, T95N, R49W	6,8	Union
Flandreau Creek	Big Sioux River	Minnesota Border	6,8	Moody
Hidewood Creek	Big Sioux River	U.S. Highway 15	6,8	Deuel
Medary Creek	Big Sioux River	South Dakota - Minnesota border	6,8	Brookings
Deer Creek	Medary Creek	S30, T111N, R47W	6,8	Brookings
Nine Mile Creek	Big Sioux River	Lake Alvin	6,8	Lincoln
No Name Creek, also known as Brookfield Creek, (Brookings and Moody Counties)	Big Sioux River	S22, T104N, R48W	6,8	Brookings
Owens Creek	Blue Dog Lake	S17, T122N, R52W	4,8	Roberts
Pattee Creek	Big Sioux River	Lake Lakota outlet	5,8	Lincoln
Peg Munky Run	Big Sioux River	S17, T113N, R50W	6,8	Deuel

SURFACE WATER QUALITY

74:51

Water Body	From	To	Beneficial Uses	County
Pickereel Creek (Day County)	Pickereel Lake	Waubay Lake	6,8	Day
Park Creek	Bourne Slough	Silver Creek	6,8	Lake
Silver Creek	Park Creek	Lake Herman	6,8	Lake
Six Mile Creek	North Deer Creek	S30, T112N, R48W	6,8	Brookings
College Creek	Big Sioux River	S12, T110N, R50W	6,8	Brookings
North Deer Creek	Big Sioux River	U.S. Highway 15	6,8	Deuel
Skunk Creek	Big Sioux River	outlet of Brant Lake	6,8	Lake
Unnamed tributary Skunk Creek	Skunk Creek	S21, T102N, R51W	6,8	Minnehaha
Willow Creek	Skunk Creek	S16, T102N, R50W	6,8	Minnehaha
Split Rock Creek	Big Sioux River	Minnesota border	5,7,8	Minnehaha
West Pipestone Creek	Split Rock Creek	S33, T105N, R48W	6,8	Minnehaha
Unnamed tributary of West Pipestone Creek	West Pipestone Creek	Confluence with an unnamed tributary in S9, T103N, R48W	5,8	Minnehaha
Unnamed tributary	Unnamed tributary of West Pipestone Creek	EROS outfall in S8, T103N, R48W	5,8	Minnehaha
Slip-Up Creek	Big Sioux River	to its headwaters in S19, T104N, R48W	6,8	Minnehaha /Moody

Water Body	From	To	Beneficial Uses	County
Pipestone Creek	Split Rock Creek <u>S22, T104N, R47W</u>	Minnesota border	5,7,8	Minnehaha
Strayhorse Creek	Big Sioux River	S26, T116N, R51W	6,8	Codington
Spring Creek (Moody County)	Big Sioux River	S22, T109, R47W <u>Minnesota border</u>	6,8	Brookings
Jack Moore Creek	Big Sioux River	S33, T107N, R49W	6,8	Moody
Union Creek	Big Sioux River	confluence with East and West Forks	6,8	Union
Indian River	Big Sioux River	U.S. Highway 81	6,8	Grant
Willow Creek	Big Sioux River	S7, T117N, R50W	6,8	Deuel

Source: SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; transferred from § 34:04:04:06, effective July 1, 1979; 10 SDR 145, effective July 4, 1984; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:04:06, July 1, 1996; 24 SDR 10, effective July 20, 1997; 31 SDR 29, effective September 13, 2004; 32 SDR 38, effective September 6, 2005; 35 SDR 253, effective May 12, 2009; 41 SDR 109, effective January 12, 2015; 47 SDR 110, effective April 27, 2021.

General Authority: SDCL 34A-2-10, 34A-2-11, 34A-2-93.

Law Implemented: SDCL 34A-2-10, 34A-2-11.

STATE OF SOUTH DAKOTA



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MARK A. VARGO
ATTORNEY GENERAL

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OFFICE OF
WATER

November 9, 2022

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Ken LeBon, Manager
Brian Peterson, President
Black Hawk Water User District
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David M. McVey
Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre, SD 57501

Re: *In the Matter of Water Application No. 2016-1, South Dakota Ellsworth
Development Authority*

To Whom it May Concern:

Enclosed please find a copy of the Water Rights Program's Proposed Findings of Fact, Conclusions of Law, and Final Decision and Certificate of Service in the above-referenced file.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ann F. Mines Bailey".

Ann F. Mines Bailey
Assistant Attorney General

AFM/cmb
Enclosures
cc w/encs: Ron Duvall, DANR Water Rights Program

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NOV 10 2022

STATE OF SOUTH DAKOTA
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

OFFICE OF
WATER

WATER MANAGEMENT BOARD

IN THE MATTER OF WATER APPLICATION)
NO. 2016-1, South Dakota Ellsworth) CERTIFICATE OF SERVICE
Development Authority)

The undersigned hereby certifies that true and correct copies of the Water Rights Program's Proposed Findings of Fact, Conclusions of Law, and Final Decision in the above matter was served by U.S. mail, first class, postage prepaid, upon the following on this 9th day of November 2022:

Matthew E. Naasz
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Ken LeBon, Manager
Brian Peterson, President
Black Hawk Water User District
P.O. Box 476
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Gregory J. Erlandson
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Simmons, LLP
P.O. Box 2670
Rapid City, SD 57709

And on the same date, a copy was hand-delivered and a word copy e-mailed to:

David M. McVey
Assistant Attorney General
1302 East Highway 14, Ste. 1
Pierre, SD 57501

And on the same date, the original was filed with:

Ron Duvall
DANR Water Rights Program
Joe Foss Building
523 East Capitol Avenue
Pierre, SD 57501



Ann F. Mines Bailey
Assistant Attorney General
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Pierre, SD 57501-8501
Telephone: (605) 773-3215
E-mail: Ann.MinesBailey@state.sd.us
Counsel for Chief Engineer and
Water Rights Program

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NOV 10 2022

STATE OF SOUTH DAKOTA
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

OFFICE OF
WATER

WATER MANAGEMENT BOARD

IN THE MATTER OF WATER
APPLICATION NO. 2016-1, South
Dakota Ellsworth Development
Authority

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WATER RIGHTS PROGRAM'S
PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
FINAL DECISION

This matter came before the South Dakota Water Management Board for hearing on October 5, 2022. Board members James Hutmacher, Peggy Dixon, Leo Holzbauer, Chad Comes, and Bill Larson were present at the hearing and heard the evidence presented. Applicant, South Dakota Ellsworth Development Authority (SDEDA), was represented by Gregory J. Erlandson. Petitioner, Black Hawk Water User District (BHWUD), was represented by Matthew E. Naasz. Ann F. Mines Bailey represented the DANR Water Rights Program and the Chief Engineer.

The Board, having considered the testimony and exhibits presented and all records and documents on file and having entered its oral decision and rulings on the parties' submissions, now enters the following:

FINDINGS OF FACT

1. On March 1, 2022, Water Rights received Water Permit Application No. 2016-1 on behalf of SDEDA seeking an appropriation of 2.67 cubic feet of water per second (cfs) from one well to be completed into the Madison aquifer for use in a water distribution system in Meade and

Pennington Counties. The original application indicated that the well would be located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 5 T2N-R7E.

2. The Chief Engineer, Eric Gronlund, recommended approval of the application subject to qualifications.

3. Notice of Water Permit Application No. 2016-1 was timely advertised on May 25, 2022, in the Rapid City Journal (Pennington County) and the Faith Independent (Meade County) and posted on the DANR website.

4. Water Rights received a timely petition in opposition to Water Permit Application No. 2016-1 from BHWUD on June 6, 2022.

5. Subsequently, SDEDA amended its application altering the proposed location of the point of diversion to NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 32 T3N-R7E.

6. Again, the Chief Engineer recommended approval of the application subject to qualifications.

7. A second notice of Water Permit Application No. 2016-1 was advertised on August 24, 2022, in the Rapid City Journal (Pennington County) and the Faith Independent (Meade County) and placed on the DANR website.

8. The matter was scheduled to be heard by the Water Management Board during its October meeting.

9. Water Permit Application No. 2016-1 is a new water permit application which requires a determination pursuant to SDCL § 46-2A-9 whether there is a reasonable probability that unappropriated water is available for the proposed use, whether the proposed use would impair

existing rights, whether the use would be a beneficial use, and whether the proposed use is in the public interest pertaining to matters of public interest within the regulatory authority of the Water Management Board.

10. Kim Drennon, a natural resources engineer with Water Rights, reviewed the permit application and performed a technical review of both the initial application and amended application. Ms. Drennon provided expert testimony regarding the technical review of the application to the Board.

11. The Madison aquifer is composed of the Pahasapa and Englewood limestone formations which underlie approximately 210,000 square miles in Montana, Wyoming, North Dakota, and South Dakota. It is older and lower than the Greenhorn Formation. In South Dakota, it is estimated that the Madison aquifer has 692 million acre-feet of water in storage west of the Missouri River. Aquifer material in the area of the proposed point of diversion averages a thickness of approximately 380 feet. The aquifer is under confined conditions in the area of the point of diversion with well logs in the area demonstrating an artesian head pressure of approximately 750 feet.

12. The Madison aquifer receives recharge through infiltration of precipitation along the outcrop and from streamflow losses. The best information available calculates that recharge to the Madison aquifer equals 137,000 acre-feet of water per year in South Dakota.

13. Ms. Drennon calculated withdrawals from the Madison aquifer in South Dakota to be approximately 65,954 acre-feet per year, including water reserved by future use permits.

14. Ms. Drennon further testified that there are 25 observation wells completed into the Madison aquifer. A review of the data from those observation wells indicates that the aquifer is responding to climatic conditions and that natural discharge is available for capture.

15. Ms. Drennon testified it is her conclusion that, based upon her review of the best information available regarding recharge to the aquifer, existing water rights, and the observation well data, there is sufficient unappropriated water available to satisfy this application.

16. There are 160 existing water rights/permits currently authorized to withdraw water from the Madison aquifer in South Dakota. Ms. Drennon testified that the nearest existing water right is located approximately 0.7 miles to the SW of the proposed point of diversion; the closest observation well is approximately 3.7 miles SW of the proposed point of diversion; and the closest domestic well is approximately 2.5 miles SE of the proposed point of diversion.

17. Ms. Drennon testified that the Madison aquifer is highly transmissive in the area of this application. She furthered her explanation by stating that an aquifer that has high transmissivity will have low drawdown in nearby wells because the aquifer can recharge the area more quickly.

18. Ms. Drennon further testified that she calculated the potential drawdown of the proposed diversion and concluded that if granted drawdown at the nearest existing water right would be approximately 40 feet after 27 years of pumping.

19. Ms. Drennon concluded that based upon the high transmissivity of the aquifer, the presence of approximately 750 feet of head pressure in the area, and no previous complaints of interference in the aquifer, that there was a reasonable probability that the application could be developed without unlawful impairment to existing rights.

20. The Board finds Ms. Drennon to be a credible expert witness and that these Findings of Fact are supported by the evidence presented including Ms. Drennon's testimony and the reports and exhibits upon which she prepared and/or relied.

21. The Board also received the testimony of John Wetstein, a hydrogeologist and civil engineer. Mr. Wetstein testified that he also performed a technical review. Based on the observation well data and the study done by Ms. Drennon, Mr. Wetstein concluded that there is unappropriated water available for this application. Mr. Wetstein further opined that there would be minimal impact on surrounding wells should this application be developed. On cross-examination, Mr. Wetstein agreed that there could be increased costs of operation if head pressure decreased.

22. Glen Kane, the managing director of SDEDA, also provided testimony to the Board. Mr. Kane testified that the purpose of SDEDA is to make sure the State of South Dakota is a good host to Ellsworth Air Force Base and the Department of Defense. Mr. Kane testified that SDEDA works to fulfill its purpose in a variety of ways such as: building and operating a wastewater treatment plant which serves both the Air Force Base and the city

of Box Elder; purchasing property around the Base to protect against encroachment; and constructing a recreation center for the community. Mr. Kane further testified that SDEDA was approached by the Department of Defense to assist with ensuring safe water for those homes which were impacted by PFAS/PFOA due to operations at the Base. SDEDA also wishes to provide water to others along the proposed waterline route and potentially to the city of Box Elder. Mr. Kane testified that they are in the process of seeking funding, easements, and the approval of the Meade County Commission to utilize certain section lines.

23. The Board also received testimony from Rita Krebs, an environmental restoration program manager with Ellsworth Air Force Base. Ms. Krebs manages the cleanup of soil and groundwater contamination, particularly contamination from PFAS/PFOA. Ms. Krebs testified that when it was determined that contamination had occurred, the impacted residents were provided bottled water and subsequently provided twenty household treatment systems and built a large treatment system at the nearby mobile home park. These steps are considered interim measures. Ms. Krebs testified that the focus then became long term solutions. A number of alternatives were examined. Initially, the decision was made to expand the city of Box Elder's water system. However, difficulties were encountered to implementing that plan. Subsequently, the decision was made to enlist SDEDA to design, construct and then own and operate a new water system given the constraints on the use of federal monies.

24. Mr. Ken LeBon, manager of BHWUD, also offered testimony before the Board. BHWUD provides water to over 4,000 individuals in a number of communities, including Black Hawk, Summerset, Piedmont, Stagebarn subdivision, and Pine Hills. Mr. LeBon testified that BHWUD had secured a future use permit and intends to expand and place an additional well in the proximity of the proposed point of diversion.

25. The Board also received the testimony of Thomas Norman, the former owner of the land upon which SDEDA intends to drill the proposed well. Mr. Norman testified that the land upon which the proposed well is to be constructed is under covenant to only be used for residential use and commercial use is prohibited.

26. Chief Engineer Eric Gronlund also provided testimony to the Board. Mr. Gronlund testified that the Board may consider artesian head pressure but is not required to protect it by statute. He additionally testified that previously the Board has refused to protect head pressure as a means of delivery and that to do so would result in a waste of water and a failure to place water to the maximum beneficial use as mandated by the Legislature.

27. The Board finds that there is unappropriated water available to satisfy this application.

28. The Board finds that granting the application would not unlawfully impair existing water rights or domestic water uses.

29. The Board further finds that the proposed use of the water for a water distribution system constitutes a beneficial use.

30. The Board further finds that placing the water to this beneficial use is in the public interest.

31. Any finding of fact more properly designated as a conclusion of law shall be treated as such.

Based on the foregoing Findings of Fact, the Board makes the following Conclusions of Law:

CONCLUSIONS OF LAW

1. The Board has jurisdiction over this matter. The application falls within the Board's responsibility over water appropriation and regulation in Title 46.

2. Publication was properly made, and the Notices of Hearing were properly issued pursuant to SDCL § 46-2A-4.

3. The Chief Engineer recommended granting the application both initially and upon amendment. The recommendations are not, however, binding on the Board. SDCL § 46-2A-4(8).

4. The applicant is required to satisfy each of the factors set forth in SDCL § 46-2A-9.

5. The Board concludes that the applicant has satisfied each of the factors set forth in SDCL § 46-2A-9.

6. South Dakota Codified Law, section 46-2A-9 provides that a permit to appropriate water may be issued "only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of

existing rights and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by §§ 46-2-9 and 46-2-11.” Each of these factors must be met and the permit must be denied if the applicant does not meet its burden of proof on any one of them.

7. The first factor for consideration under SDCL § 46-2A-9 is whether there is water available for the appropriation. Determination of water availability includes consideration of the criteria in SDCL § 46-6-3.1 pertaining to recharge/withdrawal: whether “according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.”

8. The Board concludes there is a reasonable probability that there is unappropriated water available to fulfill the amount requested by the application.

9. The Board further concludes the proposed diversion seeks an appropriation from the Madison aquifer which is lower and older than the Greenhorn Formation and is for use in a water distribution system; thus the appropriation may be granted even if the withdrawal would exceed the estimated annual recharge.

10. Nonetheless, the Board concludes that it is not probable that withdrawals from the aquifer would exceed recharge to the aquifer in violation of SDCL § 46-6-3.1 if the application is granted.

11. The second requirement of SDCL § 46-2A-9 is that the proposed water use may not unlawfully impair existing water rights. The proposed diversion can be developed without unlawful impairment of existing water rights or domestic water uses.

12. The Board concludes that artesian head pressure is not a protected means of delivery.

13. The Board further concludes that an increase in the costs of operation for an existing right due to a reduction in artesian head pressure does not constitute an unlawful impairment.

14. The third element set forth in SDCL § 46-2A-9 is whether the use of water would be a beneficial use: one that is reasonable and useful and beneficial to the appropriator and also consistent with the interest of the public in the best utilization of water supplies under SDCL § 46-1-6(3). The proposed use (water distribution system) is a beneficial use.

15. The fourth requirement of SDCL § 46-2A-9 concerns the public interest. The proposed use of the water must be “consistent with the interests of the public of this state in the best utilization of water supplies.”

SDCL § 6-1-6(3). The Board concludes that appropriating water for use in a water distribution system is in the public interest.

16. Any conclusion of law more properly designated as a finding of fact shall be treated as such.

FINAL DECISION

Based on the foregoing Findings of Fact and Conclusions of Law, the Board enters its determination that Water Permit Application No. 2016-1 is granted with a priority date of June 13, 2022, and the following qualifications:

1. In accordance with §§ SDCL 46-1-14 and 46-2A-20, Permit No. 2016-1 is issued for a twenty-year term. Pursuant to SDCL § 46-2A-21, the twenty-year term may be deleted at any time during the twenty-year period or following its expiration. If the twenty-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2016-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL §§ 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.

2. The well will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under the Permit, shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

3. The well authorized by Permit No. 2016-1 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Madison aquifer.

5. Water Permit No. 2016-1 appropriates up to 1,600 acre-feet of water annually.

Dated this ____ day of December, 2022.

BY THE BOARD:

South Dakota Water Management Board



GUNDERSON | PALMER | NELSON | ASHMORE LLP

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November 21, 2022

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Re: In the matter of Water Application No. 2016-1, South Dakota Ellsworth Development
Authority
GPNA File No. 16240.0002

To Whom it May Concern:

Enclosed please find a copy of the Black Hawk Water User District's Objections to the Water Rights Program's Proposed Findings of Fact, Conclusions of Law in the above-referenced matter.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Naasz', written over a horizontal line.

Matthew E. Naasz

MEN:aa
cc: client
Enclosure

Offices in Rapid City and Pierre, South Dakota

Attorneys licensed to practice in South Dakota, North Dakota, Nebraska, Wyoming, and Montana

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OFFICE OF
WATER

BEFORE THE WATER MANAGEMENT BOARD
OF THE STATE OF SOUTH DAKOTA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

IN RE MATTER OF WATER)	BLACK HAWK WATER USER
APPLICATION NO. 2016-1, South)	DISTRICT'S OBJECTIONS TO THE
Dakota Ellsworth Development)	WATER RIGHTS PROGRAM'S
Authority)	PROPOSED FINDINGS OF FACT
)	AND CONCLUSIONS OF LAW

COMES NOW Black Hawk Water User District ("BHWUD"), the Intervenor, through its attorney, Matthew E. Naasz of Gunderson, Palmer, Nelson & Ashmore, LLP, and submits its Objections to the Water Rights Program's proposed Findings of Fact and Conclusions of Law submitted on November 9, 2022. BHWUD specifically objects as follows:

Objections to Respondent's Proposed Findings of Fact

1. On March 1, 2022, Water Rights received Water Permit Application No. 2016-1 on behalf of SDEDA seeking an appropriation of 2.67 cubic feet of water per second (cfs) from one well to be completed into the Madison aquifer for use in a water distribution system in Meade and Pennington Counties. The original application indicated that the well would be located in the NW1/4NW1/4 sec. 5 T2N-R7E.
2. The Chief Engineer, Eric Gronlund, recommended approval of the application subject to qualifications.
3. Notice of Water Permit Application No. 2016-1 was timely advertised on May 25, 2022, in the Rapid City Journal (Pennington County) and the Faith Independent (Meade County) and posted on the DANR website.
4. Water Rights received a timely petition in opposition to Water Permit Application No. 2016-1 from BHWUD on June 6, 2022.
5. Subsequently, SDEDA amended its application altering the proposed location of the point of diversion to NW1/4SW 1/4 Sec. 32 T3N-R7E.
6. Again, the Chief Engineer recommended approval of the application subject to qualifications.
7. A second notice of Water Permit Application No. 2016-1 was advertised on August 24, 2022, in the Rapid City Journal (Pennington County) and the Faith Independent (Meade County) and placed on the DANR website.

8. The matter was scheduled to be heard by the Water Management Board during its October meeting.
9. Water Permit Application No. 2016-1 is a new water permit application which requires a determination pursuant to SDCL §46-2A-9 whether there is a reasonable probability that unappropriated water is available for the proposed use, whether the proposed use would impair existing rights, whether the use would be a beneficial use, and whether the proposed use is in the public interest pertaining to matters of public interest within the regulatory authority of the Water Management Board.
10. Kim Drennon, a natural resources engineer with Water Rights, reviewed the permit application and performed a technical review of both the initial application and amended application. Ms. Drennon provided expert testimony regarding the technical review of the application to the Board.
11. The Madison aquifer is composed of the Pahasapa and Englewood limestone formations which underlie approximately 210,000 square miles in Montana, Wyoming, North Dakota, and South Dakota. It is older and lower than the Greenhorn Formation. In South Dakota, it is estimated that the Madison aquifer has 692 million acre-feet of water in storage west of the Missouri River. Aquifer material in the area of the proposed point of diversion averages a thickness of approximately 380 feet. The aquifer is under confined conditions in the area of the point of diversion with well logs in the area demonstrating an artesian head pressure of approximately 750 feet.
12. The Madison aquifer receives recharge through infiltration of precipitation along the outcrop and from streamflow losses. The best information available calculates that recharge to the Madison aquifer equals 137,000 acre-feet of water per year in South Dakota.
13. Ms. Drennon calculated withdrawals from the Madison aquifer in South Dakota to be approximately 65,954 acre-feet per year, including water reserved by future use permits.
14. Ms. Drennon further testified that there are 25 observation wells completed into the Madison aquifer. A review of the data from those observation wells indicates that the aquifer is responding to climatic conditions and that natural discharge is available for capture.
15. Ms. Drennon testified it is her conclusion that, based upon her review of the best information available regarding recharge to the aquifer, existing water rights, and the observation well data, there is sufficient unappropriated water available to satisfy this application.
16. There are 160 existing water rights/ permits currently authorized to withdraw water from the Madison aquifer in South Dakota. Ms. Drennon testified that the nearest existing water right is located approximately 0.7 miles to the SW of the proposed point of diversion; the closest observation well is approximately 3.7 miles SW of the proposed point of diversion; and the closest domestic well is approximately 2.5 miles SE of the proposed point of diversion.

17. Ms. Drennon testified that the Madison aquifer is highly transmissive in the area of this application. She furthered her explanation by stating that an aquifer that has high transmissivity will have low drawdown in nearby wells because the aquifer can recharge the area more quickly.
18. Ms. Drennon further testified that she calculated the potential drawdown of the proposed diversion and concluded that if granted drawdown at the nearest existing water right would be approximately 40 feet after 27 years of pumping.
19. Ms. Drennon concluded that based upon the high transmissivity of the aquifer, the presence of approximately 750 feet of head pressure in the area, and no previous complaints of interference in the aquifer, that there was a reasonable probability that the application could be developed without unlawful impairment to existing rights.

Objection. This Finding of Fact is incomplete. Ms. Drennon also testified that she did not consider the Applicant's need for the volume of water requested in the application.

20. The Board finds Ms. Drennon to be a credible expert witness and that these Findings of Fact are supported by the evidence presented including Ms. Drennon's testimony and the reports and exhibits upon which she prepared and/ or relied.
21. The Board also received the testimony of John Wetstein, a hydrogeologist and civil engineer. Mr. Wetstein testified that he also performed a technical review. Based on the observation well data and the study done by Ms. Drennon, Mr. Wetstein concluded that there is unappropriated water available for this application. Mr. Wetstein further opined that there would be minimal impact on surrounding wells should this application be developed. On cross-examination, Mr. Wetstein agreed that there could be increased costs of operation if head pressure decreased.

Objection. This Finding of Fact is incomplete. On cross-examination, Mr. Wetstein agreed that, based on the Applicant's proposed diversion, there could be drawdown experienced at BHWUD's existing well. That drawdown could increase operational costs to BHWUD.

22. Glen Kane, the managing director of SDEDA, also provided testimony to the Board. Mr. Kane testified that the purpose of SDEDA is to make sure the State of South Dakota is a good host to Ellsworth Air Force Base and the Department of Defense. Mr. Kane testified that SDEDA works to fulfill its purpose in a variety of ways such as: building and operating a wastewater treatment plant which serves both the Air Force Base and the city of Box Elder; purchasing property around the Base to protect against encroachment; and constructing a recreation center for the community. Mr. Kane further testified that SDEDA was approached by the Department of Defense to assist with ensuring safe water for those homes which were impacted by PFAS/PFOA due to operations at the Base. SDEDA also wishes to provide water to others along the proposed waterline route and potentially to the city of Box Elder. Mr. Kane testified that they are in the process of seeking funding, easements, and the approval of the Meade County Commission to utilize certain section lines.

Objection. This Finding of Fact is incomplete. Mr. Kane also testified that the homes which were impacted by the PFAS/PFOA would require only 60 gallons of water per minute. Mr. Kane further testified that DANR officials first presented the idea of a regional water system. Mr. Kane also testified that SDEDA is an entity of the State of South Dakota and that none of its Directors live in the area to be served by this project. Mr. Kane stated that the project is estimated to cost approximately \$30 million dollars, with over \$17 million coming from the United States Air Force. Mr. Kane indicated that the well site is roughly 14 miles from the PFAS/PFOA impacted homes. Mr. Kane further testified that SDEDA is requesting \$12 million dollars from the State of South Dakota: because SDEDA has no paying water customers, it will be requesting that the entire \$12 million be a grant, not a loan.

23. The Board also received testimony from Rita Krebs, an environmental restoration program manager with Ellsworth Air Force Base. Ms. Krebs manages the cleanup of soil and groundwater contamination, particularly contamination from PFAS/PFOA. Ms. Krebs testified that when it was determined that contamination had occurred, the impacted residents were provided bottled water and subsequently provided twenty household treatment systems and built a large treatment system at the nearby mobile home park. These steps are considered interim measures. Ms. Krebs testified that the focus then became long term solutions. A number of alternatives were examined. Initially, the decision was made to expand the city of Box Elder's water system. However, difficulties were encountered to implementing that plan. Subsequently, the decision was made to enlist SDEDA to design, construct and then own and operate a new water system given the constraints on the use of federal monies.

Objection. This Finding of Fact is incomplete. Ms. Krebs also testified that BHWUD was not consulted regarding this project. Ms. Krebs stated that the Air Force did not think about BHWUD when considering remedies to the PFAS/PFOA issue because BHWUD was too far away. In fact, the Air Force did not consider any alternatives west of Elk Vale Road, which is approximately 8 miles east of the proposed well site. Ms. Krebs was denied permission to discuss a recent letter from the U.S. Air Force, which is included in the record in this matter, in which the U.S. Air Force "respectfully declined [BHWUD's] offer to meet." Ms. Krebs testified that the EE/CA documents requesting public comment on this project included no mention of a high-volume well over 10 miles west of the impacted homes.

24. Mr. Ken LeBon, manager of BHWUD, also offered testimony before the Board. BHWUD provides water to over 4,000 individuals in a number of communities, including Black Hawk, Summerset, Piedmont, Stagebarn subdivision, and Pine Hills. Mr. LeBon testified that BHWUD had secured a future use permit and intends to expand and place an additional well in the proximity of the proposed point of diversion.

Objection. This Finding of Fact is incomplete. Mr. LeBon testified that BHWUD has been in existence since 1949 and is currently a regional water distribution system. Mr. LeBon described BHWUD's future use permit area and testified that Applicant's proposed pipeline route would run "right through the center" of BHWUD's future use permit area. Mr. LeBon testified that any increased operational costs associated with drawdown in its Well #5 would need to be borne by BHWUD's customers.

25. The Board also received the testimony of Thomas Norman, the former owner of the land upon which SDEDA intends to drill the proposed well. Mr. Norman testified that the land upon which the proposed well is to be constructed is under covenant to only be used for residential use and commercial use is prohibited.
26. Chief Engineer Eric Gronlund also provided testimony to the Board. Mr. Gronlund testified that the Board may consider artesian head pressure but is not required to protect it by statute. He additionally testified that previously the Board has refused to protect head pressure as a means of delivery and that to do so would result in a waste of water and a failure to place water to the maximum beneficial use as mandated by the Legislature.

Objection. This Finding of Fact is incomplete. Mr. Gronlund also testified that he raises questions with applicants when he sees red flags regarding the applicant's need for the amount of water requested. Mr. Gronlund previously questioned BHWUD's need for an amount of water requested on application no. 1991-1. As a result, BHWUD reduced the requested amount of its appropriation. Even though evidence was presented establishing that Applicant needed only 60 gallons of water per minute to provide water to the PFAS/PFOA impacted residents, Mr. Gronlund saw nothing that would have him reconsider his recommendation to grant the Applicant's request for 1200 gallons per minute. Mr. Gronlund further testified that the Water Management Board is not prohibited from considering artesian head pressure when considering an application to appropriate water.

27. The Board finds that there is unappropriated water available to satisfy this application.
28. The Board finds that granting the application would not unlawfully impair existing water rights or domestic water uses.
29. The Board further finds that the proposed use of the water for a water distribution system constitutes a beneficial use.
30. The Board further finds that placing the water to this beneficial use is in the public interest.

Objection. This Finding of Fact is not supported by the evidence presented. BHWUD proposes the following Finding of Fact, which appropriately reflects the evidence presented: "The Board further finds that it is a waste of water to appropriate 1200 gallons per minute to satisfy a 60 gallon per minute need. As such, the appropriation requested in this application is not in the public interest."

31. Any finding of fact more properly designated as a conclusion of law shall be treated as such.

Objections to the Water Rights Program's Proposed Conclusions of Law

1. The Board has jurisdiction over this matter. The application falls within the Board's responsibility over water appropriation and regulation in Title 46.

Objection. This Conclusion of Law is incomplete. BHWUD proposes that this Conclusion include: "However, because the Applicant does not have the statutory authority to construct and operate a water distribution system, the application is denied."

2. Publication was properly made, and the Notices of Hearing were properly issued pursuant to SDCL §46-2A-4.
3. The Chief Engineer recommended granting the application both initially and upon amendment. The recommendations are not, however, binding on the Board. SDCL §46-2A-4(8).
4. The applicant is required to satisfy each of the factors set forth in SDCL §46-2A-9.
5. The Board concludes that the applicant has satisfied each of the factors set forth in SDCL §46-2A-9.

Objection. This Conclusion is not supported by the weight of the evidence presented. BHWUD proposes the following replacement Conclusion: "The Board concludes that the Applicant did not satisfy each of the factors set forth in SDCL §46-2A-9. Specifically, the requested appropriation is not in the public interest as it is a waste of available water."

6. South Dakota Codified Law, Section §46-2A-9 provides that a permit to appropriate water may be issued "only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SS 46-2-9 and 46-2-11." Each of these factors must be met and the permit must be denied if the applicant does not meet its burden of proof on any one of them.
7. The first factor for consideration under SDCL §46-2A-9 is whether there is water available for the appropriation. Determination of water availability includes consideration of the criteria in SDCL §46-6-3.1 pertaining to recharge/ withdrawal: whether "according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source."
8. The Board concludes there is a reasonable probability that there is unappropriated water available to fulfill the amount requested by the application.

9. The Board further concludes the proposed diversion seeks an appropriation from the Madison aquifer which is lower and older than the Greenhorn Formation and is for use in a water distribution system; thus the appropriation may be granted even if the withdrawal would exceed the estimated annual recharge.
10. Nonetheless, the Board concludes that it is not probable that withdrawals from the aquifer would exceed recharge to the aquifer in violation of SDCL §46-6-3.1 if the application is granted.
11. The second requirement of SDCL §46-2A-9 is that the proposed water use may not unlawfully impair existing water rights. The proposed diversion can be developed without unlawful impairment of existing water rights or domestic water uses.
12. The Board concludes that artesian head pressure is not a protected means of delivery.
13. The Board further concludes that an increase in the costs of operation for an existing right due to a reduction in artesian head pressure does not constitute an unlawful impairment.

Objection. This Conclusion of Law is incomplete. BHWUD proposes that this Conclusion include: "The Board further concludes that reduction in artesian head pressure can be considered by this Board in evaluation of the public interest component of SDCL §46-2A-9."

14. The third element set forth in SDCL §46-2A-9 is whether the use of water would be a beneficial use: one that is reasonable and useful and beneficial to the appropriator and also consistent with the interest of the public in the best utilization of water supplies under SDCL §46-1-6(3). The proposed use (water distribution system) is a beneficial use.
15. The fourth requirement of SDCL §46-2A-9 concerns the public interest. The proposed use of the water must be "consistent with the interests of the public of this state in the best utilization of water supplies." SDCL §6-1-6(3). The Board concludes that appropriating water for use in a water distribution system is in the public interest.

Objection. This Conclusion of Law is not supported by the weight of the evidence. BHWUD proposes the following replacement Conclusion: "The Board concludes that appropriating 1200 gallons of water per minute to satisfy a 60 gallon per minute need is a waste of water and is therefore not in the public interest."

16. Any conclusion of law more properly designated as a finding of fact shall be treated as such.

Respectfully submitted this 21st day of November, 2022.

By: /s/ Matthew E. Naasz

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CERTIFICATE OF SERVICE

I hereby certify on November 21, 2022, a true and correct copy of **BLACK HAWK WATER USER DISTRICT'S OBJECTIONS TO THE WATER RIGHTS PROGRAM'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW** was served by U.S. mail, first class, postage prepaid and via email upon the following individuals set forth below:

Gregory James Erlandson
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By: /s/ Matthew E. Naasz
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**RECOMMENDATION OF CHIEF ENGINEER FOR FUTURE USE WATER PERMIT
APPLICATION NO. 8651-3, Shared Resources**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Future Use Water Permit Application No. 8651-3, Shared Resources, c/o Lloyd Rave, Chairman, 47381 248th Street, Dell Rapids SD 57022.

The Chief Engineer is recommending APPROVAL of Application No. 8651-3 for reservation of 9,415 acre feet of water annually because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) Shared Resources has demonstrated a reasonable need to reserve water in the amount of 9,415 acre feet of water annually, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Future Use Permit No. 8651-3 reserves 9,415 acre-feet of water annually from the Big Sioux:Moody aquifer.
2. That Future Use Permit No. 8651-3 is approved with the stipulation that this Permit is subject to review by the Water Management Board as to accomplishment in developing reserved water upon expiration of seven (7) years. This Permit shall be subject to cancellation if the Water Management Board determines during the review that the holder cannot demonstrate a reasonable need for the Permit.
3. At such time as definite plans are made to construct works and put the water reserved by this permit to beneficial use, specific application for all or any part of the reserved water must be submitted prior to construction of facilities pursuant to SDCL 46-5-38.1.

See report on application for additional information.

Eric Gronlund, Chief Engineer
September 15, 2022

NOTE: Approval of Future Use Permit No. 8651-3 does not preclude approval of subsequent appropriations by other persons within the future use area identified on No. 8651-3. Approval of any such appropriations will have a priority date junior to No. 8651-3. However, future siting of wells by the Shared Resources to place water to beneficial use within the future use area will be subject to review during the application process to place to beneficial use regarding the likelihood of well interference between Shared Resources wells and wells of other users within the future use area.

Report to the Chief Engineer
On Future Use Permit Application No. 8651-3

Shared Resources

September 15, 2022

Future Use Permit Application No. 8651-3 proposes to appropriate and reserve 9,415 acre-feet of water annually from the Big Sioux: Moody aquifer. The area to be reserved for future use is in the NW ¼ of Section 15 and SE ¼ of Section 9; all in T105N-R49W. The water is reserved for future supplies for rural water system use serving users in Brookings, Lake, Minnehaha, and Moody Counties. This application does not authorize the construction of works or application of water to beneficial use. The site of the future use area is located in Moody County approximately two miles west of Trent, SD.

AQUIFER: Big Sioux: Moody (BS:M)

HYDROGEOLOGY:

The Big Sioux aquifer is primarily composed of meltwater stream and glacial outwash deposits that range from fine to medium, poorly sorted sand to a well-sorted sand and medium gravel and occurs mostly in the floodplains of the Big Sioux River and its major tributaries (Hamilton, 1989; Hansen, 1986). The Big Sioux aquifer is divided into twelve management units that have been historically recognized by the DANR-Water Rights Program and SD Water Management Board (Water Rights, 2022c). The water proposed to be reserved is within the Moody management unit of the Big Sioux aquifer.

In Minnehaha and Moody Counties, the Big Sioux: Moody aquifer is estimated to underly approximately 35,500 acres and contain an estimated 133,130 acre-feet of recoverable water in storage (shown in Figure 1) (Hedges et al., 1982). In Moody County, the Big Sioux: Moody aquifer has an average saturated aquifer thickness of approximately 22 feet, and a documented maximum thickness of approximately 54 feet (Hansen, 1986). The aquifer is generally unconfined near the Big Sioux River and along major tributary valleys, but is elsewhere confined beneath till (Hamilton, 1989; Hansen, 1986). Groundwater movement in the Big Sioux aquifer is generally to the south towards the Big Sioux River (Hansen, 1986).

No water well or test hole completion report was submitted with Future Use Permit Application No. 8651-3. Within approximately two miles of the applicant's proposed future use area, water well and test hole completion reports on file for wells completed into the Big Sioux: Moody aquifer have saturated aquifer thicknesses ranging from approximately 5 to 25 feet, with the depth to the top of aquifer materials ranging from approximately 5 to 20 feet below the ground surface, and static water levels varying between 5 to 20 feet below the ground surface at the time of well completion (Water Rights, 2022b and 2022d). Based on the water well and test hole completion reports on file near the proposed future use area, and the lithologic logs on file for nearby observation wells, the Big Sioux: Moody aquifer is expected to be unconfined near the proposed future use area (SDGS, 2022; Water Rights, 2022b and 2022d).

Figure 1 displays a map of the approximate Big Sioux: Moody aquifer boundary (modified from Hansen, 1986 and 1988; Hedges et al., 1982) with the water rights/permits currently authorized to appropriate water from the Big Sioux: Moody aquifer (Water Rights, 2022c), and the proposed future use area for Future Use Permit Application No. 8651-3 (Water Rights, 2022c).

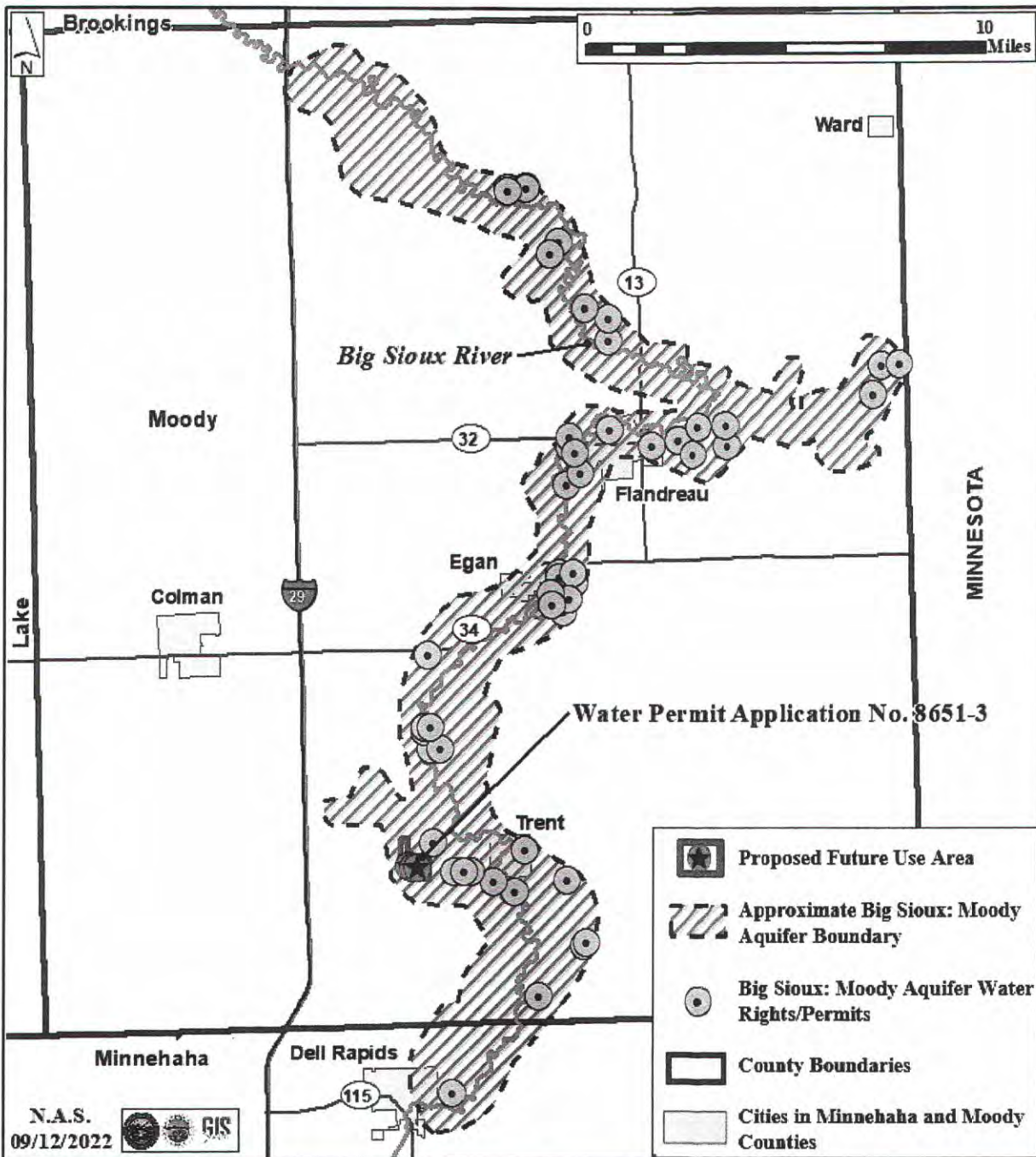


Figure 1. Map of the approximate Big Sioux: Moody aquifer boundary (modified from Hansen, 1986 and 1988; Hedges et al., 1982) with the water rights/permits currently authorized to appropriate water from the Big Sioux: Moody aquifer (Water Rights, 2022c), and the proposed future use area for Future Use Permit Application No. 8651-3 (Water Rights, 2022c)

South Dakota Codified Law (SDCL) 46-2A-10

Pursuant to SDCL 46-2A-10, “A reservation for a future use may be approved only if there is a reasonable probability that unappropriated water is available for appropriation, that the quantity of water reserved will be needed by the entity and that the proposed use will be a beneficial use and in the public interest.” This report will address the availability of unappropriated water from the Big Sioux: Moody aquifer. This report will also discuss potential for unlawful impairment of existing domestic water users and water rights within the Big Sioux: Moody aquifer for the information of the Chief Engineer and Water Management Board.

SDCL 46-5-38

Shared Resources is a joint rural water system formed by Minnehaha Community Water Corporation and Big Sioux Community Water System in 2021. Shared Resources is an entity that may reserve water for future use pursuant to SDCL 46-5-38(4). An entity that may reserve water for future use must show future need for the water, and unappropriated water must be available for the proposed appropriation pursuant to SDCL 46-2A-10.

Shared Resources indicated that the future use reservation is needed to support increasing water demands and future growth. The applicant has provided justification in Future Use Permit Application No. 8651-3 for the volume of water requested to be reserved as required under Administrative Rule of South Dakota (ARSD) 74:02:04:24.01.

WATER AVAILABILITY:

Future Use Permit Application No. 8651-3 proposes to reserve and appropriate water from the Big Sioux: Moody aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.” The Big Sioux: Moody aquifer is not older than or stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010). Therefore, even though the applicant’s proposed use is for use in a water distribution system as defined by SDCL 46-1-6(17), the average annual recharge and average annual withdrawal rates to and from the Big Sioux: Moody aquifer must be considered.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Big Sioux: Moody aquifer is primarily through the infiltration of precipitation where the aquifer is at or near the ground surface, leakage from adjacent till, and seepage from the Big Sioux River and its tributaries (Hamilton, 1989; Hansen, 1986).

Utilizing observation well analysis and a specific yield of 15 percent, Hansen (1988) estimated a recharge rate range of 2.7 to 7.02 inches per year, with an average recharge rate of 4.86 inches per year to the Big Sioux: Moody aquifer. The Big Sioux: Moody aquifer has an estimated areal extent of approximately 35,500 acres (Hedges et al., 1982); therefore, the estimated annual recharge rate ranges between approximately 7,988 to 20,768 acre-feet per year, with an average annual recharge rate of approximately 14,378 acre-feet per year.

Discharge

Discharge from the Big Sioux: Moody aquifer is primarily through well withdrawals (Water Rights, 2022d), evapotranspiration where the aquifer is at or near the ground surface, and seepage to the Big Sioux River and adjacent lakes (Hamilton, 1989; Hansen, 1986).

Currently, there are 38 water rights/permits authorized to appropriate water from Big Sioux: Moody aquifer (Water Rights, 2022c). Additionally, there are three future use permits (Nos. 3984-3, 3984A-3, and 3984B-3) reserving 589 acre-feet of water annually from the Big Sioux: Moody aquifer (Water Rights, 2022c). For the purpose of estimating average annual withdrawals, the future use permits are assumed to be fully developable for a total of 589 acre-feet per year.

Table 1 summarizes the 14 non-irrigation water rights/permits authorized to appropriate water from the Big Sioux: Moody aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. Historically, average water use by non-irrigation appropriations limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at the respective permitted diversion rate. Water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. This is a standard method generally used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer (Water Rights, 2022c). Two municipal water rights were identified as being connected to a rural water system and likely maintain their wells for standby purposes (Drinking Water Program, 2022; Water Rights, 2022c); as such, the average annual water use for these water rights has been estimated to be zero acre-feet per year on Table 1. Overall, the estimated average annual withdrawal rate from the Big Sioux: Moody aquifer by the non-irrigation water rights/permits is approximately 2,937 acre-feet per year (Table 1) (Water Rights, 2022c).

Report on Future Use Permit Application No. 8651-3

Table 1. Summary of the non-irrigation water rights/permits authorized to appropriate from the Big Sioux: Moody aquifer with estimated annual use determined by their respective authorized diversion rate or annual volume (Drinking Water Program, 2022; Water Rights, 2022c)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet/year)	Total Estimated Use (acre-feet/year)
1182-3	City of Flandreau	LC	MUN	3.42		0*
1800-3	Town of Trent	LC	MUN	0.25		0*
2054-3	Big Sioux Community Water	LC	RWS	1.16		503.9
5083-3	LG Everist Inc	LC	COM	0.05		21.7
5720B-3	Big Sioux Community Water	LC	RWS	0.67	291	291
5962-3	Big Sioux Community Water	LC	RWS	0.44	120	120
5963-3	Big Sioux Community Water	LC	RWS	0.95	240	240
6026-3	Pleasant Valley Colony	LC	COM, DOM, LCO	0.27		117.3
6223-3	Big Sioux Community Water	LC	RWS	0.67		291
6317-3	Dakota Layers LLP	LC	COM, LCO	0.39		169.4
6549-3	Ben Pearson	LC	COM, LCO	0.167		72.5
6632-3	Golden Dakota Farms LLC	LC	COM, LCO	1.34		582.1
8391-3	Big Sioux Community Water	PE	RWS	0.67	300	300
8457-3	River Bend Dairy LLC	PE	COM, LCO	0.637	228	228
					TOTAL:	2,937
LC: Licensed Water Right; PE: Water Permit; COM: Commercial; DOM: Domestic; LCO: Livestock Confinement Operation						
MUN: Municipal; RWS: Rural Water System *Identified as being connected to a rural water system						

There are six non-irrigation water rights/permits (held by Big Sioux Community Water) that are required to report their annual usage from the Big Sioux: Moody aquifer (listed on Table 2) (Water Rights, 2022c and 2022f). The average annual withdrawal volume estimated for the six water rights/permits (held by Big Sioux Community Water) on Table 1 totals to approximately 1,746 acre-feet per year (Water Rights, 2022c). The average annual withdrawal volume based on the withdrawals reported over the period of record (2003 to 2021) by the six water rights/permits (held by Big Sioux Community Water) on Table 2 averages to approximately 1,499 acre-feet per year (Water Rights, 2022c). The reported withdrawals listed on Table 2 are for comparison purposes only to show historically the average annual use has been less than the annual use volume that is estimated on Table 1 (Water Rights, 2022c and 2022f). The estimated use for the non-irrigation water rights/permits calculated on Table 1 will be used in the analysis.

Table 2. Average annual withdrawal rate for the Big Sioux: Moody aquifer non-irrigation water rights/permits required to report their annual usage (Water Rights, 2022c and 2022f)

	Big Sioux Community Water
Permit Nos.	2054-3, 5720B-3, 5962-3, 5963-3, 6223-3, 8391-3
	(acre-feet)
Year	
2003	1,387
2004	2,079
2005	1,419
2006	1,456
2007	1,538
2008	1,542
2009	1,429
2010	1,364
2011	1,420
2012	1,552
2013	1,540
2014	1,687
2015	1,512
2016	1,439
2017	1,316
2018	1,481
2019	1,251
2020	1,485.3
2021	1,579.9
Min	1,251
Max	2,079
Average	1,499

Currently, there are 24 irrigation water rights/permits authorized to appropriate water from the Big Sioux: Moody aquifer (Water Rights, 2022c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire since 1979. The estimated average annual withdrawal rate for the Big Sioux: Moody aquifer irrigation water rights/permits that have reported over the period of record is approximately 850 acre-feet per year (Table 3) (Water Rights, 2022a). To reflect the current development of the Big Sioux: Moody aquifer irrigation water rights/permits more accurately, the average annual withdrawal rate for irrigation appropriations from 2012 to 2021, approximately 933 acre-feet per year, will be used for the hydrologic budget (Table 3) (Water Rights, 2022a).

Report on Future Use Permit Application No. 8651-3

Table 3. Reported historic irrigation use from the Big Sioux: Moody aquifer (Water Rights, 2022a)

Year	No. of Water Rights/Permits Reporting	Reported Pumpage (acre-feet)
1979	35	517
1980	35	1,243
1981	36	1,478
1982	26	733.54
1983	27	1,127.99
1984	26	582
1985	28	1,113.5
1986	29	260
1987	30	743.5
1988	31	1,931
1989	31	1,434.95
1990	25	812.5
1991	25	1,163.1
1992	24	193.5
1993	25	7
1994	26	693.93
1995	24	402.27
1996	22	1,006.37
1997	20	575
1998	19	1,299.52
1999	19	499.44
2000	19	851.75
2001	19	1,050.62
2002	20	1,339.73
2003	20	1,203.97
2004	21	379.62
2005	21	556.6
2006	21	960.18
2007	23	860.22
2008	24	745.66
2009	24	753.24
2010	25	245.55
2011	26	474.86
2012	26	2,094.44
2013	26	1,390.41
2014	26	1,158.68
2015	27	243.76
2016	26	869.84
2017	26	1,073.24
2018	26	207.02
2019	26	79.11
2020	24	673.39
2021	24	1,537.96
Min	19	7
Max	36	2,094.44
Avg (1979 to 2021)	25	850
Avg (2012 to 2021)	26	933

There are domestic wells completed into the Big Sioux: Moody aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2022d). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget. Additionally, with the development of rural water systems in areas where the Big Sioux: Moody aquifer is the uppermost aquifer available; it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the Big Sioux: Moody aquifer.

Hydrologic Budget Summary

The estimated average annual recharge rate to the Big Sioux: Moody aquifer is approximately 14,378 acre-feet per year. The estimated average annual withdrawal rate from the Big Sioux: Moody aquifer plus the proposed future use reservation for this application is approximately 13,874 acre-feet per year (non-irrigation: 2,937 acre-feet/year; irrigation (avg 2012 to 2021): 933 acre-feet/year; future use permit reservations: 589 acre-feet/year; Future Use Permit Application No. 8651-3 (if approved, assuming full volume): 9,415 acre-feet/year). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the Big Sioux: Moody aquifer for the proposed appropriation.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DNR-Water Rights Program monitors 22 observation wells completed into the Big Sioux: Moody aquifer (Water Rights, 2022b). The four closest observation wells to the proposed future use area are MY-77A (approximately one mile east of Section 9, approximately one mile northeast of Section 15; all in T105N-R49W), MY-77B (approximately 1.5 miles east of Section 9, approximately one mile southeast of Section 15; all in T105N-R49W), MY-82G (approximately three miles east of Section 9, approximately three miles east of Section 15; all in T105N-R49W), and MY-78E (approximately five miles east of Section 9, approximately four miles southeast of Section 15; all in T105N-R49W) (as shown in Figure 6) (Water Rights, 2022b). The hydrographs for these observation wells are displayed in Figures 2 to 5 (Water Rights, 2022b). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing. It is worth noting the hydrograph titles display DENR Water Rights Observation Well on the hydrographs when the titles should display DNR Water Rights Observation Well on the hydrographs.

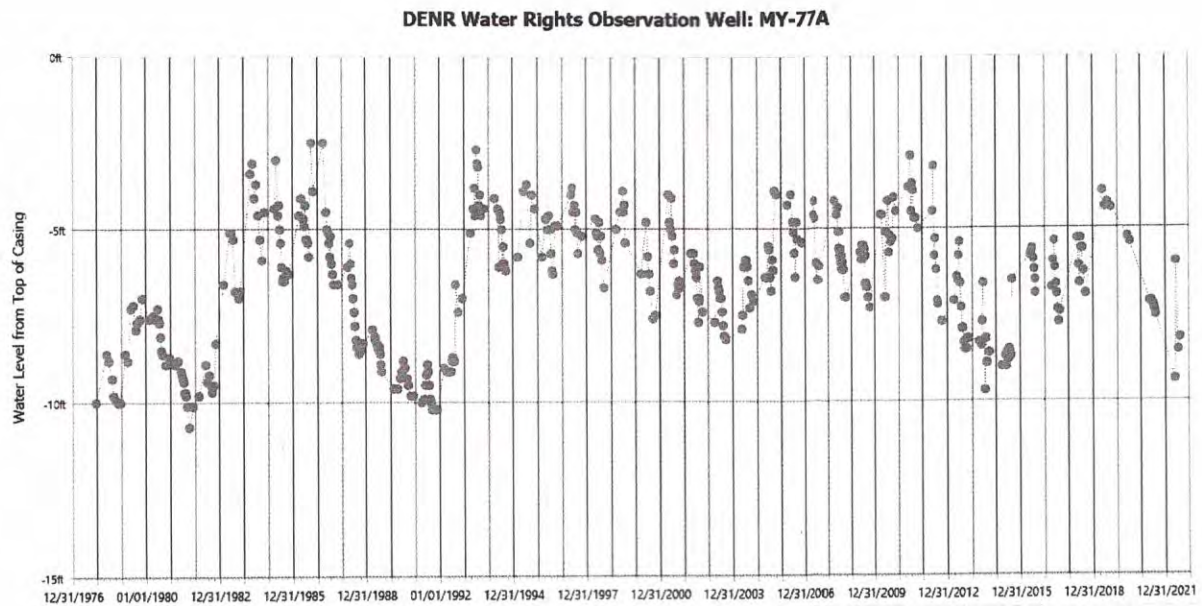


Figure 2. Hydrograph for observation well MY-77A (Water Rights, 2022b)

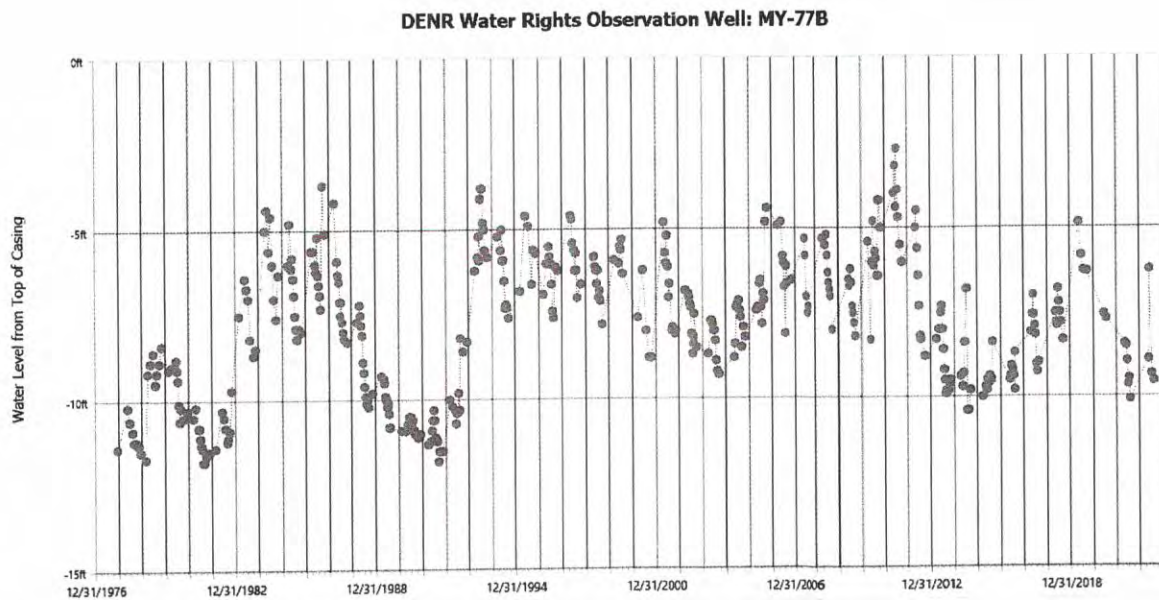


Figure 3. Hydrograph for observation well MY-77B (Water Rights, 2022b)

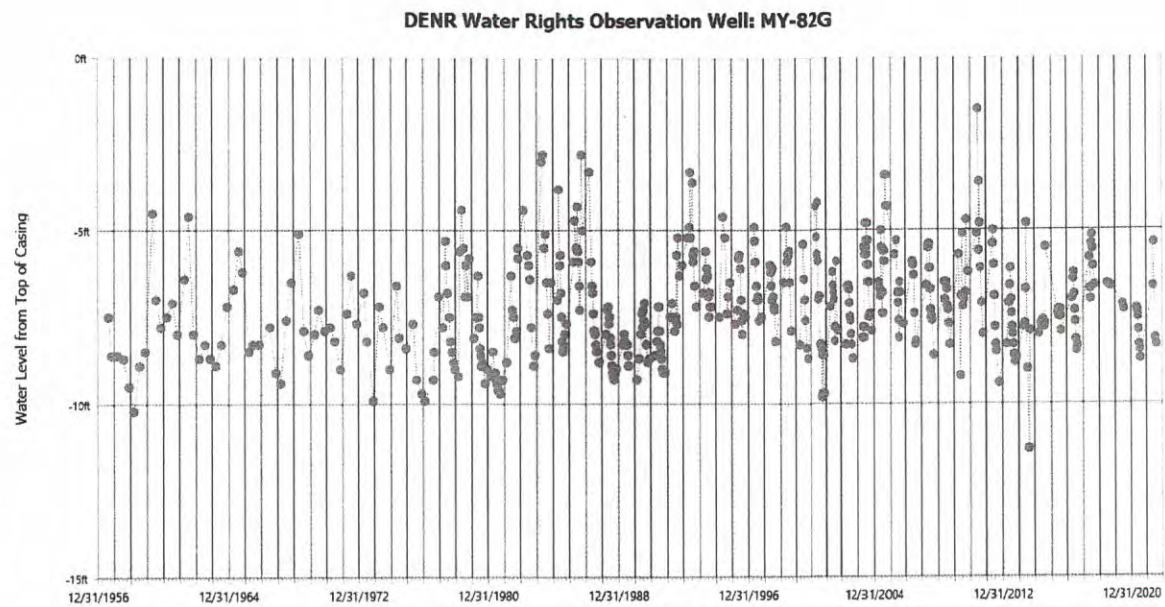


Figure 4. Hydrograph for observation well MY-82G (Water Rights, 2022b)

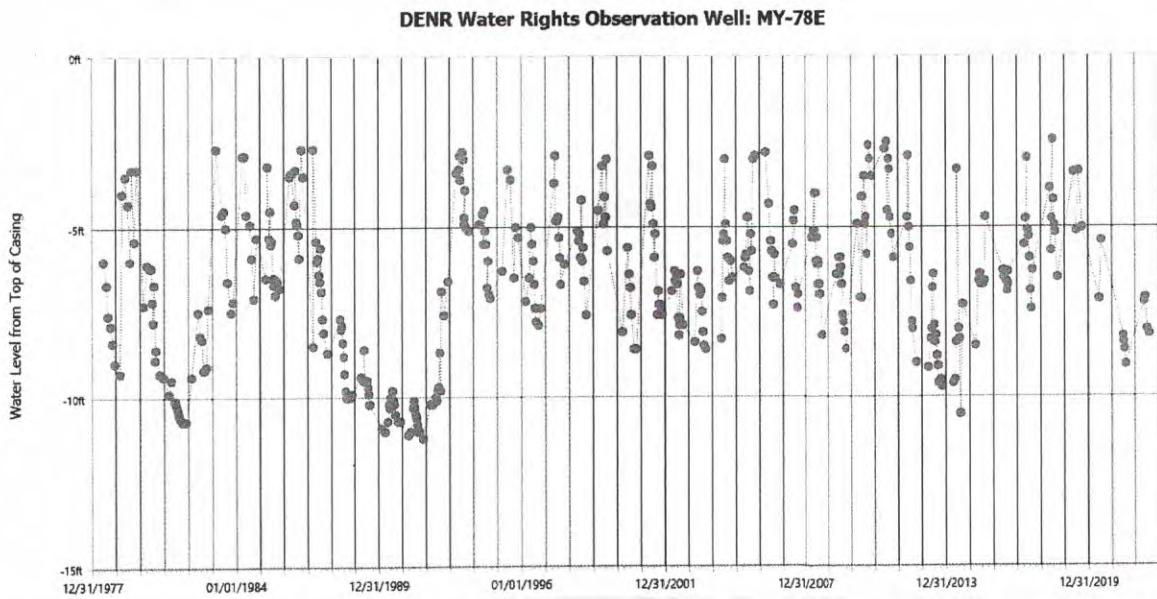


Figure 5. Hydrograph for observation well MY-78E (Water Rights, 2022b)

The hydrographs for the observation wells display stable to slightly rising water levels over their respective periods of record. The hydrographs for these four observation wells were compared to the hydrographs for the other observations wells completed into the Big Sioux: Moody aquifer and each displayed a generally similar trend as shown on the hydrographs displayed in Figures 2 to 5 (Water Rights, 2022b). The hydrographs for the Big Sioux: Moody aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Big Sioux: Moody aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

While SDCL 46-2A-10 does not require a review of the potential for unlawful impairment to existing water rights and no well is being drilled nor water put to use under this application, this report will review existing water rights/permits and domestic users in the area of the future use area this application proposes to use for the information of the Chief Engineer and the Water Management Board.

Currently, there are 38 water rights/permits authorized to appropriate water from the Big Sioux: Moody aquifer (Water Rights, 2022c). The closest water right/permit to the proposed future use area (SE $\frac{1}{4}$ of Section 9-T105N-R49W) is Water Right No. 1909-3, which is held by James J Lacey. The diversion point for Water Right No. 1909-3 is located approximately 0.9 miles east of the proposed future use area (SE $\frac{1}{4}$ of Section 9-T105N-R49W) for this application (Water Rights, 2022c). The closest water right/permit to the other proposed future use area (NW $\frac{1}{4}$ of Section 15-T105N-R49W) for this application is Water Right No. 3293-3, which is held by Michael L Schmidt. The diversion point for Water Right No. 3293-3 is located approximately one mile east of the proposed future use area (NW $\frac{1}{4}$ of Section 15-T105N-R49W) for this application (Figure 6) (Table 4) (Water Rights, 2022c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Big Sioux: Moody aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.3 miles southeast of the proposed future use area (SE $\frac{1}{4}$ of Section 9-T105N-R49W), and the other closest domestic well on file (not held by the applicant) approximately 0.2 miles west of the other proposed future use area (NW $\frac{1}{4}$ of Section 15-T105N-R49W) for this application (Water Rights, 2022d). There could potentially be other domestic wells completed into the Big Sioux: Moody aquifer near or within the proposed future use area that are not on file with the DANR-Water Rights Program.

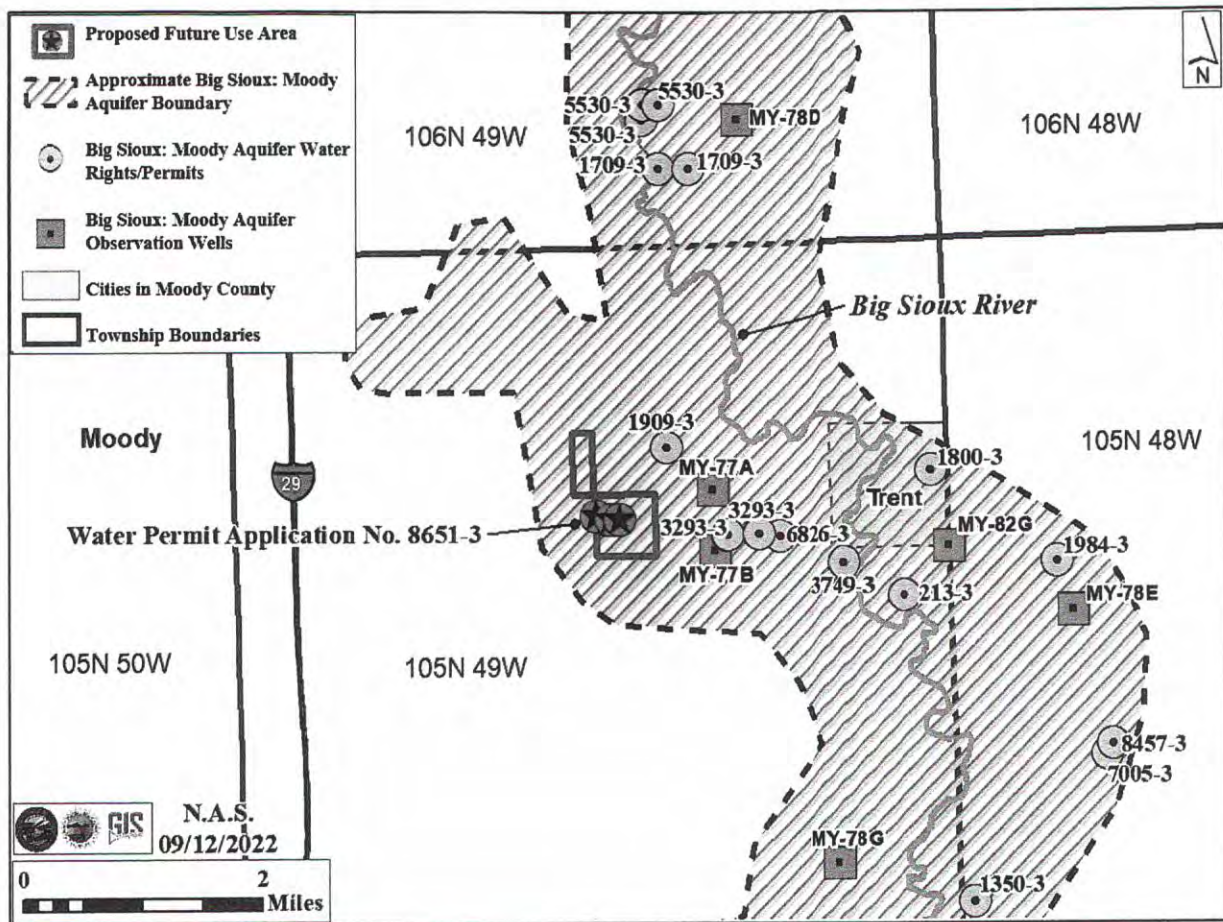


Figure 6. Location of the proposed future use area for Future Use Permit Application No. 8651-3 with the Big Sioux: Moody aquifer water rights/permits and observation wells within approximately four miles (Water Rights, 2022b and 2022c)

Table 4. Water rights/permits authorized to withdraw water from the Big Sioux: Moody aquifer within approximately four miles of the proposed future use area, as shown in Figure 6 (Water Rights, 2022c)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)	Acres if IRR
213-3	Ted or Bev Lacey	LC	IRR	4.65		252
1350-3	Raymond D Jensen	LC	IRR	1.78		158
1709-3	Mitchel L Rydberg and Jerry Heinrichy	LC	IRR	1.67		132
1800-3	Town of Trent	LC	MUN	0.25		
1909-3	James J Lacey	LC	IRR	2		151.7
1984-3	Gerakl Elsinger	LC	IRR	1.34		144.8
3293-3	Michael L Schmidt	LC	IRR	1.69		136
3749-3	Larry J Jorgenson	LC	IRR	0.42		30
5530-3	Terry L Anderson	LC	IRR	2.67		320
6826-3	Joseph Nemmers	LC	IRR	1.2		83.8
7005-3	Randall Enterprise LLC	LC	IRR	1		70.9
8457-3	River Bend Dairy LLC	PE	COM	0.637	228	

LC: Licensed Water Right; PE: Water Permit; COM: Commercial; IRR: Irrigation; MUN: Municipal

The Big Sioux: Moody aquifer is generally unconfined near the Big Sioux River and along major tributary valleys, but is elsewhere confined beneath till (Hamilton, 1989; Hansen, 1986). Based on the water well and test hole completion reports on file near the proposed future use area, the Big Sioux: Moody aquifer is expected to be unconfined near the proposed future use area (Water Rights, 2022b and 2022d). Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer; however, in a confined aquifer, drawdown from pumping could extend a distance from the diversion point. The exact drawdown behavior of a well cannot be known without an aquifer performance test.

In Moody County, the Big Sioux: Moody aquifer has an average saturated aquifer thickness of approximately 22 feet (Hansen, 1986). Within approximately two miles of the proposed future use area, water well and test hole completion reports on file for wells completed into the Big Sioux: Moody aquifer have saturated aquifer thicknesses ranging from approximately 5 to 20 feet (Water Rights, 2022b and 2022d). There are no complaints on file with the DNR-Water Rights Program regarding well interference for adequate wells completed into the Big Sioux: Moody aquifer (Water Rights, 2022e).

CONCLUSIONS:

1. Future Use Permit Application No. 8651-3 proposes to appropriate and reserve 9,415 acre-feet of water annually from the Big Sioux: Moody aquifer. The area to be reserved for future use is in the NW $\frac{1}{4}$ of Section 15 and SE $\frac{1}{4}$ of Section 9; all in T105N-R49W. The water is reserved for future supplies for rural water system use serving users in Brookings, Lake, Minnehaha, and Moody Counties. This application does not authorize the construction of works or application of water to beneficial use. The site of the future use area is located in Moody County approximately two miles west of Trent, SD.
2. Shared Resources indicated that the future use reservation is needed to support increasing water demands and future growth. The applicant has provided justification in Future Use Permit Application No. 8651-3 for the volume of water requested to be reserved as required under ARSD 74:02:04:24.01.
3. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Big Sioux: Moody aquifer to supply the proposed appropriation.
4. At the time Shared Resources applies to construct and place to beneficial use water reserved by Future Use Permit No. 8651-3, if approved, an assessment based on the proposed well location(s) will need to be conducted to determine if the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights.

Nakaila Steen

Nakaila Steen
Natural Resources Engineer II
SD DANR - Water Rights Program

Reviewed by:

Adam Mathiowetz

Adam Mathiowetz, PE
Natural Resources Engineer IV
SD DANR - Water Rights Program

References

- Drinking Water Program, 2022. Drinking Water System Information. SD DANR – Drinking Water Program Online Database. Accessed August 26, 2022.
<<http://danr.sd.gov/des/dw/sysinfomap.aspx>>
- Fahrenbach, M.D., Steece, F.V., Sawyer, J.F., McCormick, K.A., McGillivray, G.L., Schulz, L.D., and Redden, J.A. 2010. South Dakota Stratigraphic Correlation Chart. Oil and Gas Investigations 3. SD DANR-Geological Survey, Vermillion, SD.
- Hamilton, L.J., 1989. Water Resources of Brookings and Kingsbury Counties, South Dakota. Water Resources Investigations Report 88-4185. USGS, Huron, SD.
- Hansen, D.S., 1986. Water Resources of Lake and Moody Counties, South Dakota. Water-Resources Investigations Report 84-4209, 51p. Huron, South Dakota. US Geological Survey.
- Hansen, D.S., 1988. Appraisal of the Water Resources of the Big Sioux Aquifer, Moody County, South Dakota. Water-Resources Investigations Report 87-4057, 38p. Huron, South Dakota. US Geological Survey.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A., 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- SDGS, 2022. South Dakota Geological Survey Lithologic Logs Database. Accessed August 25, 2022. <http://cf.sddanr.net/lithdb/>.
- Water Rights, 2022a. "1979-2021 Irrigation Summaries by Aquifer", SD DANR-Water Rights Program, Joe Foss Building, Pierre, SD.
- Water Rights, 2022b. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022f. "2003-2021 Non-Irrigation Yearly Reports", SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Instruction to Newspaper – Publish the Notice on October 19, 2022. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 8651-3 to Appropriate Water

Notice is given that Shared Resources, c/o Scott Buss, 47381 248th St, Dell Rapids SD 57022 has filed an application for a future use permit. Application No. 8651-3 proposes to reserve 9,415 acre-feet of water annually from the Big Sioux:Moody Aquifer. The area to be reserved for future water use is located in the NW 1/4 Section 15 and SE 1/4 Section 9; all in T105N-R49W. The water is reserved for future supplies for rural water system use serving users located in Lake, Minnehaha, Moody and Brookings Counties. This application does not authorize construction of works or application of water to beneficial use. The site of the future use area is located approximately 2 miles west of Trent SD.

South Dakota Codified Law (SDCL) 46-2A-4(10) provides that “if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer’s recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board.” In this case, the Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8651-3 with qualifications because 1) there is reasonable probability that there is unappropriated water available for the applicant’s proposed use, 2) Shared Resources has demonstrated a reasonable need to reserve water in the amount of 9,415 acre feet of water annually, 3) the proposed use is a beneficial use and 4) it is in the public interest. The Chief Engineer’s recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

The Water Management Board will consider this application at 10:15 am (Central Time) on December 7, 2022, in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave., Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any person who intends to participate in the hearing shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by October 31, 2022.

The petition shall be in writing and shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The December 7, 2022, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose the application. The request for an automatic delay must be filed by October 31, 2022. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicant and all petitioners regarding the time, date, and location.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by October 31, 2022.

Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Agriculture and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is October 31, 2022. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31, 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

Published once at an approximate cost of _____.

Affidavit of Publication

State of South Dakota

Exhibit "A"

ss

County of Brookings

Katherine Foiles of said county, first duly sworn, on oath, says: That she is the office clerk of THE BROOKINGS REGISTER, a daily newspaper, printed and published in the City of Brookings, in said County of Brookings, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies of each issue daily; that said newspaper has been published within the said County of Brookings and State of South Dakota, for more than one year prior to the first publication of Exhibit "A," hereto attached and herein mentioned, and was and is printed that the

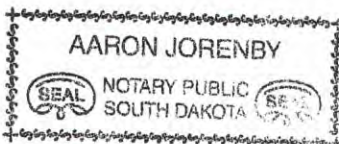
LEG#19660 Notice of Hearinhg

same was published, is hereto attached marked Exhibit said newspaper for _____ 1 times, to-wit:

October 19, 2022

said Exhibit "A" inures to the sole benefit for the publishers of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are:

Eighty Dollars and Eighty-Eight Cents \$80.88



KM Foiles

31 day of

2022

October

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires February 22, 2026

RECEIVED

NOV 04 2022

OFFICE OF
WATER

Legal 19660 1X
10/19

**NOTICE OF
APPLICATION
NO. 8651-3 TO
APPROPRIATE WATER**

Notice is given that Shared Resources, c/o Scott Buss, 47381 248th St, Dell Rapids SD 57022 has filed an application for a future use permit. Application No. 8651-3 proposes to reserve 9,415 acre-feet of water annually from the Big Sioux/Moody Aquifer. The area to be reserved for future water use is located in the NW 1/4 Section 15 and SE 1/4 Section 9; all in T105N-R49W. The water is reserved for future supplies for rural water system use serving users located in Lake, Minnehaha, Moody and Brookings Counties. This application does not authorize construction of works or application of water to beneficial use. The site of the future use area is located approximately 2 miles west of Trent SD. South Dakota Codified Law (SDCL) 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and

the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8651-3 with qualifications because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) Shared Resources has demonstrated a reasonable need to reserve water in the amount of 9,415 acre feet of water annually, 3) the proposed use is a beneficial use and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duval for this information, or other information, at the Water Rights Program address provided below.

The Water Management Board will consider this application at 10:15 am (Central Time) on December 7, 2022, in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave., Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any person who intends to participate in the hearing shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written

application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by October 31, 2022.

The petition shall be in writing and shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The December 7, 2022, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose the application. The request for an automatic delay must be filed by October 31, 2022. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicant and all petitioners regarding the time, date, and location. Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by October 31, 2022.

Notice is given to indi-

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Argus Leader

P.O. Box 677349, Dallas, TX 75267-7349

RECEIVED

NOV 03 2022

OFFICE OF
WATER

Account No.: SFA-0000000742

Ad No.: 0005446964

PO #: 8651-3

Lines : 281

Ad Total: \$82.86

MINNEHAHA COMMUNITY WATER CORP
47381 248TH ST
DELL RAPIDS, SD 57022

This is not an invoice

of Affidavits: 1

Account No.: SFA-0000000742

Ad No.: 0005446964

Argus Leader AFFIDAVIT OF PUBLICATION

State of Wisconsin

County of Brown

I being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper issue(s) :

Wednesday, October 19, 2022

Sworn to and subscribed before me this 3 day of November, 2022.

Legal Clerk

Notary Public, State of Wisconsin, County of Brown

My Commission expires

8-21-26

NICOLE JACOBS
Notary Public
State of Wisconsin

NOTICE OF
APPLICATION NO. 8651-3
to Appropriate Water

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South Dakota Codified Law (SDCL) 46-2A-4(10) provides that "If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8651-3 with qualifications because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) Shared Resources has demonstrated a reasonable need to reserve water in the amount of 9,415 acre feet of water annually, 3) the proposed use is a beneficial use and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

The Water Management Board will consider this application at 10:15 am (Central Time) on December 7, 2022, in the Matthew

Training Center, Joe Foss Bldg, 523 E. Capitol Ave., Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

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The petition shall be in writing and shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

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the applicant or any person who has filed a petition to oppose the application. The request for an automatic delay must be filed by October 31, 2022. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicant and all petitioners regarding the time, date, and location.

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46-5-1.1, 46-5-2 thru 46-5-26,
46-5-30.2 thru 46-5-30.4,
46-5-31, 46-5-32 thru 46-5-34.1,
46-5-38 thru 46-5-39, 46-5-46,
46-5-47, 46-5-49; 46-6-1 thru
46-6-3.1, 46-6-6.1, 46-6-10,
46-6-13, 46-6-14, 46-6-21,
46-6-26; and Board Rules
ARSD 74:02:01:01 thru
74:02:01:35.01.
Published once at the total
approximate cost of \$82.86
and may be viewed free of
charge at www.sdpublicnotices.com.
5446964 Oct 19, 2022

Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF MOODY) SS

KAYLA CHARLES, of said county, being first duly sworn on oath says that she is the bookkeeper of the Moody County Enterprise, a weekly newspaper printed and published in said county of Moody and State of South Dakota, and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least 200 copies weekly, and has been published within said county for five consecutive weeks next prior to the publication of the notice herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; the advertisement headed:

Shared Resources
Legal

a printed copy of which, taken from the newspaper in which the same was published, attached to this sheet and is made a part of this affidavit, was published in said newspaper at least once in each week for successful weeks, on the day of each week in which said newspaper was regularly published, to wit:

10/19/22

that the full amount of the fee charged for publication of said Notice insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the publication thereof has been made with any person and that no part thereof has been agreed to be paid to any person whomsoever, and the fees charged for the publication thereof are

\$ 82.99

Kayla Charles
bookkeeper
subscribed and sworn to before me this

October 20, 2022

Roger W. Janssen
Notary Public, County Moody, South Dakota
ROGER W. JANSSEN

NOTARY PUBLIC
SOUTH DAKOTA

Notice of Application

NOTICE OF APPLICATION NO. 8651-3 TO APPROPRIATE WATER

Notice is given that Shared Resources, c/o Scott Buss, 47381 248th St, Dell Rapids SD 57022 has filed an application for a future use permit. Application No. 8651-3 proposes to reserve 9,415 acre-feet of water annually from the Big Sioux: Moody Aquifer. The area to be reserved for future water use is located in the NW 1/4 Section 15 and SE 1/4 Section 9, all in T105N-R49W. The water is reserved for future supplies for rural water system use serving users located in Lake, Minnehaha, Moody and Brookings Counties. This application does not authorize construction of works or application of water to beneficial use. The site of the future use area is located approximately 2 miles west of Trent SD.

South Dakota Codified Law (SDCL) 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8651-3 with qualifications because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) Shared Resources has demonstrated a reasonable need to reserve water in the amount of 9,415 acre feet of water annually, 3) the proposed use is a beneficial use and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

The Water Management Board will consider this application at 10:15 am (Central Time) on December 7, 2022, in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave., Pierre SD. The Chief Engineer's recommendation is not final or binding upon the

Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any person who intends to participate in the hearing shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by October 31, 2022.

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Published once at a cost of \$9.99 and may be viewed free of charge at www.sdpublicnotices.com.

RECEIVED

OCT 24 2022

AFFIDAVIT OF PUBLICATION

Madison Daily Leader 1M

OFFICE OF
WATER

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss.
County of Lake)

Michelle Albers, of the City of Madison, County of Lake, State of South Dakota, being first duly sworn on oath, deposes and says:

The Madison Daily Leader is a daily legal newspaper of general circulation, printed and published in the City of Madison, in said County of Lake, by Wick Communications, Michelle Albers, Business Manager, and has been such legal newspaper during the times hereinafter mentioned; That the said Madison Daily Leader has been in existence as such legal newspaper for more than one year prior to the publication of the notice hereunto attached, and has during all of said time had, and how has, more than 200 bona fide subscribers; that the undersigned, the affiant, is the Business Manager of the said newspaper, a member of the Daily Leader staff thereof, and has personal knowledge of all the facts stated in this affidavit and the advertisement headed

NTC OF APP- #8651-3
WATER RIGHTS PROGRAM

printed copy of which hereunto attached, was printed and published in the said newspaper for 1 successive week(s), once each week and on the same day of the week, on the following dates, to-wit:

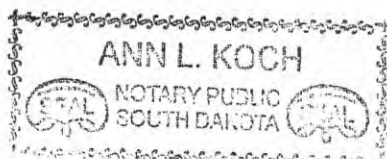
10/19/2022

That \$ 83.43 being the full amount of the fees for publication of the attached notice inures solely for the benefit of the publication of the said newspaper; that no arrangement or understanding for a division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Michelle Albers

Subscribed and sworn before me this 19th day of

October, 2022



Ann L. Koch
Notary Public, Lake County, South Dakota
Exp. 11-14-25

Wednesday, Oct. 19

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Published Oct. 13, 2022 at the total approximate cost of \$83.43 and may be viewed free of charge at www.sdpublicnotices.com