

WATER PERMIT NO. 8864-3

Name of Applicant: **Big Sioux Community Water System**

Address: **23343 479th Avenue, Egan SD 57024** Phone: **605-864-7996**

Amount of Water Claimed: **300 AF** Total Acres: **N/A**

Source of Water Supply: **Groundwater**

Water to be used for: **Industrial** County: **Lake**

Type of Waste Disposal System:

Location: **Approx. 10 miles northwest of Madison SD**

PRIORITY Date Received: **04-02-24**

Application/License Fee: **\$1,050.00**

Corrected Application Received: **04-29-24**

Period of Annual Use: **January 1 – December 31**

Remarks: **Well will be used to sell raw water to Dakota Ethanol**

Diversion Point: **NE 1/4 SW 1/4 Sec 16-T105N-
R51W**

Land to be Irrigated: **N/A**

Depth of Well: **77.5**

Well Driller: **Thein/Lacey**

Remarks:

Type of Map: **aerial**

			16		

Reviewed and the Number Assigned on: **04-30-24**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 8864-3**

Date of first receipt of application April 2, 2024.

Date of return to applicant for corrections, amendments or changes April 3, 2024.

Date of receipt of corrected application May 9, 2024.

The Water Management Board approved Water Permit No. 8864-3 on March 5, 2025 for Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024, authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8864-3 authorizes construction and placing to beneficial use 300 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well (77.5 feet deep) to be completed into the Big Sioux Northern Skunk Creek Aquifer located in the NE 1/4 SW 1/4 Section 16 -T105N-R51W for rural water system use. Water service will be provided to the Dakota Ethanol facility located in the W 1/2 NE 1/4 Section 21-T106N-R51W. This water was appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3. There are zero acre-feet remaining in reserve in Future Use Permit Nos. 6834-3 and 6834A-3. The proposed well site is located approximately seven miles south of Wentworth SD.
2. The water appropriated shall be used for rural water system purposes and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 8864-3 is March 5, 2025.
5. The date from which applicant may claim right is March 19, 2007.
6. One-fifth of the construction is to be completed on or before September 5, 2027.
7. All construction is to be completed on or before March 5, 2030.
8. Water is to be put to beneficial use on or before March 5, 2034.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under Water Permit No. 8864-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must 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 well authorized by Permit No. 8864-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must 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. The permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Northern Skunk Creek Management Unit of the Big Sioux Aquifer.
4. Water Permit No. 8864-3 authorizes a total annual diversion of up to 300 acre-feet of water.

WATER MANAGEMENT BOARD

By: _____

Mark Mayer
Mark Mayer, PE
Director of Office of Water
Department of Agriculture and Natural Resources

5/6/25
date



SD EForm - 1585LD V5

FORM 2: Application for uses other than irrigation
(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8864-3</u> (office use only) Hydrologic Unit <u>10170203</u>
	Basin <u>Lower Big Sioux</u>
	Newspaper <u>Madison Daily Leader</u>
	<u>Argus Leader</u>

PAID
APR 02 2024
Clt 261978
Rec'n 1221

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Water Distribution System	☐ Recreational	☐ Institutional
☒ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal
☐ Domestic (over 18 gpm)	☒ Industrial	☐ Other	

Type of Application:
(check one)

☐ New	☐ Vested Right (Use predates Mar 2, 1955)	☐ Future Use Reservation
☒ Place to Beneficial Use Water Reserved by Future Use Permit No. <u>6834-3</u>		
☐ Amendment/Correction to Permit No. _____		

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

- Name to Appear on Water Permit Big Sioux Community Water Sytem
Mailing Address 23343 479th Ave. Egan SD 57024
Phone 605-997-2098 (Address) 605-864-7996 (City) (State) (Zip Code)
Mobile _____ Email bigsioux@bigsiouxaws.com
- Amount of water claimed 0.67 *CFS or 300 **GPM and 300 ***AF or _____ Gallons
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use)
- Source of water supply Big Sioux; Northern Skunk Creek Aquifer
- Location of point of diversion 1-well NE1/4 SW1/4 Sec 16-105-51 County Lake
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☒ Yes ☐ No
If "Yes," where will water be used? Dakota Ethanol West 1/2 NE1/4 Sec 21-106-51
(example - NW1/4 section 12-T104N-R53W)
- County or counties where water will be used Lake
- Annual period during which water is to be used Jan. 1st - Dec.31st
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Drilling one well at this time to sell raw water to Dakota Ethanol for Ethanol production 300 GPM

RECEIVED

APR 02 2024

OFFICE OF
WATER

I, Jason Johnson Manager, the applicant, certify under
Name of Person Title (if applicable)
penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

2015-10

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many 1 Have test holes been drilled ☒ Yes ☐ No Drilled by Thein Well Company
(if yes, please provide copies of logs)
- b) If existing wells, how many 3 test wells Provide copy of log(s), if available. Drilled by Lacey Drilling

For either Existing or Proposed Wells:

- c) Well Depth (required) 77.5' Depth to Top of Water Bearing Material _____ Depth to Water from Surface 34'
- d) Distance to nearest domestic well on applicant's property none Property owned by others 1,900'

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

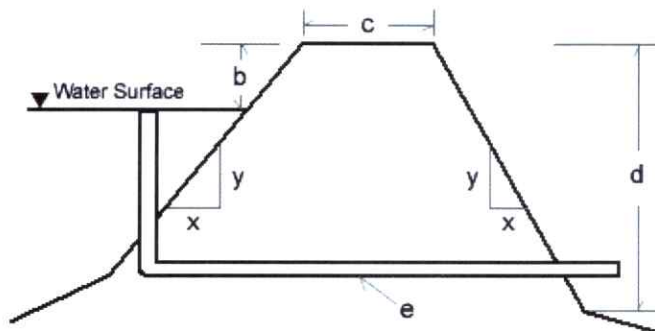
3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

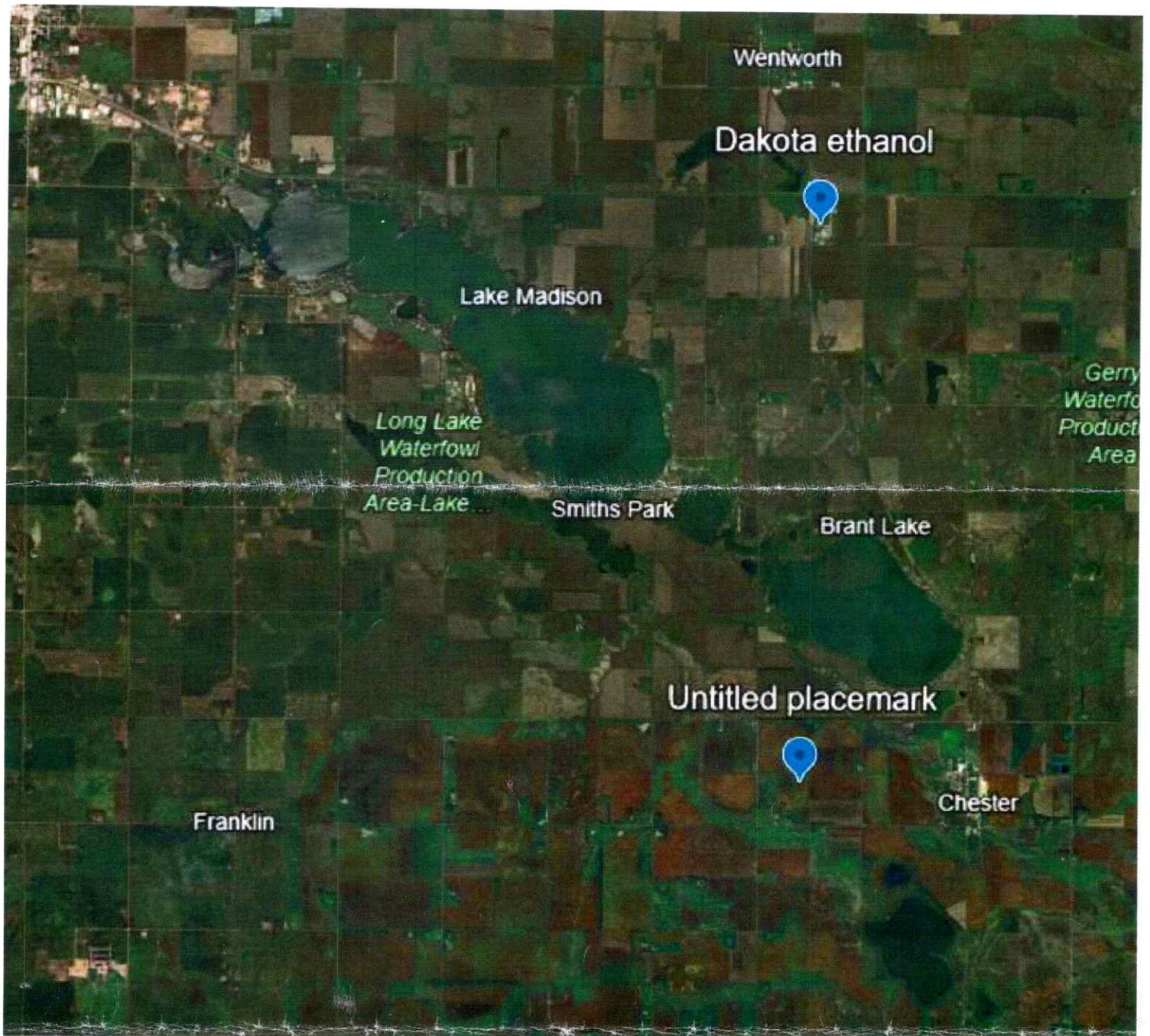
4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



Bottom pin in New well
 $43^{\circ} 53' 46'' \text{N}$ $96^{\circ} 57' 34'' \text{W}$ #6
 NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 16 105 51
 Dakota Ethanol
 $43^{\circ} 58' 26'' \text{N}$ $96^{\circ} 57' 27'' \text{W}$
 West $\frac{1}{2}$ NE $\frac{1}{4}$ Sec 21 - 106 - 51

Big Sioux Rural Water

New well #6

Legend

 Feature 1

 Prospect Cemetery

19

 New well #6 - 12" 77.5 ft well

52

52

Google Earth



1000 ft

105N 51W
Section: 05

105N 51W
Section: 04

105N
Section

239 ST

WEST BAY RD

UNKNOWN
SOUTH SHORE DR

NORTH SPRAY

105N 51W
Section: 08

105N 51W
Section: 09

105N 51W
Section: 10

105N 51W
Section: 17

105N 51W
Section: 16

105N 51W
Section: 15

10170203 Lower Big Sioux

462 AVE

241 ST

105N 51W
Section: 20

105N 51W
Section: 21

105N 51W
Section: 22

242 ST

105N 51W
Section: 29

105N 51W
Section: 28

105N 51W
Section: 27

SOUTH DAKOTA WATER WELL COMPLETION REPORT

Date: 11-27-23

Big Sioux Rural Water – New Well # 6 – 12” well

Chester SD GPS: N43 53.7690 W96 57.5510

<i>Formation</i>	<i>From</i>	<i>To</i>
Top soil	0	1
Clay - brown	1	3
Clay - yellow	3	6
Gravel	6	32
Sandy clay – blue	32	40
Sand & gravel w/thin clay layers	40	56
Clay – blue	56	57
Sand	57	64
Medium gravel	64	75
Gravel	75	79
Clay - grey	79	

Water Test
by Lacey Drilling, Trent, SD .
February 27th, 2006.

Test Hole # 1.
Lake County, South Dakota.
Legal Location: NE SE NE SW Sec. 16, T.105N, R. 51W.
Elevation 1615

Feet
0-2 Topsoil
2-30 Sand, brown, medium to coarse, dry to 25'.
30-37 Clay, brown (till ?)
37-72 Sand & Gravel, medium to coarse sand, fine to coarse gravel.

Static WL 28.8' below land surface.

Jim Lacey
SD #111

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date April 2, 2024

RECEIVED OF Big Sioux Community Water, Inc. 23343 479th Avenue Egan SD 57024

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>8864-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>850.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8864-3</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law) TOTAL	\$ <u>1050.00</u>

By Eric Gronlund
Chief Engineer
EG

Duvall, Ron

From: Jeff - Big Sioux Water <jeff@bigsiouxwvs.com>
Sent: Thursday, May 9, 2024 12:57 PM
To: Duvall, Ron
Subject: [EXT] water rights

Hi Ron

Jodi said you had a question on the application for are new well.

It will be 300gpm.

Call my cell 605-270-2189

or email me with other questions

Jeff Carruthers
Big Sioux Water
23343 479th Ave.
Egan, SD 57024
605-997-2098

Duvall, Ron

From: Jodi Johanson <jodi@bigsiouxcws.com>
Sent: Monday, May 6, 2024 10:29 AM
To: Duvall, Ron
Subject: Re: [EXT] Water Permit Application to place future reservation to use to supply Dakota Ethanol

Yes that is fine. We are supplying them but I think my operator thought it was type of use.

Jodi Johanson
General Manager
Big Sioux Community Water System

Sent from my iPhone

On May 6, 2024, at 10:26 AM, Duvall, Ron <Ron.Duvall@state.sd.us> wrote:

Jodi,

I am looking over the application to supply Dakota Ethanol and I see an email string in the application file that the proposed well is to be used exclusively for the ethanol plant. Presumably, and understandably, this is why "Industrial" was checked as the proposed use of water. However, the future use reservation from which the 300 acre-feet of water is being taken indicates the water was reserved for rural water system use – [see pages two and three of the PDF copy of Future Use Permit No. 6834-3](#). Consequently, I think your application to place water to beneficial use should also identify "rural water system" as the type of use rather than "industrial."

This change does not preclude Big Sioux Community from serving Dakota Ethanol from the proposed well, or existing permitted wells, just as the water distribution system serves many other customers under the umbrella of rural water system use. Please let me know if I can make the change to the application from "industrial" use to "rural water system" use so the use type is consistent with the originating future use reservation.

Thank you,

Ron Duvall
Dept. of Agriculture & Natural Resources
Office of Water, Water Rights Program
605.773.3352
danr.sd.gov

<image001.png>

Rodriguez, Rachel

From: Jodi Johanson <jodi@bigsiouxcws.com>
Sent: Monday, April 29, 2024 1:37 PM
To: Rodriguez, Rachel
Subject: Fwd: [EXT] Re: Fwd: Water Permit Application

----- Forwarded Message -----

From: Jodi Johanson <jodi@bigsiouxcws.com>
To: Big Sioux Community Water System <bscws@bigsiouxcws.com>
Sent: Wed, 10 Apr 2024 11:44:06 -0500 (CDT)
Subject: Re: Fwd: Water Permit Application

Rachel -

It is a dedicated well for Dakota Ethanol. 100%

Jodi

----- Original Message -----

From: Big Sioux Community Water System <bscws@bigsiouxcws.com>
To: Jodi Johanson <jodi@bigsiouxcws.com>
Sent: Wed, 10 Apr 2024 11:26:10 -0500 (CDT)
Subject: Fwd: Water Permit Application

Big Sioux Community Water System
23343 479th Ave.
Egan, SD 57024
605-997-2098

From: "Rachel Rodriguez" <Rachel.Rodriguez@state.sd.us>
To: "Big Sioux Community Water System" <bscws@bigsiouxcws.com>
Sent: Wednesday, April 10, 2024 11:25:37 AM
Subject: Water Permit Application

Good morning,

I am just following up on the email I sent April 3, 2024. Please see below. Once I receive a response, I can begin processing your application.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

April 26, 2024

Big Sioux Community Water System
c/o Jodi Johanson
23343 479th Avenue
Egan SD 57024

Dear Ms. Johanson:

I am in receipt of your *Application for a Permit to Appropriate Water*. I have emailed twice, once on April 3rd and again on April 10th requesting information and to date, I have not received a response. The following is required:

- Will the water be used just for selling to Dakota Ethanol? Or will some of the water also be used for the entire service area?

Once I receive the information requested, I can begin processing your application.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
605 773-3352
rachel.rodriquez@state.sd.us

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, April 10, 2024 11:26 AM
To: bscws@bigsiouxcws.com
Subject: Water Permit Application

Good morning,

I am just following up on the email I sent April 3, 2024. Please see below. Once I receive a response, I can begin processing your application.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



From: Rodriguez, Rachel
Sent: Wednesday, April 3, 2024 10:20 AM
To: bscws@bigsiouxcws.com
Subject: Water Permit Application

Good morning,

I am in receipt of your application however, there is one item which needs clarification:

- Will the water be used just for selling to Dakota Ethanol? Or will some of the water also be used for the entire service area?

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, April 3, 2024 10:12 AM
To: 'bigsioux@bigsiouxews.com'
Subject: Water Permit Application

Good morning,

I am in receipt of your application however, there is one item which needs clarification:

- Will the water be used just for selling to Dakota Ethanol? Or will some of the water also be used for the entire service area?

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8864-3, Big Sioux Community Water System**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8864-3, Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024.

The Chief Engineer is recommending APPROVAL of Application No. 8864-3 because 1) Future Use Permit Nos. 6834-3 and 6834A-3 reserved the water for future use by Big Sioux Community Water System, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The well approved under Water Permit No. 8864-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must 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 well authorized by Permit No. 8864-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must 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. The permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Northern Skunk Creek Management Unit of the Big Sioux Aquifer.
4. Water Permit No. 8864-3 authorizes a total annual diversion of up to 300 acre-feet of water.

See report on application for additional information.

Eric Gronlund, Chief Engineer
June 28, 2024

Report to the Chief Engineer
On Water Permit Application No. 8864-3
Big Sioux Community Water System

June 21, 2024

Water Permit Application No. 8864-3 proposes to construct and place to beneficial use 300 acre-feet of water annually at a maximum instantaneous diversion rate of 0.67 cubic feet of water per second (cfs) from one well (77.5 feet deep) completed into the Big Sioux: Northern Skunk Creek aquifer located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 16-T105N-R51W for rural water system use. Water service will be provided to the Dakota Ethanol facility located in the W $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 21-T106N-R51W. This water was appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3. If this application is approved, there will be zero acre-feet remaining in Future Use Permit Nos. 6834-3 and 6834A-3. The proposed well site is located in Lake County approximately seven miles south of Wentworth, SD.

AQUIFER: Big Sioux: Northern Skunk Creek (BS:NSC)

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 (Hansen, 1986; Water Rights, 2024ba and 2024d). These deposits are Quaternary aged. The Big Sioux aquifer is divided into twelve management units that have been historically recognized by the DNR-Water Rights Program and SD Water Management Board (Water Rights, 2024c). The water proposed to be appropriated is within the Northern Skunk Creek management unit of the Big Sioux aquifer.

The Northern Skunk Creek management unit of the Big Sioux aquifer is a glacial outwash primarily composed of medium to coarse sand and gravel and is located in Lake and Moody Counties (Hansen, 1986). Hedges and others (1982) estimated the Big Sioux: Northern Skunk Creek aquifer to underly 25,400 acres and contain approximately 72,400 acre-feet/yr of recoverable water in storage. Hansen (1986) delineated an estimated areal extent of 30,720 acres of which approximately 27,250 acres was under unconfined conditions. The areal extent by Hansen (1986) can be seen in Figure 1. The areal extent in Hansen (1986) is likely larger than the extent from Hedges and others (1982) based on newer and more information being available to Hansen (1986).

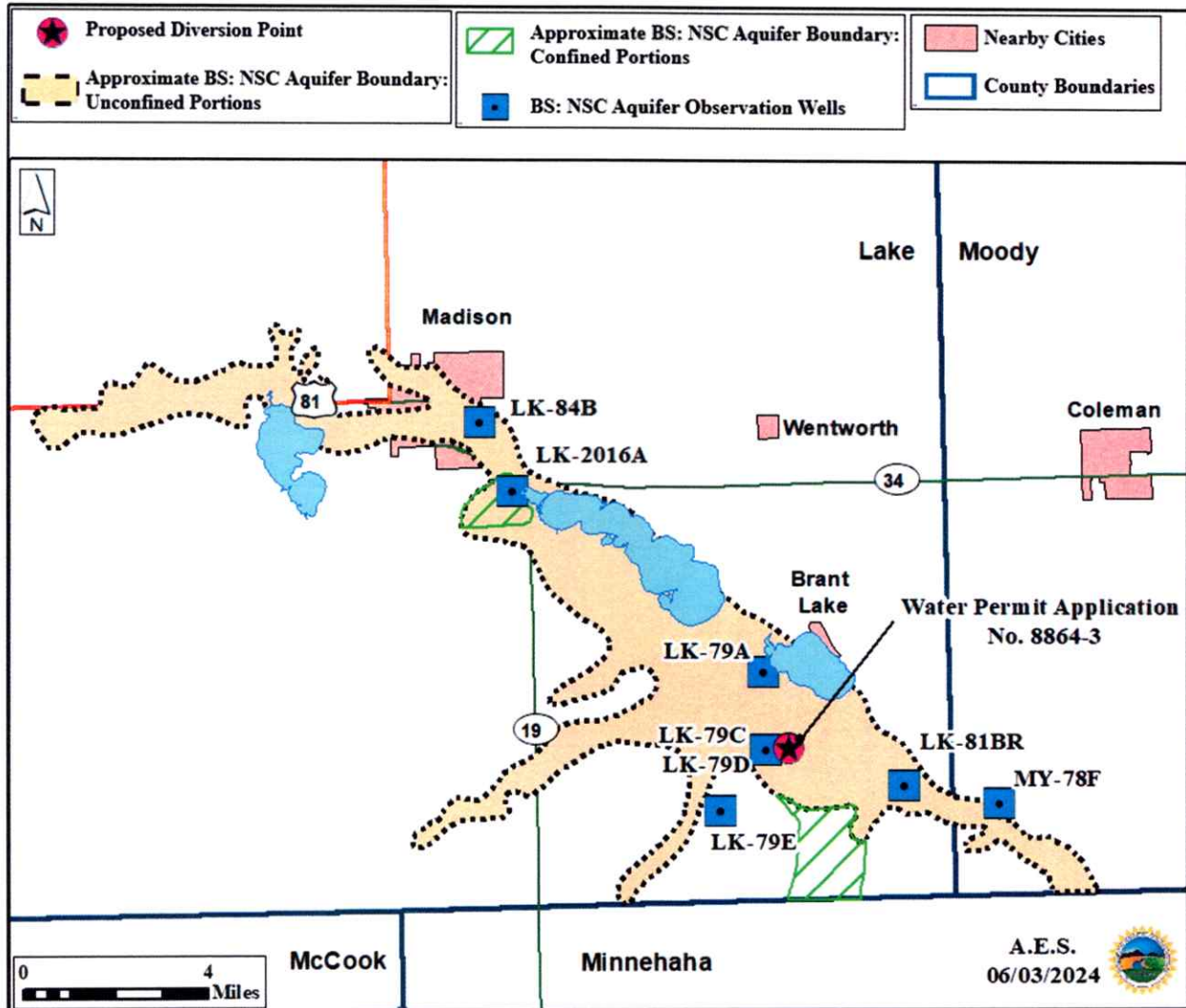


Figure 1. Map of the approximate Big Sioux: Northern Skunk Creek aquifer as delineated by Hansen (1986) with the location of the diversion point and the Big Sioux: Northern Skunk Creek aquifer observation wells (Water Rights, 2024b)

The Big Sioux: Northern Skunk Creek aquifer has an average saturated aquifer thickness of approximately 39 feet and a documented maximum thickness of 73 feet (Hansen, 1986). The Big Sioux: Northern Skunk Creek aquifer is hydraulically connected to many local surface water sources, such as, Madison, Herman, and Brant Lakes and Skunk Creek (Hansen, 1986). The Northern Skunk Creek management unit of the Big Sioux aquifer is also hydraulically connected to the Middle Skunk Creek management unit to the south (Hansen, 1986; Water Rights, 2024b and 2024d). Water movement in the aquifer is generally from the northwest to the southeast (Hansen, 1986). The aquifer is primarily under unconfined conditions; however, along the margin of the aquifer and in the south-central part of T105N-R51W, the aquifer may be overlain by up to 60 feet of till and is expected to be under confined conditions (Hansen, 1986).

A water well completion report was submitted with Water Permit Application No. 8864-3. A reiteration of this report is shown in Table 1. The top of aquifer materials (sands and gravels) was encountered at 6 to 79 feet with clay layers from 32 to 40 and 56 to 57 feet below land

surface. The static water level was 34 feet below ground surface at the time of well completion in October 2023. Thus, the top of aquifer is at 34 feet. The well was screened from 57.5 to 77.5 feet below the ground surface, with a static water level of approximately 34 feet at the time of well completion (October 31, 2023) (Water Rights, 2024d). Wells within approximately one mile of the diversion point indicate saturated aquifer thicknesses range from approximately 5 to 50 feet, with the depth to the top of aquifer materials ranging from approximately 10 to 40 feet below the ground surface, and static water levels varying between 10 to 35 below the ground surface (SDGS, 2024; Water Rights, 2024b, 2024c and 2024d). Based on the submitted well completion report, the Big Sioux: Northern Skunk Creek aquifer water rights/permits, and the lithologic logs for nearby observation wells, the Big Sioux: Northern Skunk Creek aquifer is expected to be locally confined around the diversion point but will likely act in an unconfined manner (SDGS, 2024; Water Rights, 2024b, 2024c and 2024d). The chance of the well behaving in an unconfined manner is due to the sandy nature of the overlying confining materials, how thin the confining material layers encountered were, and the presence of a number of unconfined aquifer wells within one mile of the applicant's diversion point (Water Rights, 2024b and 2024d).

Table 1. Water well completion report submitted with Water Permit Application No. 8864-3

Formation	From (ft)	To (ft)
Top Soil	0	1
Clay -Brown	1	3
Clay -yellow	3	6
Gravel	6	32
Sandy clay - blue	32	40
Sand & gravel w/thin clay layers	40	56
Clay - blue	56	57
Sand	57	64
Medium gravel	64	75
Gravel	75	79
Clay - grey	79	

South Dakota Codified Law (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, "A permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the diversion point can be developed without unlawful impairment of existing domestic water uses and water 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 SDCL 46-2-9 and 46-2-11." This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Big Sioux: Northern Skunk Creek aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8864-3 proposes to place water reserved by a future use permit to beneficial use. The water is reserved by Future Use Permit Nos. 6834-3 and 6834A-3 from the

Big Sioux: Northern Skunk Creek aquifer. Since this application intends to place water reserved by future use permits to beneficial use, the water has already been accounted for in the hydrologic budget for the aquifer. Regardless, a hydrologic budget and observation well data analysis will be included in this report for the information of the Chief Engineer and the Water Management Board. The last application to appropriate water from the aquifer is Temporary Water Use Permit No. 8580-3 issued in 2022.

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: Northern Skunk Creek aquifer is not older than or stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010); however, the applicant’s proposed use is for use by a rural water system which is a water distribution system as defined by SDCL 46-1-6(17). However, the sole purpose is to supply the Dakota Ethanol facility which is an industrial use.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Big Sioux: Northern Skunk Creek aquifer is primarily through the infiltration of precipitation and snowmelt (Hansen, 1986). Madison, Herman, and Brant Lakes and Skunk Creek recharge the aquifer when the elevation of the surface water source is higher than the potentiometric surface in the aquifer (typically spring and early summer), and subsequently the aquifer discharges to the hydraulically connected surface water sources when the potentiometric surface in the aquifer is higher than the elevation of the lake/creek (typically late summer and early fall) (Hansen, 1986; Water Rights, 2024b).

Utilizing observation well analysis, Hedges and others (1985) estimated an average annual recharge rate to the Northern Skunk Creek management unit of 3.1 inches per year. Utilizing observation well analysis with additional years of data, Buhler (2009) estimated an average annual recharge rate to the unconfined portions of the management unit to be approximately 3.82 inches per year. Based on the estimated areal extent of the unconfined portions of the aquifer, 27,250 acres (Hansen, 1986), and applying Buhler’s (2009) estimated recharge rate, the average annual recharge rate to the unconfined portions of the Big Sioux: Northern Skunk Creek aquifer is approximately 8,674 acre-feet per year.

Discharge

Discharge from the Big Sioux: Northern Skunk Creek aquifer is primarily through well withdrawals, evapotranspiration where the aquifer is at or near the ground surface, and outflow to Madison, Herman, and Brant Lakes and Skunk Creek (Hansen, 1986; Water Rights, 2024d). Outflow to Minnehaha County was estimated to be approximately 1.5 acre-feet of water per day (547 acre-feet per year) (Hansen, 1986).

Currently, there are 35 water rights/permits authorized to appropriate water from the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2024c). Additionally, there are six temporary use permits authorized to appropriate water at this time from the Big Sioux: Northern Skunk Creek aquifer pursuant to SDCL 46-5-39 - Temporary Use Permit Nos. 7131-3, 7275-3, 7829-3, 7915-3, 7956-3, and 8580-3 (Water Rights, 2024c). Furthermore, there are six future use permits reserving 2,118 acre-feet of water from the Big Sioux: Northern Skunk Creek (listed on Table 2) (Water Rights, 2024c).

Table 2. Future use permits reserving water from the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2024c)

Future Use Permit Holder	Amount of Reserved Water
City of Madison (747-3)	1,033
Kingbrook Rural Water System Inc (5643-3)	425
Big Sioux Community Water (5689-3, 6834-3, 6834A-3)	660
TOTAL:	2,118

Of the 35 water rights/permits, 18 are authorized for non-irrigation use and 17 are authorized for irrigation use (Water Rights, 2024c). Table 3 summarizes the 18 non-irrigation water rights/permits authorized to appropriate water from the Big Sioux: Northern Skunk Creek 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 used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer (Water Rights, 2024c). One municipal water right was identified as being connected to a rural water system and likely maintains the wells for standby purposes (Drinking Water Program, 2024; Water Rights, 2024c); as such, the average annual water use for this water right has been estimated to be zero acre-feet per year on Table 3. The average annual withdrawal rate from the Big Sioux: Northern Skunk Creek that is estimated for the non-irrigation water rights/permits is approximately 7,189.4 acre-feet per year (Water Rights, 2024f).

Table 3. Estimated annual withdrawal rate for the non-irrigation Big Sioux: Northern Skunk Creek aquifer water rights/permits (Water Rights, 2024c)

Permit No.	name	status	use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)	Annual Estimated Use (acre-feet/year)
371-3	City of Madison	LC	MUN	0.31		134.7
372-3	City of Madison	LC	MUN	0.26		112.9
1079-3	City of Madison	LC	MUN	2.7		1,172.9
1453-3	City of Madison	LC	MUN	0.78		338.8
4311A-3	Kingbrook RWS INC	LC	RWS	1.15	266	266
4367-3	Kingbrook RWS INC	LC	RWS	3		1,303.2
4943-3	Big Sioux Community Water	LC	RWS	0.440		191.1
5168-3	Hilde Pipe & Gravel	LC	IND, DOM	0.910		395.3
5646-3	Kingbrook RWS INC	LC	RWS	1.000	425	425
5688-3	Shipwreck Inn	LC	COM	0.022		9.6
6040-3	City of Madison	LC	MUN	1.670	600	600
6046-3	Chester Sanitary District	LC	MUN	0.786		0*
6152-3	Big Sioux Community Water	LC	RWS	0.500	360	360
6510-3	City of Madison	PE	MUN	0.780		338.8
6531-3	Kingbrook RWS INC	LC	RWS	1.050	350	350
6730-3	Kingbrook RWS INC	LC	RWS	0.670		291
7117-3	David & Chrysella Daniel	LC	RWS	0.890	600	600**
8387-3	David & Chrysella Daniel	LC	RWS	0.670	300	300
LC: Licensed Water Right; PE: Water Permit; COM: Commercial;					TOTAL:	7,189.4
DOM: Domestic; GEO: Geothermal; IND: Industrial; MUN: Municipal; RWS: Rural Water System						
*Identified as being connected to RWS						
** Annual reported withdrawal rate included with Big Sioux Community Water RWS on Table 3						

There are 11 non-irrigation water rights/permits (generally held by water distribution systems (Water Rights, 2024c)) that are required to report their annual usage from the Big Sioux: Northern Skunk Creek aquifer (listed on Table 4). Water Right No. 6046-3, held by Chester Sanitary District, does not have an annual reporting qualification (Water Rights, 2024c); however, the respective annual water use was obtained from Capen (2014) and Carruthers (2022) and will be included on Table 4. Carruthers' (2022) indicated Chester Sanitary District connected to Big Sioux Rural Water System in 2017, and it is likely the district maintains their wells for standby purposes; as such, the average annual water use for this water right has been estimated to be zero acre-feet per year on Table 3. Additionally, the wells authorized by Water Right Nos. 7117-3 and 8387-3, held by David and Chrysella Daniel, are for rural water system use at Big Sioux Community Water System (Water Rights, 2024c). As such, the average annual water use for Water Right Nos. 7117-3 and 8387-3 are included in Big Sioux Community Water System's reported withdrawals on Table 3 (Water Rights, 2024f). The reported withdrawals by the water users listed on Table 4 are for comparison purposes only to show historically the average annual use has been less than the volume that is estimated on Table 3 (Water Rights, 2024c and 2024f). The estimated use for the non-irrigation water rights/permits calculated on Table 3 will be used in the analysis.

Table 4. Reported annual withdrawal rate for the Big Sioux: Northern Skunk Creek aquifer non-irrigation water rights/permits required to report their annual usage (Capen, 2014; Carruthers, 2022; Water Rights, 2024c and 2024f)

	Chester Sanitary District	Big Sioux Community Water	Kingbrook RWS	City of Madison
Permit Nos.	6046-3	4943-3, 6152-3, 8387-3, 7117-3	4311A-3, 5646-3, 6531-3, 6730-3	6040-3, 6510-3
	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)
Year				
2003	62.52	622.12	648.45	510.68
2004	56.47	711.46	640.08	195.97
2005	66.1	748.64	653.58	342.54
2006	51.18	777.55	664	713.59
2007	49.15	741	695.95	622.92
2008	41.71	690	647.1	614.03
2009	30.6	698.9	606	600.81
2010	30.76	727.91	620.22	765.48
2011	29.69	694.49	662.23	683.84
2012	36.55	752	677.23	629.98
2013	35.73	903.41	619.65	491.63
2014	34.98	804.65	644.81	473.02
2015	34.63	764.06	640.42	588.41
2016	35.93	742.18	662.86	626.05
2017	14.63	587	727.73	510.49
2018	n/a	661.41	723.14	398.59
2019	n/a	768.03	667.16	396.89
2020	n/a	762.6	727.12	382.1
2021	n/a	1,414.9	737.68	374.54
2022	n/a	1,004	740	401.04
Min	14.63	587	606	195.97
Max	66.1	1,414.9	740	765.5
Average	40.7	779	670.3	516.1

Currently, there are 17 irrigation water rights/permits authorized to appropriate water from the Big Sioux: Northern Skunk Creek aquifer that are not temporary use permits pursuant to SDCL 46-5-39 (Water Rights, 2024c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire since 1979. Table 5 shows the reported irrigation withdrawals, excluding the temporary use permits. The estimated average annual withdrawal rate for the Big Sioux: Northern Skunk Creek aquifer irrigation water rights/permits that have reported over the period of record (1979 to 2022) is approximately 849 acre-feet per year (Table 5) (Water Rights, 2024a). To reflect the current development of irrigation water

rights/permits more accurately, the average annual withdrawal rate for irrigation appropriations from 2013 to 2022 is approximately 950 acre-feet per year (Table 5) (Water Rights, 2024a).

There are domestic wells completed into the Big Sioux: Northern Skunk Creek aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2024d). Due to their relatively low diversion rates, withdrawals from domestic wells are generally 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: Northern Skunk Creek 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: Northern Skunk Creek aquifer.

Hydrologic Budget Summary

The estimated average annual recharge rate to the Big Sioux: Northern Skunk Creek aquifer is approximately 8,674 acre-feet per year. The estimated average annual withdrawal rate from the Big Sioux: Northern Skunk Creek aquifer is approximately 10,257.4 acre-feet per year (non-irrigation: 7,189.4 acre-feet/year; irrigation (avg 2013 to 2022): 950 acre-feet/year; future use reservations: 2,118 acre-feet; Water Permit Application No. 8864-3 (if approved): zero acre-feet/year (volume appropriated by and accounted for under Future Use Permits Nos. 6834-3 and 6834A-3). The estimated average annual withdrawal rate does not include use by the temporary use permits authorized pursuant to SDCL 46-5-39 because those permits are withdrawing water accounted for by the future use reservations (Water Rights, 2024c). Based on the hydrologic budget, the estimated average annual withdrawal rate from the aquifer exceeds the estimated average annual recharge rate to the Big Sioux: Northern Skunk Creek aquifer. However, Water Permit Application No. 8864-3 is not appropriating new water. This application is to place water to beneficial use water previously reserved by Future Use Permit Nos. 6834-3 and 6834A-3.

Table 5. Reported historic withdrawal rate for the Big Sioux: Northern Skunk Creek aquifer irrigation water rights/permits, not including the temporary use water permits (Water Rights, 2024a and 2024c)

Year	No. of Permits Reporting	Reported Pumpage (acre-feet)
1979	14	393
1980	15	452
1981	15	941
1982	13	432.18
1983	14	763.59
1984	15	912
1985	14	941
1986	15	723
1987	14	870
1988	15	1,064.7
1989	15	1,129
1990	18	565
1991	18	1,198.7
1992	17	12
1993	18	86
1994	18	906.22
1995	18	347.34
1996	18	1,060.48
1997	18	574
1998	19	429.46
1999	19	964.04
2000	19	1,007.05
2001	19	1,475.57
2002	19	1,461.85
2003	19	1,116.52
2004	18	284.4
2005	18	825.56
2006	15	1,037.47
2007	16	1,337.56
2008	16	1,361.49
2009	17	700.1
2010	18	237.5
2011	18	541.04
2012	18	1,685
2013	18	1,198.99
2014	18	1,022.32
2015	17	490.71
2016	17	970.46
2017	17	1,053.44
2018	17	599.66
2019	17	122.05
2020	17	1,394.01
2021	17	1441.12
2022	17	1,208.73
Min	13	12
Max	19	1,755
Average (1979 to 2022)	17	849
Average (2013 to 2022)	17	950

Temporary Use Permits

There are five future use permits reserving 2,118 acre-feet of water from the Big Sioux: Northern Skunk Creek aquifer (listed on Table 2) (Water Rights, 2024c). There have been six temporary use permits (Permit Nos. 7131-3, 7275-3, 7829-3, 7915-3, 7956-3 and 8580-3) approved to appropriate water at this time from the Big Sioux: Northern Skunk Creek aquifer pursuant to SDCL 46-5-39 (Water Rights, 2024c). The water use by these temporary use permits is accounted for by the future use reservation from which these permits derive their appropriation.

Temporary Use Permit Nos. 7131-3, 7275-3, 7915-3, 7956-3 and 8580-3 are authorized for irrigation use (Water Rights, 2024c). The time limit for the construction of works period for Permit No. 7131-3 has expired and the project was not developed; however, the permit may not be cancelled due to the qualification in SDCL 46-5-40, a temporary permit may not be cancelled for any reason other than the water reserved for future use being placed to beneficial use.

Therefore, Permit No. 7131-3 will be kept on record and an irrigation questionnaire for reporting annual water use will no longer be necessary since the system was not developed (Water Rights, 2024c). Thus, the estimated use for only Temporary Use Permit Nos. 7275-3, 7915-3, 7956-3 and 8580-3 (authorized for irrigation use) will be discussed.

Permit Nos. 7275-3, 7915-3, and 7956-3 are authorized to irrigate 250 acres (Water Rights, 2024c). Water Permit Nos. 7275-3, 7915-3, and 7956-3 have more than five years of reported withdrawals rates for their respective irrigation use. The collective sum of the average of the reported withdrawal rates for these permits over their respective periods of record is approximately 94.4 acre-feet per year.

Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year. However, to account for the fluctuation in wet and dry cycles from year to year, the one foot of water per acre per year application rate will be used to liberally estimate the annual withdrawal rate for Temporary Use Water Permit No. 8580-3, which is authorized to irrigate 130 acres, because there is less than five years of reported withdrawal rates for this permit.

Therefore, Temporary Use Water Permit No. 8580-3 is estimated to collectively withdraw approximately 130 acre-feet per year (Water Rights, 2024c).

Temporary Use Permit No. 7829-3 authorizes a maximum instantaneous diversion rate of 0.133 cfs from four wells completed into the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2024c). Assuming the permit holder pumps 60% of full time at the respective permitted diversion rate, the average annual withdrawal rate for Permit No. 7829-3 is approximately 58 acre-feet per year (Water Rights, 2024c).

Collectively, the average annual withdrawal rate for the temporary use permits authorized to appropriate water at this time from the Big Sioux: Northern Skunk Creek aquifer pursuant to SDCL 46-5-39 is approximately 282.4 acre-feet per year. The estimated average annual withdrawal by temporary use permits is much less than the volume of water reserved by future use permits.

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 DANR-Water Rights Program monitors eight observation wells completed into the Northern Skunk Creek management unit of the Big Sioux aquifer (Water Rights, 2024b). The four closest observation wells to the proposed diversion point are LK-79C (approximately 0.5 miles west), LK-79D approximately 0.5 miles west), LK-79A approximately 1.7 miles northwest), and LK-79E approximately 2 miles southwest) (as shown in Figures 1 and 6). Water Rights, 2024b). The hydrographs for these observation wells are displayed in Figures 2 to 5 (Water Rights, 2024b). 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.

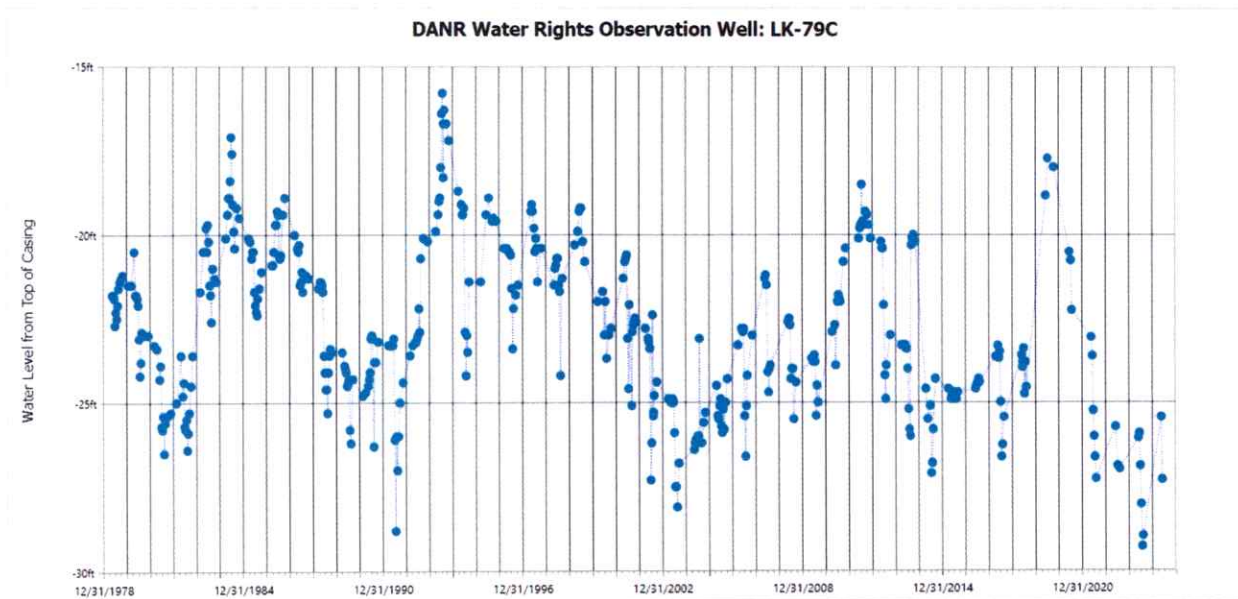


Figure 2. Hydrograph for observation well LK-79C (Water Rights, 2024b)

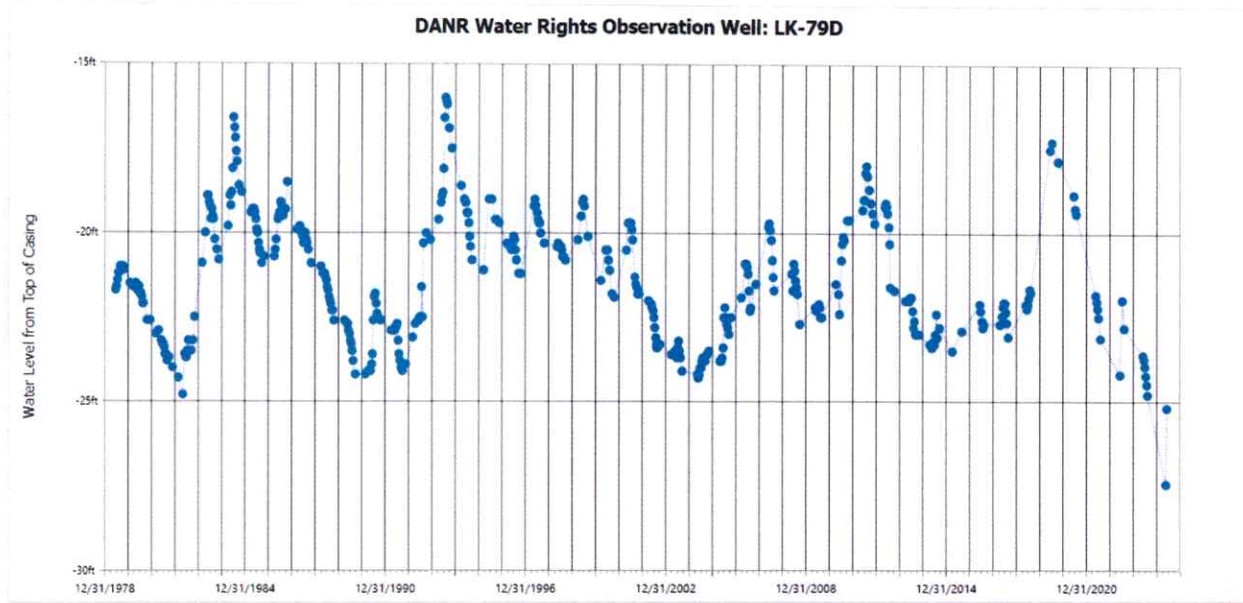


Figure 3. Hydrograph for observation well LK-79D (Water Rights, 2024b)

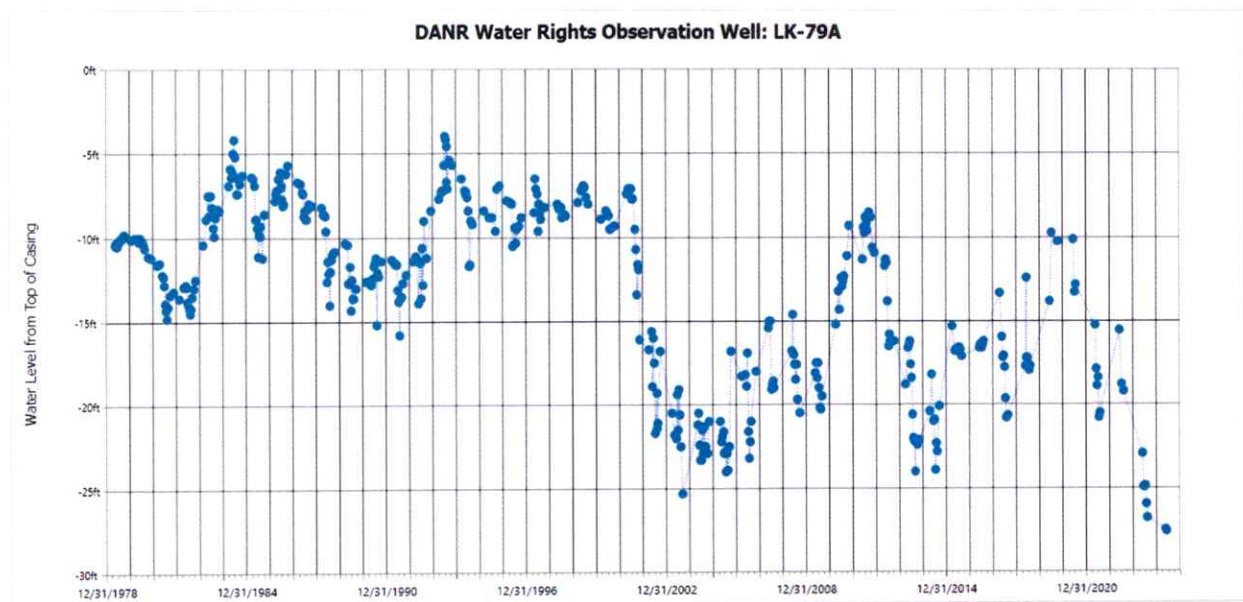


Figure 4. Hydrograph for observation well LK-79A (Water Rights, 2024b)

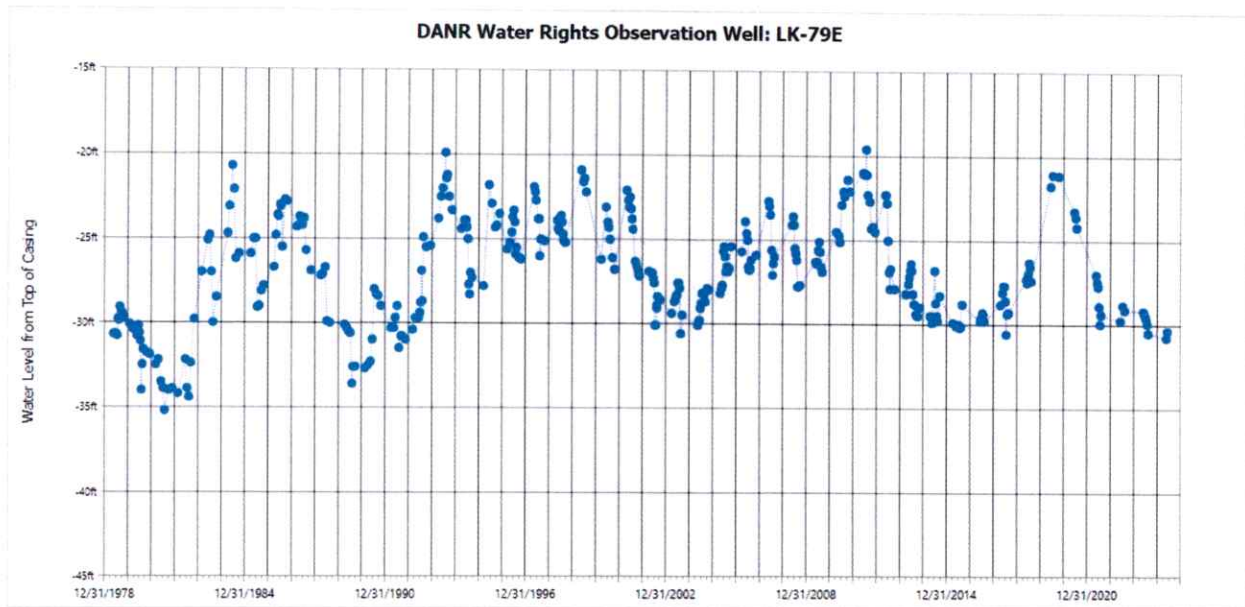


Figure 5. Hydrograph for observation well LK-79E (Water Rights, 2024b)

The hydrographs for the observation wells display stable water levels over most their respective periods of record with three of the wells, LK-79A, LK-79C, and LK-79D, showing some recent decline, 2022/2023 to present. There was also a “step-down” of approximately 10 ft in the water level of LK-79A in 2001. The hydrographs for the four observation wells shown in Figures 2 to 5 were compared to the hydrographs for the other four observations wells completed into the Big Sioux: Northern Skunk Creek aquifer and each displayed a similar trend as shown on the hydrographs displayed in Figures 2 to 5, except for the recent declines and the “step-down” as previously mentioned (Water Rights, 2024b, 2024c, 2024d).

The recent declines on the water levels shown on the hydrographs for LK-79A, LK-79C, and LK-79D can be attributed to the observation wells’ close proximity to high-capacity wells (assumed to be a well with an authorized diversion rate greater than 0.2 cfs), the recent development of several of those nearby appropriative wells, and recent drought conditions (Water Rights, 2024b, 2024c, 2024d). For example, observation well LK-79A is located within approximately one-half mile of the four wells authorized by Water Right Nos. 4943-3 (priority date: January 26, 1983) and 6152-3 (priority date: September 30, 1999), held by Big Sioux Community Water for rural water system use (Water Rights, 2024b and 2024c). The “step-down” in 2001 of the water level in LK-79A was caused by the replacement of a well for Water Right No. 6152-3 and its location being even closer to the observation well as well as increased development by Big Sioux Community Water in the area of the observation well. However, the water level in LK-79A equilibrated to the increased localized pumping and has shown a stable water level since that time.

The water table has since remained at a steady to slightly increasing elevation since development of the aquifer increased, indicating that on an aquifer basis withdrawals have not exceeded recharge (Water Rights, 2024b, 2024c, 2024d). The hydrographs for the Big Sioux: Northern Skunk Creek aquifer indicate that the aquifer responds well to climatic conditions because water

levels are rising during wetter periods (early spring snowmelt and precipitation) and declining during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer 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 the natural discharges from the aquifer govern the long-term fluctuations of water levels in the aquifer rather than the impacts of pumping from the Big Sioux: Northern Skunk Creek aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate that withdrawals from the aquifer do not exceed recharge to the aquifer.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 35 water rights/permits authorized to appropriate water and 6 temporary water use permits from the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2024c). The closest water right/permit to the proposed diversion point is Water Right No. 2987-3, held by Larry Alverson. The diversion point for Water Right No. 2987-3 is located approximately 0.3 miles to the northwest of the proposed diversion point for this application (Figure 6) (Table 6) (Water Rights, 2024c).

There are domestic wells on file with the DNR-Water Rights Program that are completed into the Big Sioux: Northern Skunk Creek aquifer, with the closest domestic well on file (not held by the applicant) located approximately 0.5 miles northeast of the proposed diversion point (Water Rights, 2024d). There could potentially be other domestic wells completed into the Big Sioux: Northern Skunk Creek aquifer near the proposed diversion point that are not on file with the DNR-Water Rights Program. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

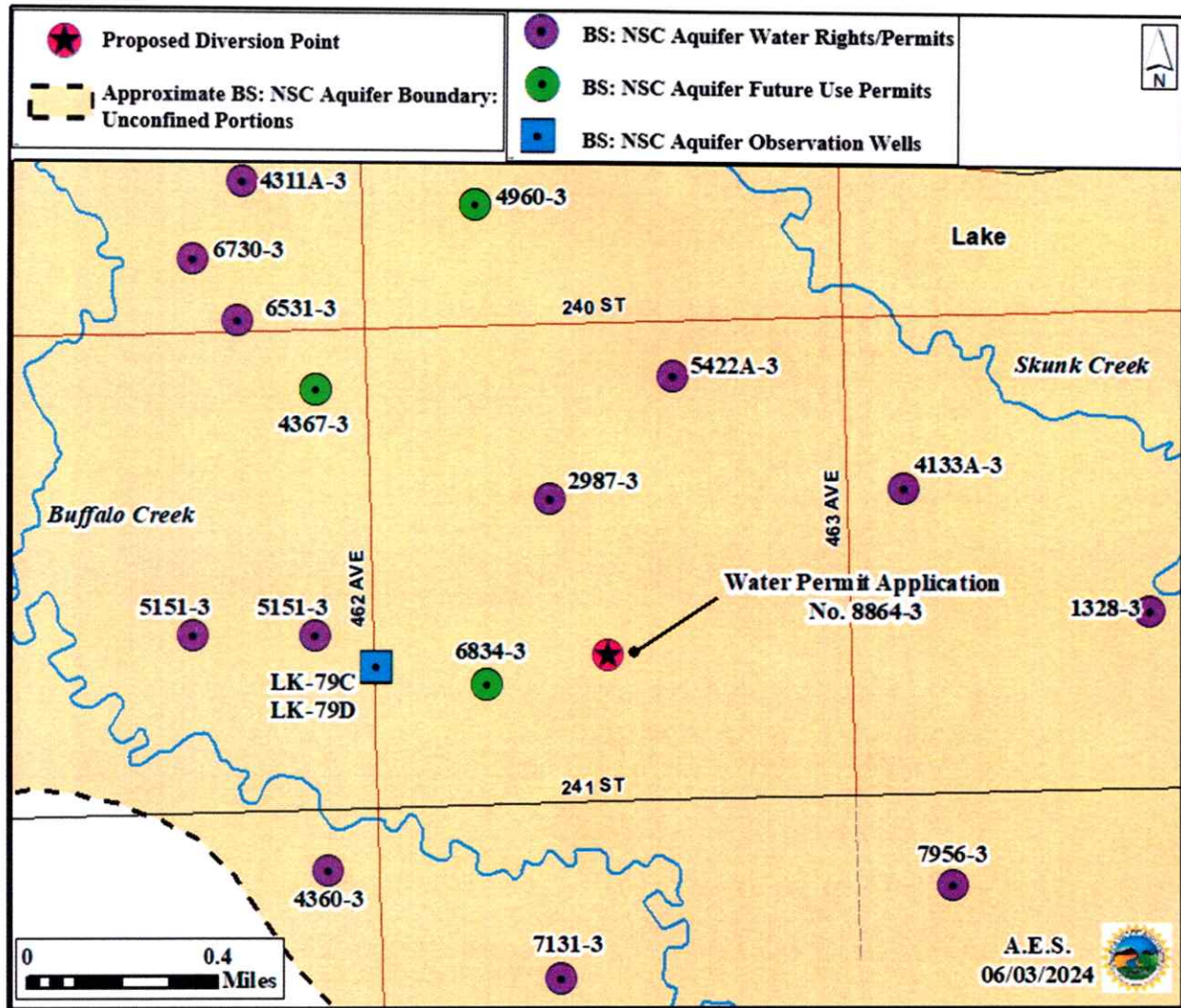


Figure 6. Location of proposed diversion point with the Big Sioux: Northern Skunk Creek aquifer water rights/permits, future use permits, and observation wells within approximately one mile (Water Rights, 2024b and 2024c)

Table 6. Big Sioux: Northern Skunk Creek aquifer water rights/permits and future use permits, within approximately one mile of the proposed diversion point, as shown in Figure 6 (Water Rights, 2024c)

Permit No.	Name	Status	Use	Authorized Acres if IRR	Authorized Diversion Rate (cfs)	Authorized/Reserved Annual Volume (acre-feet)
1328-3	SHAWN OR JILL MARTIN	LC	IRR	176	2.50	
2987-3	LARRY ALVERSON	LC	IRR	128	1.44	
4133A-3	SHAWN OR JILL MARTIN	LC	IRR	80	1.11	
4360-3	JEFFREY J MULLER	LC	IRR	128	1.44	
4960-3	RONALD C ALVERSON	LC	IRR	188	2.00	
5151-3	SHAWN OR JILL MARTIN	LC	IRR	72	1.03	
5422A-3	LARRY ALVERSON	LC	IRR	198	1.78	
6531-3	KINGBROOK RWS INC	LC	RWS		1.05	118
4311A-3	KINGBROOK RWS INC	LC	RWS		1.15	266
6730-3	KINGBROOK RWS INC	LC	RWS		0.67	
6834-3	JODI JOHANSON, MGR	FU	RWS			300
7131-3	CHARLES ALVERSON	PE	IRR	0	0	
7956-3	TERRY GASPER	PE	IRR	84	1.11	
4367-3	KINGBROOK RWS INC	LC	RWS		3.00	
5151-3	SHAWN OR JILL MARTIN	LC	IRR	72	1.03	
5643-3	KINGBROOK RWS INC	FU	RWS			425
LC: Licensed Water Right; PE: Water Permit; COM: Commercial;						
DOM: Domestic; GEO: Geothermal; IND: Industrial; MUN: Municipal; RWS: Rural Water System						

The Big Sioux: Northern Skunk Creek aquifer is primarily unconfined but is expected to be under confined conditions along the margin of the aquifer and in the south-central part of T105N-R51W (Hansen, 1986; SDGS, 2024; Water Rights, 2024b, 2024c and 2024d). Based on the submitted water well completion report, the water well completion reports on file for nearby wells completed into the aquifer, and the lithologic logs on file for nearby observation wells, the Big Sioux: Northern Skunk Creek aquifer is expected to be confined near the proposed diversion point. However, it is likely to behave as an unconfined aquifer well (SDGS, 2024; Water Rights, 2024b and 2024d). 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. Examination of the hydrographs for observation wells completed into the Big Sioux: Northern Skunk Creek aquifer show no signs of being significantly impacted by drawdown caused by pumping, despite usually being located within a mile of several high-yield wells (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) (Water Rights, 2024b and 2024c). Observation wells completed into the Big Sioux: Northern Skunk Creek aquifer near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well LK-79C (approximately 0.5 miles west of the proposed diversion point) has eight high-yield wells (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) within approximately one mile of it (Water Rights, 2024b and 2024c). The lithologic log on file for LK-79C noted the well was completed to a depth of 56 feet, with a screened interval from 39 to 54 feet below ground surface and has a casing stick up height of approximately 2.6 feet

(Water Rights, 2024b). Several layers of aquifer material (sand and gravel) were encountered: 2 to 28 feet, 33 to 36 feet, and 37 to 51 feet below ground surface (SDGS, 2024). The lowest recorded static water level on the hydrograph (displayed in Figure 2) is approximately 29 feet below the top of the well casing. The clay layers from 36 to 37 feet, and 28 to 33 feet below ground surface separating the sand and gravel layers are mentioned to be gravelly. Thus, they are unlikely to be true confining layers and are likely to be somewhat isolated lenses of clay. This is further supported by the hydrograph for LK-79C showing water level changes more indicative of an unconfined aquifer well than a confined aquifer well. With a lowest recorded water level of 29 feet and a depth to the bottom of the aquifer of 51 feet, there was still 22 feet of saturated thickness even during drier periods when high-yield wells are expected to be pumping more water and when water levels are generally naturally lower in response to drier conditions (SDGS, 2024; Water Rights, 2024b).

Within one mile of the proposed diversion point, the Big Sioux: Northern Skunk Creek aquifer has a saturated aquifer thickness ranging from approximately 5 to 50 feet (Water Rights, 2024d). The water well completion report of the well located 0.5 miles northeast of the proposed diversion point has a saturated aquifer thickness of 5 feet (Water Right, 2024d). It should be noted, this well is unlikely to have fully penetrated the aquifer nor at least 20 feet into the saturated aquifer based on nearby well completion reports and lithologic logs (SDGS, 2024; Water Rights, 2024b and 2024d). Therefore, the well is likely not an adequate well per ARSD 74:02:04:20(6). Assuming there is only 5 feet of saturated thickness at the location of the well in question, this would not allow for enough thickness for a pump to be placed 20 feet below the top of the aquifer. Therefore, to be considered an adequate well at that location, the inlet of the pump would need to be placed as near as practical to the bottom of the saturated aquifer to qualify as an adequate well under ARSD 74:02:04:20(6). Situations may occur where pumping from a thicker part of an unconfined aquifer could cause drawdown impacting adequate wells in a thinner part of the aquifer. Under such conditions an unlawful impairment of senior water rights/permits, or adequate domestic wells may occur. This is more likely to occur in situations where the full saturated thickness of the aquifer is less than 20 feet thick. In Lake County, there are no complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2024e).

While the aquifer is expected to behave as an unconfined aquifer in the vicinity of the applicant's well site, the aquifer is technically confined. The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an "adversely impacted domestic well" in ARSD 74:02:04:20(7) as:

"A well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer

has declined to a level that the pump will no longer deliver sufficient water for the well owner's needs."

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, "general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable..." (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Big Sioux: Northern Skunk Creek aquifer at their location.

However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the likelihood the aquifer will act as an unconfined aquifer, and the lack of well interference complaints from the Big Sioux: Northern Skunk Creek aquifer in the area, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment on existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

CONCLUSIONS:

1. Water Permit Application No. 8864-3 proposes to construct and place to beneficial use 300 acre-feet of water annually at a maximum instantaneous diversion rate of 0.67 cfs from one well to be completed into the Big Sioux: Northern Skunk Creek Aquifer (77.5 feet deep) for rural water system use. Water service will be provided to the Dakota Ethanol facility. This water was appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3. If this application is approved, there will be zero acre-feet remaining in Future Use Permit Nos. 6834-3 and 6834A-3. The well site for this application is located approximately seven miles south of Wentworth, SD.
2. This application is to place to beneficial use water reserved by Future Use Permit Nos. 6834-3 and 6834A-3. Therefore, the hydrologic budget already accounts for the volume of water this application proposes to use.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8864-3 will not unlawfully impair adequate wells for existing water rights/permits and domestic users.
4. If this application is approved, a qualification requiring the applicant to control their well withdrawals, so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights, should be included.



Austin Settje
Natural Resources Engineer I
SD DANR - Water Rights Program



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

References

- Buhler, K.A., 2009. Report to the Chief Engineer on Water Permit Application No. 7136-3, Big Sioux Community Water. SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Capen, B., 2014. Report to the Chief Engineer on Water Permit Application No. 7956-3, Terry Gasper. SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Carruthers, J. 2022. Past Water Rights Staff Communication. Chester Sanitary District Contact Person. January 25, 2022.
- 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.
- Hansen, D.S., 1986. Water Resources of Lake and Moody Counties, South Dakota. Water-Resources Investigations Report 84-4209, 51p. USGS, Huron, SD.
- 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.
- Hedges, L.S., Allen, J., Holly, D.E., 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; United States Army Corps of Engineers Contract DACW 45-80-C-0185.
- SDGS, 2024. South Dakota Geological Survey Lithologic Logs Database. Accessed May 29, 2024. <http://cf.sddanr.net/lithdb/>.
- Water Rights, 1995. Findings of Fact, Conclusions of Law, and Final Decision in the Matter of Water Permit Application No. 2313-2, Coca-Cola Bottling Company of the Black Hills. DANR-Water Rights Program file for Water Right No. 2313-2. Pierre, SD.
- Water Rights, 2024a. "1979-2022 Irrigation Summaries by Aquifer", SD DANR-Water Rights Program, Joe Foss Building, Pierre, SD.
- Water Rights, 2024b. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2024c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2024d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2024e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2024f. "2003-2022 Non-Irrigation Yearly Reports", SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPERS RIGHT AWAY.**

June 24, 2024

Big Sioux Community Water System
c/o Jodi Johanson
23343 479th Avenue
Egan SD 57024

Dear Ms. Johanson:

Water Permit Application No. 8864-3 for industrial and rural water system use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Daily Leader printed in Madison SD (Ph # 605 256-4555) and the Argus Leader printed in Sioux Falls (see attachment for contact number). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

NOTICE OF APPLICATION NO. 8864-3 to Withdraw Water from Future Use Permit Nos. 6834-3 and 6834A-3

Notice is given that Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024 has filed an application for a water permit to construct and place to beneficial use 300 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well (77.5 feet deep) to be completed into the Big Sioux Northern Skunk Creek Aquifer located in the NE 1/4 SW 1/4 Section 16 -T105N-R51W for rural water system use. Water service will be provided to the Dakota Ethanol facility located in the W 1/2 NE 1/4 section 21-T106N-R51W. This water was appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3. If this application is approved, there will be zero acre-feet remaining in reserve in Future Use Permit Nos. 6834-3 and 6834A-3. The proposed well site is located approximately seven miles south of Wentworth SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8864-3 because 1) Future Use Permit Nos. 6834-3 and 6834A-3 reserved the water for future use by Big Sioux Community Water System, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. 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.

Any person interested in opposing this application or recommendation 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 July 9, 2024.

The petition 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.

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 July 9, 2024.

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 recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Rodriguez, Rachel

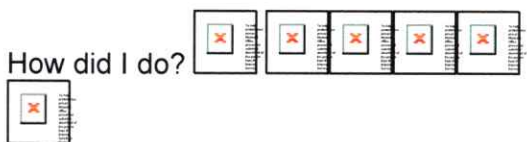
From: Becky Bikul <legals@wickpublicnotice.com>
Sent: Friday, June 21, 2024 3:05 PM
To: Rodriguez, Rachel
Subject: Re: [EXT] 8864-3 Big Sioux Community Water System - Public Notice
Attachments: Nle8zKfEwTQFnysZaT4T_1719000276135.pdf; invoices_294b-7643f12683f36-a54192f6d-279e-e863c660a-4ee4-48ac9813a-540a-c954bb9ea-1f6a-faa68c9d5836f-99901f1faa9eb-1a6bdc6ef.pdf

Your notice is scheduled to be published in the Madison Daily Leader on June 28, 2024.
Your Notice ID is: Nle8zKfEwTQFnysZaT4T

—
Becky Bikul

Column Pro Representative

Column.us is an easy-to-use online platform where you can place public notices, and access your proofs, invoices and affidavits.



On June 21, 2024 at 10:41 AM PDT shauna.cunningham@capjournal.com wrote:

Please schedule for the Madison Daily Leader.

----- Forwarded message -----

From: Rita Fuerst <rita@madisondailyleader.com>

Date: Fri, Jun 21, 2024 at 12:36 PM

Subject: Fwd: 8864-3 Big Sioux Community Water System - Public Notice

To: Shauna Cunningham <shauna.cunningham@capjournal.com>

Thanks and have a great weekend!

----- Forwarded message -----

From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>

Date: Fri, Jun 21, 2024 at 11:18 AM

Subject: 8864-3 Big Sioux Community Water System - Public Notice

To: ads@madisondailyleader.com <ads@madisondailyleader.com>

Attached is a notice to be published on June 28, 2024.

Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024, 605-997-2098, has been notified to contact you to authorize publication and arrange for payment.

Account Number:	1464995
Customer Name:	Big Sioux Community Water System
Customer Address:	Big Sioux Community Water System 23343 479Th AVE Egan SD 57024-6438
Contact Name:	Rachel Rodriguez
Contact Phone:	(605) 773-3212
Contact Email:	rachel.rodriguez@state.sd.us
PO Number:	

Date:	06/21/2024
Order Number:	10311843
Prepayment Amount:	\$ 0.00

Column Count:	1.0000
Line Count:	178.0000
Height in Inches:	0.0000

Print

Product	#Insertions	Start - End	Category
SFA SiouxFalls Argus Leader	1	06/28/2024 - 06/28/2024	Public Notices
SFA argusleader.com	1	06/28/2024 - 06/28/2024	Public Notices

Total Cash Order Confirmation Amount Due	\$61.62
Tax Amount	\$0.00
Service Fee 3.99%	\$2.46
Cash/Check/ACH Discount	-\$2.46
Payment Amount by Cash/Check/ACH	\$61.62
Payment Amount by Credit Card	\$64.08

As an incentive for customers, we provide a discount off the total order cost equal to the 3.99% service fee if you pay with Cash/Check/ACH. Pay by Cash/Check/ACH and save!

Order Confirmation Amount	\$61.62
---------------------------	---------

Rodriguez, Rachel

From: Gannett Legals Public Notices 4 <ganlegpubnotices4@gannett.com>
Sent: Friday, June 21, 2024 5:04 PM
To: Rodriguez, Rachel
Subject: RE: [EXT] 10311843 8864-3 Big Sioux Community Water System - Public Notice
Attachments: 10311843.pdf

Good Afternoon,

Please find your order confirmation and proof of ad attached.

Your ad is set to run in the Argus Leader on June 28. The order cost is \$61.62 which includes an affidavit, that will be mailed to you 7-10 business days after the last day of the ad printing.

All orders are subject to a 3.99% service fee. As an incentive for customers, we provide a discount off the order cost equal to the 3.99% service fee if you pay with ACH. Pay by ACH and Save!

Final order cost provided at time of payment and via a receipt.

Your notice is scheduled to run per your request and will publish unless you reply to this email requesting changes or to cancel.

If you would like to utilize our online self-serve ad portal to place your legal notices in the future, please visit your local publication's online classifieds legal section. There, you can conveniently submit and immediately preview your notices anytime, 24/7.

Thank you!

Brittany Grady
Public Notice Representative



Office: 844-254-5287

From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Sent: Friday, June 21, 2024 11:19 AM
To: SFA-Legals mbx <allegals@gannett.com>
Subject: 10311843 8864-3 Big Sioux Community Water System - Public Notice

Attached is a notice to be published on June 28, 2024.

Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024, 605-997-2098, has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. **Please acknowledge receipt of this email.**

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, June 21, 2024 11:19 AM
To: ads@madisondailyleader.com
Subject: 8864-3 Big Sioux Community Water System - Public Notice
Attachments: 8864-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on June 28, 2024.

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Let me know if you have questions. **Please acknowledge receipt of this email.**

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, June 21, 2024 11:19 AM
To: legals@argusleader.com
Subject: 8864-3 Big Sioux Community Water System - Public Notice
Attachments: 8864-3 public.short_final.docx; FORM8.FRM.doc

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Let me know if you have questions. **Please acknowledge receipt of this email.**

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





South Dakota

PO Box 630567 Cincinnati, OH 45263-0567

GANNETT

AFFIDAVIT OF PUBLICATION

Water Rights Program
Water Rights Program
523 E Capitol Ave
Pierre SD 57501

STATE OF WISCONSIN, COUNTY OF BROWN

The Argus Leader, a daily newspaper published in the city of Sioux Falls, Minnehaha County, State of South Dakota, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

06/28/2024

and that the fees charged are legal.

Sworn to and subscribed before on 06/28/2024

Legal Clerk

Notary, State of WI, County of Brown

My commission expires

Publication Cost: \$61.62

Tax Amount: \$0.00

Payment Cost: \$61.62

Order No: 10311843

Customer No: 1464995

PO #:

of Copies:

1

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

RYAN SPELLER
Notary Public
State of Wisconsin

NOTICE OF
APPLICATION NO. 8864-3
to Withdraw Water from
Future Use Permit Nos.
6834-3 and 6834A-3

Notice is given that Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024 has filed an application for a water permit to construct and place to beneficial use 300 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well (77.5 feet deep) to be completed into the Big Sioux Northern Skunk Creek Aquifer located in the NE 1/4 SW 1/4 Section 16 -T105N-R51W for rural water system use. Water service will be provided to the Dakota Ethanol facility located in the W 1/2 NE 1/4 section 21-T106N-R51W. This water was appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3. If this application is approved, there will be zero acre-feet remaining in reserve in Future Use Permit Nos. 6834-3 and 6834A-3. The proposed well site is located approximately seven miles south of Wentworth SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8864-3 because 1) Future Use Permit Nos. 6834-3 and 6834A-3 reserved the water for future use by Big Sioux Community Water System, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. 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.

Any person interested in opposing this application or recommendation 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 July 9, 2024.

The petition 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.

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 July 9, 2024.

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 recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of \$61.62 and may be viewed free of charge at www.sdpublicnotices.com.

AFFIDAVIT OF PUBLICATION

State of Pennsylvania, County of Lancaster, ss:

Hayden Lipsky, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Madison Daily Leader, a newspaper printed and published in the City of Madison, County of Lake, State of South Dakota, and that this affidavit is Page 1 of 2 with the full text of the sworn-to notice set forth on the pages that follow, and the hereto attached.

The advertisement headed

8864-3 Big Sioux Community Water System
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:

PUBLICATION DATES:

Jun. 28, 2024

NOTICE ID: Nle8zKfEwTQFnysZaT4T

PUBLISHER ID: MDL000364

NOTICE NAME: 8864-3 Big Sioux Community Water System

That \$48.64 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.

(Signed) Hayden Lipsky

VERIFICATION

State of Pennsylvania
County of Lancaster

Commonwealth of Pennsylvania - Notary Seal
Nicole Burkholder, Notary Public
Lancaster County
My commission expires March 30, 2027
Commission Number 1342120

Subscribed in my presence and sworn to before me on this: 07/02/2024

Nicole Burkholder

Notary Public

Notarized remotely online using communication technology via Proof.

PUBLIC NOTICE

NOTICE OF APPLICATION NO.
8864-3 to Withdraw Water from
Future Use Permit Nos. 6834-3 and
6834A-3

Notice is given that Big Sioux Community Water System, 23343 479th Avenue, Egan SD 57024 has filed an application for a water permit to construct and place to beneficial use 300 acre-feet of water annually at a maximum pump rate of 0.67 cubic feet of water per second from one well (77.5 feet deep) to be completed into the Big Sioux Northern Skunk Creek Aquifer located in the NE 1/4 SW 1/4 Section 16 -T105N-R51W for rural water system use. Water service will be provided to the Dakota Ethanol facility located in the W 1/2 NE 1/4 section 21-T106N-R51W. This water was appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3. If this application is approved, there will be zero acre-feet remaining in reserve in Future Use Permit Nos. 6834-3 and 6834A-3. The proposed well site is located approximately seven miles south of Wentworth SD.

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Any person interested in opposing this application or recommendation 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 July 9, 2024.

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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 recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of
Published Jun 28, 2024 at the total approximate cost of \$48.64 and may be viewed free of charge at www.sd-publicnotices.com

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Monday, June 24, 2024 8:23 AM
To: bigsioux@bigsiouxews.com; Jodi Johanson
Subject: 8864-3 Big Sioux Community Water System - Public Notice
Attachments: 8864-3 Rec.pdf; 8864-3 Letter.pdf; 8864-3 PubNotice.pdf; Invoice_MadisonDailyLeader.pdf; Invoice ArgusLeader.pdf

Good morning,

Attached is a copy of the report, chief engineer's recommendation, and information regarding the public notice for your water permit application. As stated in the letter, **please contact the paper(s) as soon as possible to authorize publication and arrange for payment.** This information is also being mailed to you today.

Let me know if you have questions. Please acknowledge receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

Petition

Opposing Application for a Water Right Permit

Application No. 8864-3 Name of Applicant Rita Brown (Alan & Rita Brown Trust)

The Application No. and applicant's name can be found in the public notice at <https://danr.sd.gov/public>.

Note. According to South Dakota Codified Law section 46-2A-4(5), all the following information is required.

Describe the unique injury approval of this application will have upon you.

Because water in the Big Sioux Northern Skunk Creek Aquifer is recharged primarily through infiltration of precipitation and snowmelt, it has been a common occurrence, especially in years of drought, that water is being used faster than it can be replenished thus creating a cone of depression. As a result, our ability to irrigate cropland has been negatively impacted. Approving this application will further exacerbate the situation.

This concern is supported by the Chief Engineer who reports, "based on the hydrologic budget, the estimated average annual withdrawal rate from the aquifer exceeds the estimated average annual recharge rate."

Furthermore, drawdown behavior of observation wells because of close proximity to high-capacity wells may (see below)

List the reasons for your opposition to this application.

indicate what might be expected with surrounding irrigation wells. However, the exact drawdown behavior of a well cannot be determined without an aquifer performance test which should have been done so one has pertinent information to rely on when making critical decisions involving water.

The production of ethanol is a water intensive process. Prior to this application, Dakota Ethanol was consuming up to 384 million gallons of water annually. The additional use of up to 97,755,300 gallons of water is concerning, especially when their use is in direct competition with those who have invested in irrigating cropland as well as those who have built businesses and homes in the many developments around lakes Brant, Round, Long, Madison, and Herman. Sustainability should include all stakeholders, not just the ethanol industry.

The water permit application does not require the applicant to provide a statement of beneficial water use, I am concerned that the proposed addition of CCS to the Dakota Ethanol plant is the reason for the increased need for water. To understand the gravity of the additional water use, it is important to consider the impact of the entire project on SD water resources. The SD Corn Growers 2023 Annual Report discloses that 1.4 billion gallons of ethanol is produced each year in SD. It takes approximately 3 gallons of water to produce a gallon of ethanol. ($1.4 \times 3 = 4.2$ billion gallons of water annually for ethanol production). CCS requires an additional 15% more water ($4.2 \text{ BG (billion gallons)} \times .15 = .63 \text{ BG}$). Therefore, current water uses per year with the addition of CCS is ($4.2 \text{ BG} + .63 \text{ BG} = 4.83 \text{ BG}$). Bruce Rastetter, Summit Carbon Solutions, has said that all of the plants signed up for this project have engineering plans being drawn up to grow by 25%. (continued next page)

Provide name and mailing address of the person filing this petition or the petitioner's legal counsel.

First Name: Ria Last Name: Brown

Mailing Address: PO Box 217

City: Chester State: SD Zip: 57016

Optional contact information. Phone: _____ Email: brownar@itctel.com

Note. This petition needs to be submitted via mail or personally served upon Water Rights no later than the deadline date provided in the public notice. The mailing address is provided above and should be sent to "Attention - Water Rights Program." A copy of this petition also needs to be mailed to, or personally served upon, the applicant whose mailing address is provided in the public notice.

RECEIVED

JUL 08 2024

OFFICE OF
WATER

Application No. 8864-3

Petitioner's Name Rita Brown

Any additional description of the unique injury or reasons for opposing this application:

(4.83BG X .25 = 1.21 BG), then (4.83 BG + 1.21 BG = 6.038 BG - the approximate amount of water needed by SD ethanol plants with carbon capture technology per year. Now add to that another 300 million gallons of water annually for Gevo's jet fuel production (6.038 MG + 300 million gallons = 6.338 BG of water annually. The sole purpose of sharing these statistics is to demonstrate the importance of looking at the entirety of Summit Carbon Solution's project, rather than one small facet (Dakota Ethanol), in order to understand the enormity of the impact this project will have on the water footprint of the entire state.

I suggest that DANR provide greater transparency in water permit applications by including the extent to which the water will be used, evidence that uses are in the public interest or of beneficial use, and an elaboration of all parties who will be using the water.

Knowing that the approval of Future Use Permit No. 6834-3 and 6834A-3 means there will be zero acre-feet remaining in reserve is concerning. Communities relying on Big Sioux Rural Water service may be at risk of being in a near emergency situation as was experienced last summer when there was an obvious water shortage. We did not have water to irrigate at the most critical time of the growing season, which greatly impacted crop yields. Please consider implementing a plan for current and future protection of SD water resources with procedures that address correction or mitigation of such things as environmental accidents, system security breaches and water system failures.

At one time the DANR website included the motto: Protect SD's tomorrow --- today. The state is required to ensure sustainable and equitable use of water for current and future generations. With this petition, I am simply urging you keep this motto in mind when making decisions about SD natural resources. These assets are not infinite and should not be treated as though they are unlimited.

RECEIVED

JUL 08 2024

OFFICE OF
WATER



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

March 12, 2025

NOTICE OF ENTRY OF ORDER

TO: Big Sioux Community Water System Reed T. Mahlke, Attorney for Big Sioux Community
c/o Jodi Johanson, Manager Water System
23343 479th Avenue Helsper, McCarty & Rasmussen P.C.
Egan SD 57024 1441 Sixth Street, Suite 200
Brookings, SD 57006

Rita Brown Ryan D. Cwach, Attorney for Rita Brown
PO Box 217 Birmingham & Cwach Law Offices, PLLC
Chester SD 57016 202 West 2nd Street
Yankton SD 57078

Brian E. Jorde, Attorney for Rita Brown Jennifer L. Verleger, Assistant Attorney General
DominaLaw Group pc llo 1302 East Highway 14, Suite 1
2425 South 144th Street Pierre SD 57501
Omaha NE 68144

FROM: Amanda Dewell, Permitting Administrator 
SD DANR, Water Rights Program

SUBJECT: Notice of Entry of Order concerning Adoption Findings of Fact, Conclusions of Law and Final
Decision in the matter of Water Permit Application No. 8864-3, Big Sioux Community Water
System

Notice is hereby given that on the 5th day of March 2025, the South Dakota Water Management Board entered its Findings of Fact, Conclusions of Law, and Final Decision in the above-entitled matter. Enclosed is the signed Findings of Fact, Conclusions of Law and Final Decision adopted by the Board.

South Dakota statutes provide that decisions of the Board may be appealed to the Courts. Notice of appeal of the Board's decision must be filed within thirty days of this notice and be in accordance with procedures established in SDCL 1-26-31.

enclosure

c: David McVey, Water Management Board Counsel

CERTIFICATION

The undersigned hereby certifies under the penalty of perjury that a true and correct copy of a Notice of Entry of Order dated March 12, 2025, and a signed copy of the findings of fact, conclusions of law and a final decision in the matter of Water Permit Application No. 8864-3 – Big Sioux Community Water System, was served upon the following by enclosing the same in envelopes with first class postage prepaid and affixed thereto, and depositing said envelopes in the United States mail on March 12, 2025.

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Reed T. Mahlke, Attorney
Helsper, McCarty & Rasmussen P.C.
1441 Sixth Street, Suite 200
Brookings, SD 57006

Rita Brown
PO Box 217
Chester SD 57016

Ryan D. Cwach, Attorney
Birmingham & Cwach Law Offices, PLLC
202 West 2nd Street
Yankton SD 57078

Brian E. Jorde, Attorney
DominaLaw Group pc llo
2425 South 144th Street
Omaha NE 68144

Above also Sent Inter-office to:

Jennifer L. Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501

David McVey, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501



Shannon Konst
Water Rights Program, DANR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 11th day of March, 20 25.


Rachel Rodriguez
Notary Public
My Commission expires May 16, 2029



STATE OF SOUTH DAKOTA
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

IN THE MATTER OF WATER PERMIT)	FINDINGS OF FACT,
APPLICATION NO. 8864-3,)	CONCLUSIONS OF LAW, AND
BIG SIOUX COMMUNITY)	FINAL DECISION
WATER SYSTEM)	

This matter came before the South Dakota Water Management Board (Board) for hearing on December 4, 2024. Board members James Hutmacher, William Larson, Rodney Freeman, Chad Comes, and Leo Holzbauer attended the hearing and heard the evidence presented. Jennifer L. Verleger represented the Department of Agriculture and Natural Resources (DANR) Water Rights Program and the Chief Engineer. Reed T. Mahlke represented Applicant Big Sioux Community Water System. Ryan D. Cwach and Brian E. Jorde represented Petitioner Rita Brown.

Exhibits 100-107, and Exhibit A were offered without objection and accepted into the record. Exhibit 108 was offered and not received. Having considered the testimony and exhibits presented, the Board enters the following:

A. FINDINGS OF FACT

1. On April 2, 2024, the Water Rights Program received Water Permit Application No. 8864-3 from Jodi Johanson, Manager of the Big Sioux Community Water System.

2. The Application proposes to construct and place to beneficial use up to 300 acre-feet of water annually at a maximum instantaneous diversion rate of 0.67 cubic feet per second (cfs) from one well completed in the Big Sioux: Northern Skunk Creek aquifer located in the NE¼ SW¼ of Section 16, Township 105 North, Range 51 West, Lake County, approximately seven miles south of Wentworth, SD.

3. The proposed water use is rural water system use.

4. The water was previously appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3.

5. The Chief Engineer recommended approval of Application No. 8864-3 with several conditions.

6. Notice of Water Permit Application No. 8864-3 was timely advertised in the Argus Leader and Madison Daily Leader on June 28, 2024. Notice was also posted on DANR's public notices website.

7. MeLisa Elijah submitted a comment on the Application on July 1, 2024. Rita Brown submitted a petition on behalf of the Alan and Rita Brown Trust on July 8, 2024, opposing the Application. All comments and petitions were timely received.

8. A Notice of Hearing was issued July 18, 2024, for a hearing dated October 2, 2024.

9. A request for an automatic delay under SDCL § 46-2A-5 was sent on July 29, 2024.

10. A revised Notice of Hearing was issued October 24, 2024, for a hearing dated December 4, 2024.

11. Water Permit Application No. 8864-3 proposes to place water to beneficial use that has already been reserved under Future Water Use Permit Nos. 6834-3 and 6834A-3.

12. A water permit application requires an analysis pursuant to SDCL § 46-2A-9 to determine whether: 1) there is a reasonable probability that unappropriated water is available for the proposed use, 2) the proposed use would impair existing domestic water uses and water rights, 3) the proposed use would be a beneficial use, and 4) the proposed use is in the public interest pertaining to matters of public interest within the regulatory authority of the Board.

Adam Mathiowetz

13. Austin Settje and Adam Mathiowetz, Natural Resources Engineers with the Water Rights Program, performed a technical review of the Application and prepared a report. Exhibit 101. Mr. Mathiowetz provided expert testimony to the Board regarding the Application's technical review.

14. Because this water use was previously reserved, the water has already been accounted for in the aquifer's hydrologic budget.

15. Mr. Mathiowetz's testimony primarily explained how the hydrologic budget and the observation well data, in combination, indicate there is a reasonable probability that unappropriated water is available even though the

water was previously appropriated by Future Water Use Permit Nos. 6834-3 and 6834A-3.

16. Mr. Mathiowetz's testimony also explained the aquifer characteristics in the area and discussed the impact the permitted use would have on known surrounding wells.

17. The technical review concluded that there is a reasonable probability that unappropriated water is available for the proposed use and that there is a reasonable probability that the proposed use would not impair existing domestic water uses or water rights with adequate wells.

18. The Board finds Mr. Mathiowetz to be a credible expert witness and that these Findings of Fact are supported by the evidence presented, including Mr. Mathiowetz's testimony and the reports and exhibits he prepared and relied upon.

Eric Gronlund

19. Eric Gronlund, the Chief Engineer, provided a recommendation to approve the Application with conditions. Exhibit 105. Mr. Gronlund provided expert testimony to the Board regarding the Application's beneficial use and public interest factors.

20. Mr. Gronlund testified that the Applicant's proposed beneficial use is rural water system use. He testified that past Board decisions and actions indicate that rural water system use is in the public interest.

21. Mr. Gronlund also noted that he had reviewed the petition and comment for this matter and that generally the concerns were regarding nearby

water levels, the potential for over-appropriation, and the quantity of water for the proposed purpose.

22. Mr. Gronlund indicated that for permitting purposes, the beneficial use of the permit is to provide water to the rural water system and that the end users the system chooses to serve within its boundaries are its own prerogative.

23. The Board finds Mr. Gronlund to be a credible expert witness and that these Findings of Fact are supported by the evidence presented, including Mr. Gronlund's testimony and the reports and exhibits he prepared and relied upon.

Jeff Carruthers

24. Mr. Jeff Carruthers is a Water Operator for the Big Sioux Community Water System. Mr. Carruthers testified about the geographical service area of the system and general water use of the system.

25. Mr. Carruthers testified that the Big Sioux Community Water System intends to use the water authorized by this application to provide additional water to an ethanol plant (Dakota Ethanol).

26. The Board finds Mr. Carruthers to be a credible witness and that these Findings of Fact are supported by the evidence presented.

Rita Brown

27. Petitioner Rita Brown is a concerned landowner in the area of the proposed application. Ms. Brown is also a shareholder of Dakota Ethanol.

28. Ms. Brown testified that she is concerned about the amount of water being used for ethanol plants in general and the cumulative effect that water use will have on agriculture.

29. Ms. Brown installed a new irrigation system and new well in 2018, and testified that she cannot maintain water pressure in that system throughout the year. Ms. Brown does not know the depth of the well or the pump inlet depth. Ms. Brown testified that she has never made a complaint to DANR or the Water Rights Program regarding problems with her well system.

30. Ms. Brown testified that “public interest,” in her opinion, “means farmers who need to irrigate to produce a good crop to sell to the corn to the ethanol plant have sufficient water to irrigate. It means people that feed livestock have sufficient water. It means food, fuel.”

31. Ms. Brown testified that “beneficial use,” in her opinion, means growing crops and feeding animals. Ms. Brown does not believe cooling a compression line qualifies. Ms. Brown does not believe additional water for the ethanol plant is a beneficial use.

32. Ms. Brown does not believe that serving Dakota Ethanol is the best utilization of water supplies and that allowing them to use more water is not consistent with the interests of the public.

33. The Board finds Ms. Brown to be a credible witness and that these Findings of Fact are supported by the evidence presented.

34. Any finding of fact more properly designated as a conclusion of law will be treated accordingly.

35. The Board finds that the testimony clearly shows that water is available.

36. The Board finds that there will not be impairment.

37. The Board finds that water provided by rural water systems to service connections is a beneficial use of water and is in the public interest.

38. The Board finds that water used for industrial purposes, specifically ethanol plants, is also considered a beneficial use and serves the public interest.

39. Mrs. Brown testified her existing irrigation water well is reliant on the Northern Skunk Creek Aquifer. In the last few years, her existing irrigation water well has had difficulty producing water. Mrs. Brown's crop yields have decreased due to the inability to irrigate consistently out of the aquifer. Mrs. Brown testified that neighboring farmers are also experiencing this issue.

B. PETITIONER'S ALTERNATIVE PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Water Rights filed Proposed Findings of Fact and Conclusions of Law and the Petitioner filed proposed alternate findings and conclusions. In compliance with SDCL § 1-26-25, Petitioner's Proposed Findings of Fact and Conclusions of Law are accepted, modified, or rejected as follows:

1. PROPOSED ALTERNATIVE FINDINGS OF FACT (Proposed Findings)

A. Paragraphs 1 through 7, 9, the first sentence of Proposed Finding 10, 13, and 18 of Petitioner's proposed findings are

noted but not incorporated as they are duplicative.

B. Proposed findings 8, 11, 14, 15 through 17, 19 through 22, 24, and 40 are rejected as it is irrelevant.

C. The second sentence of Proposed Finding 10 is rejected as it is inconsistent with the testimony provided.

D. Proposed Findings 12 and 25 are rejected as an incomplete statement of the documentary and testimonial evidence presented at the hearing and is less accurate than the Proposed Findings of Fact submitted by the Water Rights Program.

E. Proposed Finding 23 is accepted and incorporated as Finding 39.

2. PROPOSED ALTERNATIVE CONCLUSIONS OF LAW

A. Proposed Conclusions of Law 26 through 30, 33, 37, and 42 are noted but not incorporated as they are duplicative.

B. Proposed Conclusions 31 and 39 are rejected as irrelevant.

C. Proposed Conclusions 32, 34, 35, 36, 38, 40, and 43 are rejected as they are inconsistent with the documentary and testimonial evidence presented at the hearing.

D. Proposed Conclusions 41 and 44 are rejected as they assume facts not in evidence.

On January 22, 2025, as set forth in the Certificate of Service, Petitioner filed objections to Water Right's proposed Findings of Fact and Conclusions of Law. On December 10, 2024, notice was served on the parties that "Written objections or comments in support of the proposed Findings of Fact, Conclusions of Law and Final Decision, or alternative Findings of Fact, Conclusions of Law, and Final Decision are to be mailed counsel for both the Board and the Water Rights Program, and other parties by January 21, 2025." Petitioner's objections to Water Right's proposed Findings of Fact and Conclusions of Law were not timely filed and, as such, are not further addressed herein.

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 with the conditions outlined in his recommended decision. The recommendation, however, is not 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. Any conclusion of law more properly designated as a finding of fact will be treated accordingly.

FINAL DECISION

Based on the foregoing Findings of Fact and Conclusions of Law, the Board enters its determination that Water Permit Application No. 8864-3 is granted with the following qualifications:

1. The well approved under Water Permit No. 8864-3 is located near domestic wells and other wells that may obtain water from the same aquifer. Water withdrawals must 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 well authorized by Permit No. 8864-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must 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. The Permit holder must report to the Chief Engineer annually the amount of water withdrawn from the Northern Skunk Creek Management Unit of the Big Sioux aquifer.

4. Water Permit No. 8864-3 authorizes a total annual diversion of up to 300 acre-feet of water from the Northern Skunk Creek Management Unit of the Big Sioux aquifer.

Dated this 5th day of March 2025.

BY THE BOARD:

Jim Hutmacher

Jim Hutmacher (Mar 11, 2025 09:26 CDT)

South Dakota Water Management Board



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

July 18, 2024

NOTICE OF HEARING

TO: Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Rita Brown
PO Box 217
Chester SD 57016

Jennifer Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501-8501

FROM: Amanda Dewell, Water Rights Permitting Administrator
SD DANR, Water Rights Program

SUBJECT: Notice of Hearing on Water Permit Application No. 8864-3, Big Sioux Community Water System

A petition opposing Water Permit Application No. 8864-3 was received by the Chief Engineer on July 8, 2024, in response to the Notice of Application published in the Argus Leader & Madison Daily Leader on June 28, 2024. This notice schedules a hearing on Application No. 8864-3 before the South Dakota Water Management Board.

Water Permit Application No. 8864-3 is to place to beneficial use 300 acre-feet annually, at maximum rate of 0.67 cubic feet of water per second, from one new well to be completed into the Northern Skunk Creek Management Unit of the Big Sioux Aquifer, located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16, T105N-R51W, for rural water system use in serving the Dakota Ethanol facility. The water being placed to beneficial use was reserved by Future Use Permit Nos. 6834-3 & 6834A-3.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends approval of Application No. 8864-3 with qualifications because 1) Future Use Permit Nos. 6834-3 & 6834A-3 reserved the water for future use by Big Sioux Community Water System, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board.

The Water Management Board will conduct a hearing to consider Application No. 8864-3 at 10:00 AM (Central Time), on Wednesday, October 2, 2024, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. The time is an estimate and may be delayed due to prior items on the agenda. Notice will be provided if there is a change in the time or date of the hearing.

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 the application after it reaches a conclusion based on the facts presented at the public hearing.

Notice of Hearing – Application No. 8864-3

The October 2, 2024, 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 opposing the application. A request for an automatic delay must be filed by **July 29, 2024**. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol Ave, Pierre SD 57501." 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 the petitioner regarding the time, date, and location.

The hearing is an adversary proceeding and any party has the right to be present at the hearing and may be represented by legal counsel. An individual may represent themselves pro se. As a legal entity, the Big Sioux Community Water System is required to be represented by legal counsel in this administrative proceeding. If interests of the Alan and Rita Brown Trust are represented, then legal counsel is also needed to represent the Trust. These and other due process rights will be forfeited if they are not exercised at the hearing. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

Enclosed is a copy of the report, recommendation, and the petition filed in the matter of Water Permit Application No. 8864-3. State law directs the Chief Engineer to provide Water Management Board members with a copy of all pleadings including petitions or comments for each proceeding. The information being provided to you is also being sent to the Board members in advance of the hearing. Notices, orders, other pleadings, and comments filed in this matter are posted on DANR's contested case page at <https://danr.sd.gov/public/ContestedCase.aspx>. In addition, enclosed are two documents intended to acquaint parties with the hearing process entitled "Procedure for Hearings before the Water Management Board" and "Summary of South Dakota Water Laws and Rules." If you intend to participate in the hearing, you are encouraged to review these documents prior to the hearing.

Contact Amanda Dewell at the above Chief Engineer's address to request an additional copy of the staff report, recommendation, application, or other information related to the application. 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 Walsh, Nondiscrimination Coordinator, by calling (605) 773-5559 or by email at Brian.Walsh@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.

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 direct mail to you, and the applicable date to give notice to the Chief Engineer is July 29, 2024. The Chief Engineer asserts this hearing pertains to a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right.

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; Board Rules ARSD 74:02:01:01 thru 74:02:01:24.02 and ARSD Chapter 74:02:04.

Questions regarding the hearing process may be directed to Amanda Dewell (amanda.dewell@state.sd.us) or Ron Duvall (ron.duvall@state.sd.us), Water Rights Program at (605) 773-3352.

CERTIFICATION

The undersigned hereby certifies under the penalty of perjury that a true and correct copy of a Notice of Hearing dated July 18, 2024, with attachments regarding Water Permit Application No. 8864-3 – Big Sioux Community Water System, was served upon the following by enclosing the same in envelopes with first class postage prepaid, and depositing said envelopes in the United States mail on July 18, 2024.

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Rita Brown
PO Box 217
Chester SD 57016

Above also Sent Inter-office to:

Jennifer Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501-8501

Shannon Cox

Shannon Konst
Water Rights Program, DANR

[illegible]

Sworn to, before me, this 18th day of July, 2024.

Rachel Rodriguez
Notary Public
My Commission expires May 16, 2029





July 29, 2024

TO: Chief Engineer
SD Dept. of Agriculture and Natural Resources
Water Rights Program
Foss Building
523 E. Capitol Avenue
Pierre, SD 57501

FROM: Rita Brown
Alan & Rita Brown Trust
PO Box 217
Chester, SD 57016

SUBJECT: Request to delay October 2, 2024 hearing on Water Permit Application No. 8864-3, Big Sioux
Community Water System



RECEIVED

AUG 01 2024

OFFICE OF
WATER



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

August 5, 2024

NOTICE

TO: Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Rita Brown
PO Box 217
Chester SD 57016

Jennifer Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501-8501

FROM: Ron Duvall, Engineer III
SD DANR, Water Rights Program

SUBJECT: Automatic Delay of Hearing on Water Permit Application No. 8864-3, Big Sioux
Community Water System

A petition opposing Water Permit Application No. 8864-3 was received by the Chief Engineer on July 8, 2024, in response to the Notice of Application published in the Argus Leader & Madison Daily Leader on June 28, 2024. In response to the petition, a Notice of Hearing dated July 18, 2024, was sent to the applicant and petitioner scheduling a hearing for October 2, 2024, to be held by the South Dakota Water Management Board.

In response to the July 18, 2024 Notice of Hearing, Rita Brown, the petitioner, filed a request to delay the October 2, 2024 hearing date. The request for a delay (copy enclosed) was dated and postmarked July 29, 2024, meeting the July 29, 2024 filing deadline to request an automatic delay of the hearing. Pursuant to SDCL 46-2A-5 and the Notice of Hearing dated July 18, 2024, this is written notice to the chief engineer requesting an automatic delay of the October 2, 2024 hearing date. Therefore, the hearing on Application No. 8864-3 is automatically delayed pursuant to SDCL 46-2A-5 and 46-2A-23 and will NOT be held on October 2, 2024.

The hearing to consider Application No. 8864-3 is now tentatively to be held at the December 4 and 5, 2024 Water Management Board meeting. The Board will formalize the December 2024 meeting dates at the October 2, 2024 meeting. Future notice of the time and place of the hearing for Application No. 8864-3 will be provided to the applicant and petitioner.

Notices, orders, and other pleadings filed in the matter of Water Permit Application No. 8864-3 are posted on DANR's contested case page at <https://danr.sd.gov/public/ContestedCase.aspx>.

Questions regarding the hearing process may be directed to Amanda Dewell (amanda.dewell@state.sd.us) or Ron Duvall (ron.duvall@state.sd.us), Water Rights Program at (605) 773-3352.

CERTIFICATION

The undersigned hereby certifies under the penalty of perjury that a true and correct copy of a Notice dated August 5, 2024, regarding an automatic delay of the hearing concerning Water Permit Application No. 8864-3 – Big Sioux Community Water System, with an attachment, was served upon the following by enclosing the same in envelopes with first class postage prepaid, and depositing said envelopes in the United States mail on August 5, 2024.

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Rita Brown
PO Box 217
Chester SD 57016

Above also Sent Inter-office to:

Jennifer Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501-8501



Ron Duvall
Water Rights Program, SD DANR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 5th day of August, 2024.



Rachel Rodriguez
Notary Public
My Commission expires May 16, 2029





Birmingham & Cwach

LAW OFFICES, PROF. LLC

PATRICK J. BIRMINGHAM
OF COUNSEL

RYAN D. CWACH
COUNSEL LICENSED IN NEBRASKA &
SOUTH DAKOTA

MALLORY K. SCHULTE
COUNSEL LICENSED IN NEBRASKA &
SOUTH DAKOTA

November 25, 2024

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Ave.
Egan, SD 57024

Jennifer Verlerger, Assistant Attorney General
1302 E. Highway 14, Ste. 1
Pierre, SD 57501-8501

Water Rights Program
Foss Building
523 E. Capitol Ave.
Pierre SD 57501

RE: DANR BWM App. No. 8864-3

All:

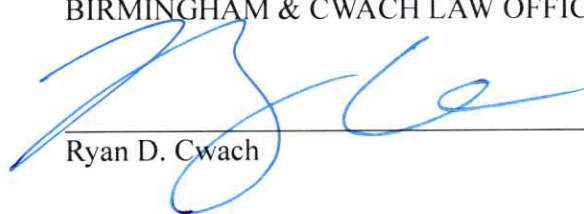
Please find enclosed the following documents relating to the above referenced application:

1. Notice of Appearance of Ryan Cwach on behalf of Rita Brown
2. Motion for Pro Hac Vice Admission of Brian Jorde
3. Affidavit of Brian Jorde
4. Certificate of Service
5. Proposed Order for Admission of Brian Jorde

Please contact me if you have any comments or questions.

Very Truly,

BIRMINGHAM & CWACH LAW OFFICES, PLLC



Ryan D. Cwach

Enc.

Cc: Brian Jorde, *via email*

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NOV 27 2024

OFFICE OF
WATER

STATE OF SOUTH DAKOTA

CIRCUIT COURT

COUNTY OF HUGHES

SIXTH JUDICIAL CIRCUIT

BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

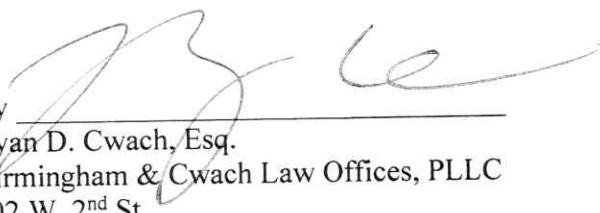
IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM

APP. NO. 8864-3

NOTICE OF APPEARANCE
RYAN D. CWACH

Please take notice that the undersigned Ryan D. Cwach is appearing in the above-captioned case as counsel for objector Rita Brown.

Dated this 25th day of November 2024.

By 
Ryan D. Cwach, Esq.
Birmingham & Cwach Law Offices, PLLC
202 W. 2nd St.
Yankton, SD 57078
Phone: 605 260 4747
ryan@birmcwachlaw.com

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STATE OF SOUTH DAKOTA

CIRCUIT COURT

COUNTY OF HUGHES

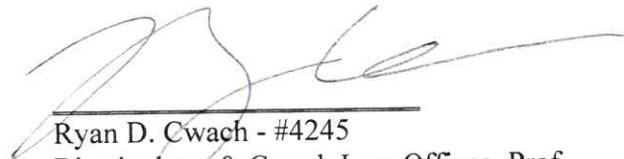
SIXTH JUDICIAL CIRCUIT

BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM

APP. NO. 8864-3
CERTIFICATE OF SERVICE

I certify to this Court in writing, that on November 25, 2024, I gave notice through first class mail or email if indicated below to the Interested Parties listed below of my Notice of Appearance.



Ryan D. Cwach - #4245
Birmingham & Cwach Law Offices, Prof.
LLC
202 W. 2nd St.
Yankton, SD 57078
605-260-4747
ryan@birmcwachlaw.com

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Ave.
Egan, SD 57024

Jennifer Verlerger, Assistant Attorney General
1302 E. Highway 14, Ste. 1
Pierre, SD 57501-8501

Water Rights Program
Foss Building
523 E. Capitol Ave.
Pierre SD 57501

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STATE OF SOUTH DAKOTA

CIRCUIT COURT

COUNTY OF HUGHES

SIXTH JUDICIAL CIRCUIT

BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM

APP. NO. 8864-3

MOTION FOR ADMISSION
PRO HAC VICE
FOR BRIAN E. JORDE

1. Pursuant to SDCL 16-18-2 and other provisions of law, Ryan D. Cwach, of Birmingham & Cwach Law Offices, PLLC, and hereby moves for the admission of Brian E. Jorde to participate in this action *pro hac vice* on behalf of Rita Brown in the South Dakota Department of Agriculture and Natural Resources Board of Water Management ("BWM") App. No. 8864-3.

2. I am a resident of South Dakota and a member in good standing of the State Bar of South Dakota. My office address is 202 W. 2nd St., Yankton, SD 57078. I am actually associated with and will personally participate with Mr. Jorde in this action. I find Mr. Jorde to be reputable attorney and recommend their admission to practice before this Court. This motion is further supported by the Affidavit of Brian E. Jorde for *Pro Hac Vice* Admission, attached hereto and incorporated by reference.

3. Mr. Cwach respectfully requests that the Court enter an order allowing the admission of Brian E. Jorde *pro hac vice* to appear on behalf of and act as counsel with Ryan Cwach for Rita Brown in the BWM proceedings.

Dated this 25th day of November 2024.

By 
Ryan D. Cwach, Esq.
Birmingham & Cwach Law Offices, PLLC
202 W. 2nd St.
Yankton, SD 57078
Phone: 605 260 4747
ryan@birmcwachlaw.com

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WATER

STATE OF SOUTH DAKOTA

CIRCUIT COURT

COUNTY OF HUGHES

SIXTH JUDICIAL CIRCUIT

BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM

APP. NO. 8864-3
AFFIDAVIT OF BRIAN E. JORDE

STATE OF NEBRASKA)
 :ss.
COUNTY OF DOUGLAS)

Brian E. Jorde, being first duly sworn on oath, states:

1. Affiant seeks to be admitted pro hac vice in the above matter so that he can participate with Attorney Ryan Cwach who has been employed by Rita Brown. Affiant seeks to personally participate with Attorney Ryan Cwach on behalf of Rita Brown in the South Dakota Department of Agriculture and Natural Resources Board of Water Management ("BWM") App. No. 8864-3.

2. Affiant is associated with the law firm of DominaLaw Group pc llo, whose address is 2425 S. 144th St., Omaha, Nebraska 68144.

3. Affiant is a member in good standing of the bar of the State of Nebraska, Iowa, Wisconsin, and Michigan. Affiant has not been the subject of any disciplinary action by the bar or the courts of the State of Nebraska or any other state during the preceding five years.

4. Affiant has not been denied admission to the courts of any state or to any federal court during the preceding five years.

5. Affiant is familiar with the rules of the State Bar of South Dakota governing the conduct of members of the State Bar of South Dakota and will at all times abide and comply with those rules as long as such trial or hearing is pending until such time as he withdraws as counsel.

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WATER

6. Affiant's law firm has a South Dakota Sales and Use Tax License.

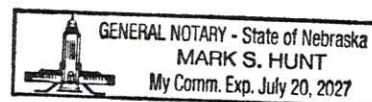


Brian E. Jorde

The foregoing instrument was acknowledged, subscribed, and sworn before me on
November 20, 2024 by Brian E. Jorde.



Notary Public



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WATER

STATE OF SOUTH DAKOTA

CIRCUIT COURT

COUNTY OF HUGHES

SIXTH JUDICIAL CIRCUIT

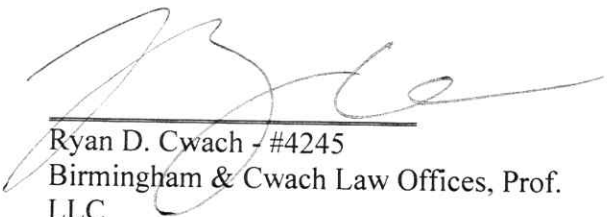
BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM

APP. NO. 8864-3

CERTIFICATE OF SERVICE

I certify to this Court in writing, that on November 25, 2024, I gave notice through first class mail or email if indicated below to the Interested Parties listed below of my motion for *pro hac vice* admission of Brian Jorde.



Ryan D. Cwach - #4245
Birmingham & Cwach Law Offices, Prof.
LLC
202 W. 2nd St.
Yankton, SD 57078
605-260-4747
ryan@birmcwachlaw.com

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Ave.
Egan, SD 57024

Jennifer Verlerger, Assistant Attorney General
1302 E. Highway 14, Ste. 1
Pierre, SD 57501-8501

Water Rights Program
Foss Building
523 E. Capitol Ave.
Pierre SD 57501

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WATER

STATE OF SOUTH DAKOTA

CIRCUIT COURT

COUNTY OF HUGHES

SIXTH JUDICIAL CIRCUIT

BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD

IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM

APP. NO. 8864-3

ORDER
PRO HAC VICE ADMISSION
BRIAN E. JORDE

Now on this ____ day of November 2024, Ryan D. Cwach's motion for pro hac vice admission of Brian E. Jorde for purposes of participating in all proceedings on behalf of Rita Brown in the Department of Agriculture and Natural Resources Water Management Board("PUC") Application No. 8864-3. The Court, having reviewed said motion and the affidavit of Brian E. Jorde, finds that the requirements of SDCL § 16-18-2 have been met.

It is hereby ORDERED that Brian E. Jorde shall be admitted to participate in all proceedings of this case pursuant to SDCL § 16-8-2.

Executed this ____ day of November 2024.

BY THE COURT:

RECEIVED

NOV 27 2024

OFFICE OF
WATER



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

December 10, 2024

NOTICE

TO: Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Reed T. Mahlke, Attorney for Big Sioux Community
Water System
Helsper, McCarty & Rasmussen P.C.
1441 Sixth Street, Suite 200
Brookings, SD 57006

Rita Brown
PO Box 217
Chester SD 57016

Ryan D. Cwach, Attorney for Rita Brown
Birmingham & Cwach Law Offices, PLLC
202 West 2nd Street
Yankton SD 57078

Brian E. Jorde, Attorney for Rita Brown
DominaLaw Group pc llo
2425 South 144th Street
Omaha NE 68144

Jennifer L. Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501

FROM: Amanda Dewell, Permitting Administrator
SD DANR, Water Rights Program

SUBJECT: Preparation of Finding of Fact, Conclusions of Law, and Final Decision in the matter of Water
Permit Application No. 8864-3, Big Sioux Community Water System

The Water Management Board directed counsel for the Water Rights Program to prepare proposed Finding of Fact, Conclusions of Law, and a Final Decision in the matter of the Board's approval of Water Permit Application No. 8864-3, Big Sioux Community Water System.

The Board requested the proposed Finding of Fact, Conclusions of Law, and Final Decision be mailed to Board Counsel, David McVey, and all other parties by January 10, 2025. Written objections or comments in support of the proposed Findings of Fact, Conclusions of Law and Final Decision, or alternative Findings of Fact, Conclusions of Law, and Final Decision are to be mailed counsel for both the Board and the Water Rights Program, and other parties by January 21, 2025. Board counsel requests that the draft findings or alternative findings be provided in both a PDF format and a WORD format file via email to David.McVey@state.sd.us.

At the Board's discretion, oral arguments in opposition or support of the proposed Finding of Fact, Conclusions of Law and Final Decisions, or alternative Findings of Fact, Conclusions of Law and Final Decision may be made at the March 5, 2025 meeting. The evidentiary hearing was completed December 4, 2024. No additional testimony will be received at the March 5, 2025 meeting.

The Board will consider adoption of the Findings of Fact, Conclusions of Law, and Final Decision at 9:30 AM (Central Time), on Wednesday, March 5, 2025, in the Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol Avenue, Pierre SD. The agenda time is an estimate and may be delayed due to prior issues on the agenda.

If you have questions about the findings process, please contact Jennifer L. Verleger at (605) 773-3215.

c: David McVey, Assistant Attorney General

CERTIFICATION

The undersigned hereby certifies under the penalty of perjury that a true and correct copy of a Notice dated December 10, 2024, regarding preparation of findings of fact, conclusions of law and a final decision in the matter of Water Permit Application No. 8864-3 – Big Sioux Community Water System, was served upon the following by enclosing the same in envelopes with first class postage prepaid and affixed thereto, and depositing said envelopes in the United States mail on December 10, 2024.

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Reed T. Mahlke, Attorney
Helsper, McCarty & Rasmussen P.C.
1441 Sixth Street, Suite 200
Brookings, SD 57006

Rita Brown
PO Box 217
Chester SD 57016

Ryan D. Cwach, Attorney
Birmingham & Cwach Law Offices, PLLC
202 West 2nd Street
Yankton SD 57078

Brian E. Jorde, Attorney
DominaLaw Group pc llo
2425 South 144th Street
Omaha NE 68144

Above also Sent Inter-office to:

Jennifer L. Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501

David McVey, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501



Shannon Konst
Water Rights Program, DANR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 10th day of Dec, 2024.


Rachel Rodriguez
Notary Public
My Commission expires May 16, 2029



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

October 24, 2024

NOTICE OF HEARING

TO: Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Rita Brown
PO Box 217
Chester SD 57016

Jennifer Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501

FROM: Amanda Dewell, Permitting Administrator
SD DANR, Water Rights Program

SUBJECT: Scheduling of Hearing on Water Permit Application No. 8864-3, Big Sioux Community Water System

The Water Management Board will conduct a hearing to consider Application No. 8864-3 at 10:15 AM (Central Time), on Wednesday, December 4, 2024, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. The time is an estimate and may be delayed due to prior items on the agenda.

Pursuant to SDCL 46-2-9, 46-2-11, and 46-2A-23, the Board has legal authority and jurisdiction to conduct this hearing. Applicable provisions of the public notice published in the Argus Leader and Madison Daily Leader on June 28, 2024, and the Notice dated July 18, 2024, still apply.

The hearing is an adversary proceeding and any party has the right to be present at the hearing and may be represented by legal counsel. As a legal entity, Big Sioux Community Water System is required to be represented by legal counsel in this administrative proceeding. These and other due process rights will be forfeited if they are not exercised at the hearing. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

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; Board Rules ARSD 74:02:01:01 thru 74:02:01:24.02 and ARSD Chapter 74:02:04.

Notices, orders, and other pleadings filed in the matter of Water Permit Application No. 8864-3 are posted on DANR's contested case page at <https://danr.sd.gov/public/ContestedCase.aspx>.

Questions regarding the hearing process may be directed to Amanda Dewell (amanda.dewell@state.sd.us) or Run Duvall (ron.duvall@state.sd.us), Water Rights Program at (605) 773-3352.

CERTIFICATION

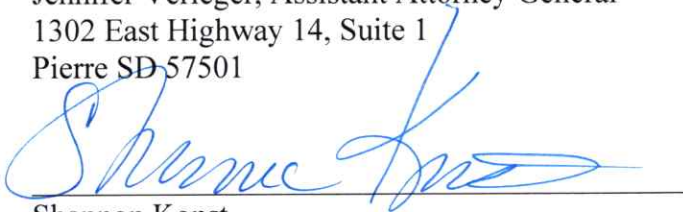
The undersigned hereby certifies under the penalty of perjury that a true and correct copy of a Notice of Hearing dated October 24, 2024, regarding Water Permit Application No. 8864-3 – Big Sioux Community Water System, was served upon the following by enclosing the same in envelopes with first class postage prepaid and affixed thereto, and depositing said envelopes in the United States mail on October 24, 2024.

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Rita Brown
PO Box 217
Chester SD 57016

Above also Sent Inter-office to:

Jennifer Verleger, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre SD 57501



Shannon Konst
Water Rights Program, DANR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 24th day of Oct, 20 24.



Rachel Rodriguez
Notary Public
My Commission expires May 16, 2029



Duvall, Ron

From: DANRnoreply <DANRnoreply@state.sd.us>
Sent: Monday, July 1, 2024 9:15 PM
To: Duvall, Ron; Gronlund, Eric
Subject: [EXT] Comment on 8864-3, Big Sioux Community Water System, c/o Jodi Johanson, Manager

Follow Up Flag: Follow up
Flag Status: Flagged

Please use caution in opening any attachments or clicking on any links.

This message was received from an external mail system, but has been made to appear as though originating from an internal State email address. If you are not expecting this message or are concerned about its content, please forward it to the reportspam@state.sd.us mailbox.

Comment On:
No. 8864-3, Big Sioux Community Water System, c/o Jodi Johanson, Manager

Comment Deadline Date:
07/09/2024

Date Comment Filed:
07/01/2024 21:14:42

Commenter Info:
MeLisa Elijah
45632 216th Street
Arlington SD, 57212

Comment:
Good evening, I'm contacting you this evening to ask you to PLEASE DENY application number 8864-3 submitted by Big Sioux Community Water Systems, on behalf of Dakota Ethanol, who is requesting a tremendous amount of water to cool Co2 that Dakota Ethanol hopes to compress and put in a pipeline to be transported to North Dakota for permanent sequestration, via Summit Carbon Solutions. Eric Gronlund, Chief Engineer, recommended approval because 1) Future Use Permit Nos 6834-3 and 6834A-3 reserved the water for future use by Big Sioux Community Water System, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use. My family owns farmland within 3 miles of Dakota Ethanol and our family has an irrigation permit. At the time of my father's passing in 2018 we were in the process of having a new well dug because the depth of the well no longer allowed irrigation of our land. Today the well is not deep enough once again (only 6 years after a new well was dug in 2018). What this tells me is that there is a water issue with our Big Sioux Skunk Creek Aquifer and the reasons that Mr.Gronlund listed for approving this application would significantly impair existing water use and water rights AND the proposed use of the additional water is NOT a beneficial use. Co2 sequestration is a pipe dream at best with no factual benefits to our environment. What is the beneficial use? The Co2 cooling process which is needed for Co2 pipeline transmission will single handedly deplete our water supply which is essential to our personal and property life. I ask you to please not gamble with a precious resource like water to allow a "Private, For Profit" company to deplete an essential element to life. This application is not beneficial to Big Sioux Community Water System customers. Thank you for your consideration in this matter. Sincerely, MeLisa Elijah Alan Brown Family Trust

**BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD**

**IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM**

APP. NO. 8864-3

**RITA BROWN'S OBJECTION TO
STATE'S PROPOSED FINDINGS OF
FACT AND CONCLUSIONS OF LAW**

COMES NOW, Objector Rita Brown, by and through her counsel, Ryan D. Cwach, Birmingham & Cwach Law Offices, PLLC, and Brian Jorde, Domina Law Group, pc llo, and hereby submits her objections to the State of South Dakota's proposed findings of fact and conclusions of law.

Mrs. Brown objects generally to the proposed findings of fact and conclusions of law for misstating the evidence and failing to conform to the evidence and for incorrectly interpreting applicable law and review. In addition, Mrs. Brown makes the following specific objections:

1. State's Proposed Finding of Fact 3.

Finding of Fact 3 finds that the use is rural water system; however, the evidence shows that the use is not for a rural water system. Mr. Carruthers testified that the rural water system will sell it to Dakota Ethanol plant, and he ultimately did not know how Dakota Ethanol will use it. He further testified that when Big Sioux Community Water System submitted the application, the water system marked it as an industrial use. Mr. Mathiowetz's report also noted that while the applicant is a rural water system, the actual use is an industrial use. Mr. Gronlund testified that he and his team did not consider the actual use in evaluating the factors needed to approve the application.

2. State's Proposed Finding of Fact 4.

This is factually true but the issuance of the future use permit was unlawful, illegal, and outside the scope of the statutory authority authorized to the water management board. *See* SDCL § 46-5-38.

3. State's Proposed Finding of Fact 13.

This finding of fact references Mr. Mathiowetz as providing expert testimony. While Mr. Mathiowetz is educated and informative, he was not disclosed prior to hearing as or offered as a person to provide expert opinion in the proceeding.

4. Proposed Finding of Fact 14, 15, 16, and 17.

These proposed findings of fact misstate the evidence. Mr. Mathiowetz's Report actually shows that the hydrologic budget is expended for the Big Sioux Northern Creek Reservoir. The Report found that the aquifer recharges through the infiltration of precipitation and snow melt. The estimated annual recharge rate is 8,674 acre-feet per year. The average withdraw rate exceeds the annual recharge rate. The Report further showed that observational well data in the area shows a steady and long term decline in groundwater present in the aquifer. The most recent data shows the aquifer at its lowest levels since collecting such data. Mr. Mathiowetz's testimony contradicted his Report.

5. State's Proposed Finding of Fact 20.

Mr. Gronlund's testimony reflected that the proposed use was ultimately industrial for the Dakota Ethanol Plant. Other evidence also showed that the ultimate use is industrial. This evidence includes Mr. Mathiowetz's Report, the application itself, Mr. Carruthers' testimony that the original application noted it was for an industrial use, but this was changed at the direction of the South Dakota Department of Agriculture and Natural Resources, and Mrs. Brown's testimony that Dakota Ethanol plant intends to use this water for the sole purposes of carbon capture and sequestration.

6. State's Proposed Finding of Fact 28.

Mrs. Brown testified that the proposed use is for carbon capture and sequestration, which requires 97,000,000 gallons of water annually, but serves no beneficial purpose to the public.

7. State's Proposed Finding of Fact 31.

This misstates Mrs. Brown's testimony, which was that one of the beneficial uses is for growing crops and feeding animals. Mrs. Brown acknowledged that there are other beneficial

uses as well, but she was unequivocal that the proposed use in the application is not a beneficial use.

8. State's Proposed Finding of Facts 35, 36, 37, and 38 and Conclusion of Law 5.

These are ultimately legal conclusions with no citations or analysis and are further not supported by the evidence. Mrs. Brown objects to these proposed findings of fact and conclusions of law based upon her previous submitted proposed conclusions of law which are incorporated here by reference.

Dated this 21st day of January 2025.

By /s/ Ryan D. Cwach
Ryan D. Cwach, Esq.
Birmingham & Cwach Law Offices, PLLC
202 W. 2nd St.
Yankton, SD 57078
Phone: 605 260 4747
ryan@birmcwachlaw.com

Brian Jorde, Esq.
Domina Law Group pc llo
2425 S. 144th St.
Omaha, NE 68144
bjorde@dominalawgroup.com

**BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD**

**IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM**

**APP. NO. 8864-3
CERTIFICATE OF SERVICE**

I certify in writing, that on January 22, 2025, I gave notice through first class mail or email if indicated below to the Interested Parties listed below of Rita Brown's Objection to State's Proposed Findings of Fact and Conclusions of Law.

By /s/ Ryan D. Cwach
Ryan D. Cwach, Esq.
Birmingham & Cwach Law Offices, PLLC
202 W. 2nd St.
Yankton, SD 57078
Phone: 605 260 4747
ryan@birmcwachlaw.com

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Ave.
Egan, SD 57024

Jennifer Verlerger, Assistant Attorney General
1302 E. Highway 14, Ste. 1
Pierre, SD 57501-8501

Water Rights Program
Foss Building
523 E. Capitol Ave.
Pierre SD 57501

**BEFORE THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
WATER MANAGEMENT BOARD**

**IN THE MATTER OF THE
WATER PERMIT APPLICATION
NO. 8864-3 BY
BIG SIOUX COMMUNITY
WATER SYSTEM**

**APP. NO. 8864-3

FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

Now this matter having come upon hearing on December 04, 2024, and the Board, after hearing the evidence and testimony, hereby makes the following findings of fact and conclusions of law.

FINDINGS OF FACT

1. On April 02, 2024, Big Sioux Community Water System filed Application No. 8864-3 to appropriate water within Hydrologic Unit 10170203 of the Lower Big Sioux Basin, specifically, the Northern Skunk Creek Aquifer.
2. On July 08, 2024, Rita Brown on behalf of the Rita and Alan Brown Trust timely filed a petition opposing Application No. 8864-3.
3. Big Sioux Community Water System is a rural water system. The purpose of rural water systems is primarily to support domestic water uses to domestic users within the territory of the rural water system.
4. Application No. 8864-3 proposes to permit water previously reserved by Future Use Permit Nos. 6834-3 and 6834A-3, for use at the Dakota Ethanol plant in Wentworth, SD
5. Application No. 8864-3 proposes to drill one water well to produce up to 300-acre feet of water from the Northern Skunk Creek Aquifer.
6. Adam Mathiowetz, PE, SD DANR - Water Rights Program testified about the Water Rights Program Report dated June 21, 2024. Mr. Mathiowetz was one of the authors of the report.
7. The Reported reached the following factual conclusions:
 - a. The proposed location of the water well is near several existing domestic water wells.

- b. The Big Sioux Northern Skunk Creek aquifer recharges through the infiltration of precipitation and snowmelt. Previous studies have estimated that the annual recharge rate of Northern Skunk Creek aquifer is 8,674 acre-feet per year.
 - c. The present average annual withdrawal rate from the aquifer exceeds the estimated average annual recharge rate to the aquifer even without considering present temporary use permits that are withdrawing water.
 - d. Observational well data demonstrates a long-term decline in groundwater present in the aquifer. Recent observation well data of LK-79C shows some of the lowest levels ever for the aquifer.
 - e. There are several existing aquifer water rights/permits within less than a mile of the proposed well in Water Permit Application No. 8864-3
 - f. The rural water system is a water distribution system; however, the sole purpose of the permit request is to supply water to Dakota Ethanol facility, which is an industrial use.
8. Mr. Mathiowetz testified that DANR does not consider future likely water use from the aquifer when analyzing whether new permit applications should be requested.
9. Mr. Eric Gronlund is the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources. Based on the report, he made a recommendation that Water Permit Application No. 8864-3 will not result in unlawful impairment to existing domestic water uses and water rights, the proposed use is a beneficial use, and is further in the public interest.
10. Mr. Gronlund further testified that while his recommendation is that (1) the proposed use is a beneficial use and (2) within the public interest, Mr. Gronlund and his team do not conduct any review of analysis of the use or the public interest. Mr. Gronlund testified that the simple consumption of water, regardless of purpose or actual use, is the extent of his analysis on whether it is a beneficial use or within the public interest.
11. The public notice of the application as shown by the affidavit of publication did not indicate the use or public interest.
12. When examined about what foundational or evidentiary basis DANR relied upon to conclude granting Big Sioux's water permit was in fact in the public interest, Mr. Gronlund testified because that this they way DANR has always done things.

13. Jeff Carruthers testified on behalf of the Big Sioux Community Water System. Mr. Carruthers testified that Big Sioux Community Water System has 2,800 customers, including the Dakota Ethanol Plant.
14. Mr. Carruthers testified that the Applicant marked "Industrial" for the use on the Application but subsequently marked "Rural Water System" at the instruction of a DANR employee.
15. Mr. Carruthers further testified that Big Sioux Community Water System did not know Dakota Ethanol's intended use or purpose for the groundwater.
16. The representative was knowledgeable about the Dakota Ethanol plant. He testified that the plant is currently producing at its nameplate capacity of 110 million gallons of ethanol per year with its present water.
17. No evidence was presented that the Dakota Ethanol plant has the legal ability to or is in the process of expanding beyond its current nameplate capacity.
18. Rita Brown is an area landowner with an irrigation well near the proposed well in Water Permit Application No. 8864-3. She is also a shareholder of Dakota Ethanol plant.
19. Mrs. Brown testified that the Dakota Ethanol plant is proposing to construct a carbon capture facility that will connect to a proposed massive Summit carbon pipeline.
20. Mrs. Brown testified that the proposed carbon capture facility is an intensive industrial users of water that require approximately 97,000,000 gallons of new water annually.
21. The apparent use of water to be allocated per this Permit Application is not for ethanol production but for cooling purposes in a proposed but not yet built carbon capture facility.
22. Landowners in the Wentworth area are reliant on irrigation to maximize production of row crops on their lands. This includes the opposing petitioner Rita Brown.
23. Mrs. Brown testified her existing irrigation water well is reliant on the Northern Skunk Creek Aquifer. In the last few years, her existing irrigation water well has had difficulty producing water. Mrs. Brown's crop yields have decreased due to the inability to irrigate consistently out of the aquifer. Mrs. Brown testified that neighboring farmers are also experiencing this issue.
24. Mrs. Brown was not aware that she, or any landowner, could complain about inefficient producing wells to the SD DANR but DANR is on notice now.

25. Mrs. Brown's testimony was uncontroverted.

CONCLUSIONS OF LAW

26. "The people of the state have a paramount interest in the use of all the water of the state."

SDCL 46-1-1.

27. "The state shall determine in what way the water of the state, both surface and underground, should be developed for the greatest public benefit." SDCL 46-1-2.

28. All water within the state is the property of the people of the state." SDCL 46-1-3.

29. The State of South Dakota follows the public trust doctrine which imposes an obligation to preserve water for legitimate public use. The state is a trustee of the water for the public. Parks v. Cooper, 676 N.W.2d 823, 841 (SD 2004).

30. Domestic use of water is the highest priority use of water in the state. SDCL § 46-1-5.

31. A nonprofit rural water system may only obtain a future use permit in contemplation of future needs and showing available future water. SDCL § 46-5-38. For nonprofit rural water systems, future use permits may only be obtained for the treatment, distribution, and sale of water primarily for *domestic purposes* to a rural area." *Id.* (emphasis added). For all other non-domestic purpose customers and uses, a future use permit is not available. *Compare* SDCL § 46-5-38 *with* SDCL § 10-36A-1 (*The statute for future use permits limits nonprofit rural water systems to only be available for domestic purposes while SDCL 10-36A-1 acknowledges that rural water systems can have customers with different uses.*)

32. The future use permit sought to reserve water for an industrial use only.

33. In order to obtain a permit, the applicant must demonstrate by the preponderance of the evidence that:

- a. there is a reasonable probability that unappropriated water is available for the applicant's proposed use;
- b. the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights;
- c. the proposed use is a beneficial use; and
- d. the permit is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. SDCL § 46-2A-9.

34. The evidence presented showed that there is a reasonable probability that unappropriated water is *not available*. The Chief Engineer's Report concluded that the current annual withdrawal rate exceeds the recharge rate of the aquifer.
35. Observational well data of the aquifer shows a long-term decline in the volume of the aquifer. Area landowners with irrigation are already experiencing difficulties irrigating crops and maximizing yields.
36. The Applicant presented no evidence that it would not unlawfully impair domestic purposes of existing domestic water uses and rights.
37. A proposed use is a beneficial use if the use "is reasonable and useful and beneficial to the appropriator, and at the same time is consistent with the interests of the public of this state in the best utilization of water supplies." SDCL § 46-1-6(3).
38. No evidence was presented that the ultimate use, carbon capture facility cooling, is consistent with the interests of the public or the best utilization of water supplies.
39. Big Sioux Community Water System presented no evidence that an additional 300-acre feet of water per year to the Dakota Ethanol Plant for purposes of carbon sequestration, or any other purpose, is reasonable, useful, and beneficial to the system. Big Sioux Community Water System itself does not need the water and no information was presented on what the ultimate user Dakota Ethanol's actual proposed use for the water.
40. DANR's witnesses further indicated that their analysis of beneficial use was limited to whether the proposed use used water. The Board is left to speculate on the use.
41. The use of water for carbon capture and sequestration is not a beneficial use. There is no public law or national interest in carbon sequestration and capture. *Compare with In re Water Right Claim No. 1927-2, 524 N.W.2d 855, 858 (1994) (finding that a water permit for waterfowl habitat and other wildlife is a beneficial use as evidenced by treaties, existing state and federal laws).*
42. The public interest within the regulatory authority of the board means (1) "the general supervision of the waters of the state, including measurement, appropriation, and distribution thereof," and (2) to "regulate and control the development, conservation, and allocation of the right to use the waters of the state according to the principals of beneficial use and priority of appropriation established" by state law. SDCL §§ 46-2-9 & 46-2-11.

43. Big Sioux Community Water System presented no evidence that the permit is in the public interest within the regulatory authority of the Water Management Board. Because the ultimate use was not articulated, the Board cannot determine whether the use is in line with the development, conservation, and allocation of water.
44. The use of water for carbon capture and sequestration is not in the public interest. The use of water applies the water to no public purpose and allocates limited groundwater resources to the wasteful use of cooling pipeline infrastructure.

Based on the foregoing findings of fact and conclusions of law, the Board orders as follows:

45. The Future Use Permit was erroneously issued to the applicant because the future use permit was for an industrial use when rural water systems may only obtain a future use permit for a domestic purpose. Therefore, the Board does not have jurisdiction to consider Application No. 8864-3 and it is therefore DENIED;
46. Applicant failed to show by the preponderance of the evince that Application No. 8864-3 meets the criteria of SDCL § 46-2A-9 and it is therefore DENIED;
47. There is no public benefit to the people of South Dakota for the use of limited groundwater resources for wasteful carbon capture and sequestration. The public trust doctrine compels the Board to preserve water for legitimate public uses. As trustees of the water for the public, Application No. 8864-3 is therefore DENIED.

Dated this ____ day of _____ 2025.

South Dakota Water Management Board BY:

James Hutmacher, Chair

ATTEST BY

Leo Holzbauer, Secretary

STATE OF SOUTH DAKOTA



OFFICE OF ATTORNEY GENERAL

1302 East Highway 14, Suite 1
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MARTY J. JACKLEY
ATTORNEY GENERAL

BRENT K. KEMPEMA
CHIEF DEPUTY

January 10, 2025

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan, SD 57024

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Brian E. Jorde
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DominaLaw Group pc llo
2425 South 144th Street
Omaha, NE 68144

Re: *In the Matter of Water Permit Application No. 8864-3, Big Sioux Community Water System*

Greetings:

Enclosed please find a true and correct copy of the proposed *Findings of Fact, Conclusions of Law, and Final Decision and Certificate of Service* in the above-referenced matter.

Sincerely,

/s/ Jennifer L. Verleger

Jennifer L. Verleger
Assistant Attorney General

JLV/lde
Enclosures

cc w/encs: David McVey
Assistant Attorney General

STATE OF SOUTH DAKOTA
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

WATER MANAGEMENT BOARD

IN THE MATTER OF WATER PERMIT)	PROPOSED FINDINGS OF FACT,
APPLICATION NO. 8864-3,)	CONCLUSIONS OF LAW, AND
BIG SIOUX COMMUNITY)	FINAL DECISION
WATER SYSTEM)	

This matter came before the South Dakota Water Management Board (Board) for hearing on December 4, 2024. Board members James Hutmacher, William Larson, Rodney Freeman, Chad Comes, and Leo Holzbauer attended the hearing and heard the evidence presented. Jennifer L. Verleger represented the Department of Agriculture and Natural Resources (DANR) Water Rights Program and the Chief Engineer. Reed T. Mahlke represented Applicant Big Sioux Community Water System. Ryan D. Cwach and Brian E. Jorde represented Petitioner Rita Brown.

Exhibits 100-107, and Exhibit A were offered without objection and accepted into the record. Exhibit 108 was offered and not received. Having considered the testimony and exhibits presented, the Board enters the following:

FINDINGS OF FACT

1. On April 2, 2024, the Water Rights Program received Water Permit Application No. 8864-3 from Jodi Johanson, Manager of the Big Sioux Community Water System.

2. The Application proposes to construct and place to beneficial use up to 300 acre-feet of water annually at a maximum instantaneous diversion rate of 0.67 cubic feet per second (cfs) from one well completed in the Big Sioux: Northern Skunk Creek aquifer located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 16, Township 105 North, Range 51 West, Lake County, approximately seven miles south of Wentworth, SD.

3. The proposed water use is rural water system use.

4. The water was previously appropriated and reserved by Future Use Permit Nos. 6834-3 and 6834A-3.

5. The Chief Engineer recommended approval of Application No. 8864-3 with several conditions.

6. Notice of Water Permit Application No. 8864-3 was timely advertised in the Argus Leader and Madison Daily Leader on June 28, 2024. Notice was also posted on DANR's public notices website.

7. MeLisa Elijah submitted a comment on the Application on July 1, 2024. Rita Brown submitted a petition on behalf of the Alan and Rita Brown Trust on July 8, 2024, opposing the Application. All comments and petitions were timely received.

8. A Notice of Hearing was issued July 18, 2024, for a hearing dated October 2, 2024.

9. A request for an automatic delay under SDCL § 46-2A-5 was sent on July 29, 2024.

10. A revised Notice of Hearing was issued October 24, 2024, for a hearing dated December 4, 2024.

11. Water Permit Application No. 8864-3 proposes to place water to beneficial use that has already been reserved under Future Water Use Permit Nos. 6834-3 and 6834A-3.

12. A water permit application requires an analysis pursuant to SDCL § 46-2A-9 to determine whether: 1) there is a reasonable probability that unappropriated water is available for the proposed use, 2) the proposed use would impair existing domestic water uses and water rights, 3) the proposed use would be a beneficial use, and 4) the proposed use is in the public interest pertaining to matters of public interest within the regulatory authority of the Board.

Adam Mathiowetz

13. Austin Settje and Adam Mathiowetz, Natural Resources Engineers with the Water Rights Program, performed a technical review of the Application and prepared a report. Exhibit 101. Mr. Mathiowetz provided expert testimony to the Board regarding the Application's technical review.

14. Because this water use was previously reserved, the water has already been accounted for in the aquifer's hydrologic budget.

15. Mr. Mathiowetz's testimony primarily explained how the hydrologic budget and the observation well data, in combination, indicate there is a reasonable probability that unappropriated water is available even though the

water was previously appropriated by Future Water Use Permit Nos. 6834-3 and 6834A-3.

16. Mr. Mathiowetz's testimony also explained the aquifer characteristics in the area and discussed the impact the permitted use would have on known surrounding wells.

17. The technical review concluded that there is a reasonable probability that unappropriated water is available for the proposed use and that there is a reasonable probability that the proposed use would not impair existing domestic water uses or water rights with adequate wells.

18. The Board finds Mr. Mathiowetz to be a credible expert witness and that these Findings of Fact are supported by the evidence presented, including Mr. Mathiowetz's testimony and the reports and exhibits he prepared and relied upon.

Eric Gronlund

19. Eric Gronlund, the Chief Engineer, provided a recommendation to approve the Application with conditions. Exhibit 105. Mr. Gronlund provided expert testimony to the Board regarding the Application's beneficial use and public interest factors.

20. Mr. Gronlund testified that the Applicant's proposed beneficial use is rural water system use. He testified that past Board decisions and actions indicate that rural water system use is in the public interest.

21. Mr. Gronlund also noted that he had reviewed the petition and comment for this matter and that generally the concerns were regarding nearby

water levels, the potential for over-appropriation, and the quantity of water for the proposed purpose.

22. Mr. Gronlund indicated that for permitting purposes, the beneficial use of the permit is to provide water to the rural water system and that the end users the system chooses to serve within its boundaries are its own prerogative.

23. The Board finds Mr. Gronlund to be a credible expert witness and that these Findings of Fact are supported by the evidence presented, including Mr. Gronlund's testimony and the reports and exhibits he prepared and relied upon.

Jeff Carruthers

24. Mr. Jeff Carruthers is a Water Operator for the Big Sioux Community Water System. Mr. Carruthers testified about the geographical service area of the system and general water use of the system.

25. Mr. Carruthers testified that the Big Sioux Community Water System intends to use the water authorized by this application to provide additional water to an ethanol plant (Dakota Ethanol).

26. The Board finds Mr. Carruthers to be a credible witness and that these Findings of Fact are supported by the evidence presented.

Rita Brown

27. Petitioner Rita Brown is a concerned landowner in the area of the proposed application. Ms. Brown is also a shareholder of Dakota Ethanol.

28. Ms. Brown testified that she is concerned about the amount of water being used for ethanol plants in general and the cumulative effect that water use will have on agriculture.

29. Ms. Brown installed a new irrigation system and new well in 2018, and testified that she cannot maintain water pressure in that system throughout the year. Ms. Brown does not know the depth of the well or the pump inlet depth. Ms. Brown testified that she has never made a complaint to DANR or the Water Rights Program regarding problems with her well system.

30. Ms. Brown testified that "public interest," in her opinion, "means farmers who need to irrigate to produce a good crop to sell to the corn to the ethanol plant have sufficient water to irrigate. It means people that feed livestock have sufficient water. It means food, fuel."

31. Ms. Brown testified that "beneficial use," in her opinion, means growing crops and feeding animals. Ms. Brown does not believe cooling a compression line qualifies. Ms. Brown does not believe additional water for the ethanol plant is a beneficial use.

32. Ms. Brown does not believe that serving Dakota Ethanol is the best utilization of water supplies and that allowing them to use more water is not consistent with the interests of the public.

33. The Board finds Ms. Brown to be a credible witness and that these Findings of Fact are supported by the evidence presented.

34. Any finding of fact more properly designated as a conclusion of law will be treated accordingly.

35. The Board finds that the testimony clearly shows that water is available.

36. The Board finds that there will not be impairment.

37. The Board finds that water provided by rural water systems to service connections is a beneficial use of water and is in the public interest.

38. The Board finds that water used for industrial purposes, specifically ethanol plants, is also considered a beneficial use and serves the public interest.

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 with the conditions outlined in his recommended decision. The recommendation, however, is not 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. Any conclusion of law more properly designated as a finding of fact will be treated accordingly.

FINAL DECISION

Based on the foregoing Findings of Fact and Conclusions of Law, the Board enters its determination that Water Permit Application No. 8864-3 is granted with the following qualifications:

1. The well approved under Water Permit No. 8864-3 is located near domestic wells and other wells that may obtain water from the same aquifer. Water withdrawals must 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 well authorized by Permit No. 8864-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must 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. The Permit holder must report to the Chief Engineer annually the amount of water withdrawn from the Northern Skunk Creek Management Unit of the Big Sioux aquifer.

4. Water Permit No. 8864-3 authorizes a total annual diversion of up to 300 acre-feet of water from the Northern Skunk Creek Management Unit of the Big Sioux aquifer.

Dated this ____ day of March, 2025.

BY THE BOARD:

South Dakota Water Management Board

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of **proposed Findings of Fact, Conclusions of Law, and Final Decision** were served upon the following by enclosing the same in envelopes with first class postage prepaid, and depositing said envelopes in the United States mail on January 10, 2025.

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Ave.
Egan, SD 57024

Reed T. Mahlke, Attorney
Helsper, McCarty and Rasmussen P.C
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Rita Brown
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Ryan D. Cwach, Attorney
Birmingham and Cwach Law Office
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Yankton, SD 57078

Brian E. Jorde, Attorney
DominaLaw Group pc llo
2425 South 144th Street
Omaha, NE 68144

And on the same date, a copy was hand delivered to:

David M. McVey, Assistant Attorney General
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Telephone: (605) 773-2243
Email: David.Mcvey@state.sd.us
Attorney for Water Management Board

MARTY J. JACKLEY
ATTORNEY GENERAL

/s/ Jennifer L. Verleger

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Email: Jennifer.Verleger@state.sd.us
*Attorneys for South Dakota Chief Engineer
and Water Rights Program*



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

MAY 06 2025

Big Sioux Community Water System
c/o Jodi Johanson, Manager
23343 479th Avenue
Egan SD 57024

Dear Ms. Johanson:

Enclosed is Water Permit No. 8864-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Mark Mayer, PE
Director of Office of Water

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8864-3

Name of Applicant: Big Sioux Community Water System, c/o Jodi Johanson, Manager

Date of Posting: 6/24/2024

Date of Removal: 5/6/2025

Ron Duvall, Engineer III

5/6/2025

Date

Subscribed and sworn to before me, a notary public, this 6th day of May, 2025.

Notary Public - South Dakota
My commission expires **May 16, 2029**

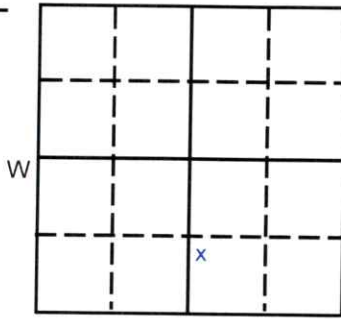


(SEAL)

SOUTH DAKOTA WATER WELL COMPLETION REPORT

2024

8867-3

Location <u>SE</u> $\frac{1}{4}$ <u>SW</u> $\frac{1}{4}$ Sec <u>16</u> Twp <u>105</u> Rg <u>51</u> County <u>LAKE</u> GPS Coordinates Lat: <u>43 53.6410</u> Lon: <u>96 57.6780</u> Please mark well location with an "X" on section grid  Well Completion Date <u>11/4/2025</u> Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.) ? <u>1000</u> ft. from <u>NORTH EAST OF SEPTIC</u> (identify source)		Well Owner: <u>BIG SIOUX RURAL WATER</u> Business Name: _____ Address: <u>23343 479TH AVE</u> City, State, Zip: <u>EAGAN, SD 57024</u> RECEIVED DEC 29 2025 OFFICE OF WATER WELL LOG: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">FORMATION</th> <th colspan="2">DEPTH</th> </tr> <tr> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr> <td>TOP SOIL</td> <td>0.0</td> <td>1.0</td> </tr> <tr> <td>CLAY BROWN</td> <td>1.0</td> <td>5.0</td> </tr> <tr> <td>SAND AND GRAVEL</td> <td>5.0</td> <td>57.0</td> </tr> <tr> <td>SAND AND MEDIUM GRAVEL/ SAND LAYERS</td> <td>57.0</td> <td>77.0</td> </tr> <tr> <td>CLAY</td> <td>77.0</td> <td>80.0</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		FORMATION	DEPTH		FROM	TO	TOP SOIL	0.0	1.0	CLAY BROWN	1.0	5.0	SAND AND GRAVEL	5.0	57.0	SAND AND MEDIUM GRAVEL/ SAND LAYERS	57.0	77.0	CLAY	77.0	80.0												
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METHOD OF DRILLING: MUD ROTARY CASING DATA: ☐ Steel ☐ Plastic ☐ Other If other describe _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PIPEWEIGHT</th> <th>DIAMETER</th> <th>FROM</th> <th>TO</th> <th>HOLE DIAMETER</th> </tr> </thead> <tbody> <tr> <td>LB/FT</td> <td><u>12</u> IN</td> <td><u>0</u> FT</td> <td><u>59</u> FT</td> <td><u>18.75</u> IN</td> </tr> <tr> <td>LB/FT</td> <td>IN</td> <td>FT</td> <td>FT</td> <td>IN</td> </tr> <tr> <td>LB/FT</td> <td>IN</td> <td>FT</td> <td>FT</td> <td>IN</td> </tr> </tbody> </table>		PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER	LB/FT	<u>12</u> IN	<u>0</u> FT	<u>59</u> FT	<u>18.75</u> IN	LB/FT	IN	FT	FT	IN	LB/FT	IN	FT	FT	IN	WELL TEST DATA: ☒ Pumped Describe: _____ ☐ Bailed ☐ Air ☐ Other _____ Pumping Level Below Land Surface <u>35.0</u> Ft. After <u>8.0</u> Hrs. pumped <u>350.0</u> GPM _____ Ft. After _____ Hrs. pumped _____ GPM If pump installed, pump rate: _____ GPM													
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LB/FT	IN	FT	FT	IN																															
GROUTING DATA: Grout Type <u>BENTONITE</u> No. of Sacks <u>19</u> Grout Weight _____ Lb/gal From <u>0.0</u> Ft To <u>54.0</u> Ft Describe grouting procedure <u>TREMMIE PIPED</u>		REMARKS <u>12" WELL - WELL # 7</u>																																	
SCREEN: ☐ Perforated pipe ☒ Manufactured Diameter <u>12</u> Inches Length <u>20.0</u> Feet Material <u>STAINLESS STEEL</u> Slot Size <u>.080</u> Set From <u>59.0</u> Feet to <u>79.0</u> Feet Other information _____		This well was drilled under license # <u>475</u> And this report is true and accurate. Drilling firm: <u>THEIN WELL COMPANY, INC</u> Signature of License Representative: <u>Michael Thein</u> Signature of Well Owner or Equitable Property Holder: _____ Date: _____																																	
WAS A PACKER OR SEAL USED? ☐ Yes ☒ No If so, what material? _____ Describe packer(s) and location _____		DISINFECTION: Was well disinfected upon completion? ☒ Yes, How? <u>CHLORINATED</u> ☐ No, Why Not? _____ Lab sample sent to for water quality analysis _____																																	

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SOUTH DAKOTA WATER WELL COMPLETION REPORT

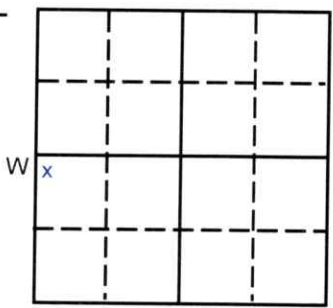
2024

Location <u>NE</u> <u>SW</u> <u>16</u> Twp <u>105</u> Rg <u>51</u>		Well Owner: <u>BIG SIOUX RURAL WATER</u>	
County <u>LAKE</u>		Business Name: <u>RECEIVED</u>	
GPS Coordinates		Address: <u>23343 479TH AVE</u>	
Lat: <u>43 53.7910</u>		City, State, Zip: <u>EAGAN, SD 57024</u> <u>DEC 29 2025</u>	
Lon: <u>96 57.7270</u>		WELL LOG:	
Please mark well location with an "X" on section grid		DEPTH	
Well Completion Date <u>7/3/2025</u>		FORMATION	
Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)		FROM	
? <u>TEST HOLE</u> ft. from (identify source)		TO	
PROPOSED USE:		TOP SOIL	
☐ Domestic/Stock ☐ Municipal ☐ Business ☐ Monitoring Well		CLAY BROWN	
☐ Irrigation ☐ Industrial ☐ Institutional ☒ Test Hole		SAND AND GRAVEL- LOTS OF SAND	
☐ Dewatering Well ☐ Geothermal ☐ Other		GRAVEL	
METHOD OF DRILLING: MUD ROTARY		GRAVEL AND ROCKS	
CASING DATA: ☐ Steel ☐ Plastic ☐ Other		CLAY TAN	
If other describe			
PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER			
LB/FT IN FT FT FT IN			
LB/FT IN FT FT FT IN			
LB/FT IN FT FT FT IN			
GROUTING DATA:			
Grout Type No. of Sacks Grout Weight From To			
<u>BENTONITE</u> <u>7</u> <u>Lb/gal</u> <u>0.0</u> Ft <u>80.0</u> Ft			
Describe grouting procedure			
<u>TREMMIE PIPED</u>			
SCREEN: ☐ Perforated pipe ☐ Manufactured			
Diameter Inches Length Feet			
Material			
Slot Size Set From Feet to Feet			
Other information			
WAS A PACKER OR SEAL USED? ☐ Yes ☒ No		STATIC WATER LEVEL	
If so, what material?		FEET	
Describe packer(s) and location		If flowing: closed in pressure PSI	
DISINFECTION: Was well disinfected upon completion?		GPM flow through Inch pipe	
☐ Yes, How?		Controlled by ☐ Valve ☐ Reducers ☐ Other	
☒ No, Why Not? <u>TEST HOLE</u>		Reduced flow rate GPM	
Lab sample sent to for water quality analysis		Can well be completely shut in?	
		WELL TEST DATA:	
		☐ Pumped Describe:	
		☐ Bailed ☐ Air	
		☐ Other	
		Pumping Level Below Land Surface	
		Ft. After Hrs. pumped GPM	
		Ft. After Hrs. pumped GPM	
		If pump installed, pump rate: GPM	
		REMARKS	
		<u>TEST HOLE # 1</u>	
		This well was drilled under license # <u>475</u>	
		And this report is true and accurate.	
		Drilling firm: <u>THEIN WELL COMPANY, INC</u>	
		Signature of License Representative: <u>Michael Thein</u>	
		Signature of Well Owner or Equitable Property Holder:	
		Date:	

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SOUTH DAKOTA WATER WELL COMPLETION REPORT

2024

Location <u>NE</u> $\frac{1}{4}$ <u>SW</u> $\frac{1}{4}$ Sec <u>16</u> Twp <u>105</u> Rg <u>51</u> County <u>LAKE</u> GPS Coordinates Lat: <u>43 53.7960</u> Lon: <u>96 57.7780</u> Please mark well location with an "X" on section grid  Well Completion Date <u>7/3/2025</u> Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.) ? _____ ft. from <u>TEST HOLE</u> (identify source)		Well Owner: <u>BIG SIOUX RURAL WATER</u> Business Name: _____ Address: <u>23343 479TH AVE</u> City, State, Zip: <u>EAGAN, SD 57024</u> WELL LOG: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">FORMATION</th> <th colspan="2">DEPTH</th> </tr> <tr> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr><td>TOP SOIL</td><td>0.0</td><td>6.0</td></tr> <tr><td>CLAY BROWN</td><td>6.0</td><td>8.0</td></tr> <tr><td>DIRTY CLAY AND GRAVEL</td><td>8.0</td><td>11.0</td></tr> <tr><td>SAN AND GRAVEL</td><td>11.0</td><td>30.0</td></tr> <tr><td>CLAY GRAY</td><td>30.0</td><td>37.0</td></tr> <tr><td>SAND AND GRAVEL WITHIN CLAY LAYERS</td><td>37.0</td><td>42.0</td></tr> <tr><td>SAND AND GRAVEL</td><td>42.0</td><td>51.0</td></tr> <tr><td>CLAY OLIVE</td><td>51.0</td><td>54.0</td></tr> <tr><td>CLAY TAN</td><td>54.0</td><td>80.0</td></tr> </tbody> </table>		FORMATION	DEPTH		FROM	TO	TOP SOIL	0.0	6.0	CLAY BROWN	6.0	8.0	DIRTY CLAY AND GRAVEL	8.0	11.0	SAN AND GRAVEL	11.0	30.0	CLAY GRAY	30.0	37.0	SAND AND GRAVEL WITHIN CLAY LAYERS	37.0	42.0	SAND AND GRAVEL	42.0	51.0	CLAY OLIVE	51.0	54.0	CLAY TAN	54.0	80.0
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SOUTH DAKOTA WATER WELL COMPLETION REPORT

2024

Location <u>SE</u> $\frac{1}{4}$ <u>SW</u> $\frac{1}{4}$ Sec <u>16</u> Twp <u>105</u> Rg <u>51</u>		Well Owner: <u>BIG SIOUX RURAL WATER</u>																																	
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BIG SIOUX RURAL WATER WELL # 7

Legend

BSRW TH # 1 for Well 7 80' 2025 N 43 53.7910 W 96 57.7270
BSRW TH # 2 for Well 7 80' 2025

BSRW TH # 3 for Well 7 80' 2025 79' 12" WELL 2025 WELL # 7

Google Earth

Image © 2025 Airbus



1000 ft