

WATER PERMIT NO. 2024-1

Name of Applicant: **Travis Linch**

Address: **10850 Sourdough Rd, Belle Fourche SD 57717**

Phone: **605 210-1111**

Amount of Water Claimed: **0.055 cfs** Total Acres: **NA**

Source of Water Supply: **groundwater (1 existing well)**

Water to be used for: **commercial** County: **Butte**

Type of Waste Disposal System:

Location: **2 miles south of Belle Fourche**

PRIORITY Date Received: **9-20-22**

Application/License Fee: **S300**

Corrected Application Received: **9-30-22**

Period of Annual Use: **Jan 1 – Dec 31**

Remarks:

Diversion Point: **NW 1/4 SE 1/4 Sec 27-T8N-R2E**

Land to be Irrigated: **NA**

Depth of Well: **1597 feet**

Well Driller: **Graf Drilling**

Remarks:

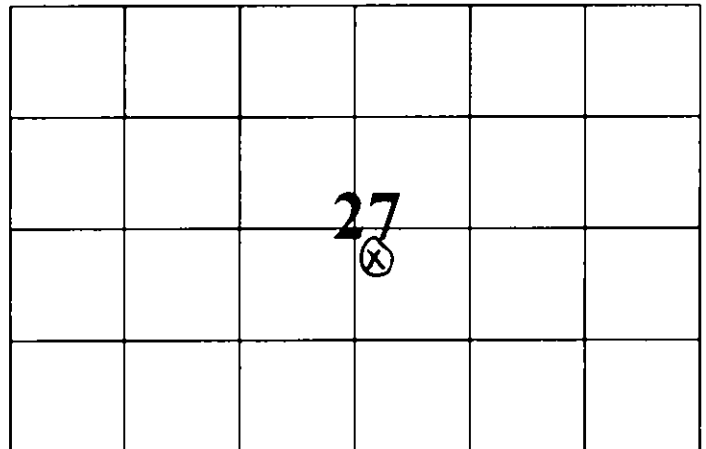
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **9-30-22**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 2024-1**

Date of first receipt of application September 20, 2022.

Date of return to applicant for corrections, amendments or changes September 20, 2022.

Date of receipt of corrected application September 30, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2024-1 to Travis Linch, 10850 Sourdough Rd, Belle Fourche SD 57717 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. 2024-1 appropriates up to 15 acre-feet of water annually at a maximum pump rate of 0.055 cubic feet of water per second from one well completed into the Minnelusa Aquifer (1,597 feet deep) located in the NW 1/4 SE 1/4 Section 27-T8N-R2E. This site is located on the south side of Belle Fourche SD.
2. The water appropriated shall be used for the purpose of commercial use 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. 2024-1 is December 5, 2022.
5. The date from which applicant may claim right is September 20, 2022.
6. One-fifth of the construction is to be completed on or before June 5, 2025.
7. All construction is to be completed on or before December 5, 2027.
8. Water is to be put to beneficial use on or before December 5, 2031.
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. 2024-1 is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well approved under this permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If the wells are abandoned, the wells must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
3. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa aquifer.
4. Water Permit No. 2024-1 authorizes a total annual diversion of 15.0 acre-feet of water from the Minnelusa aquifer.

WATER MANAGEMENT BOARD

By: Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

DEC 21 2022
date



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

RECEIVED

SEP 20 2022

OFFICE OF
WATER

Mail to: SD DANR, Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2024-1</u> Hydrologic Unit <u>10120203</u> Basin <u>Belle Fourche R.</u> Newspaper <u>Black Hills Pioneer</u> (office use only)
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Application for Permit to Appropriate Water in South Dakota

Check use(s) of water:

☐
☐
☒

Municipal
Rural Water System
Domestic (over 18 gpm)

☐
☒
☐

Water Distribution System
Commercial
Industrial

☐
☐
☐

Recreational
Fish & Wildlife
Other

☐
☐

Institutional
Geothermal

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. _____
Amendment/Correction to Permit No. _____

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

would like to change current system from domestic/stock to
a commercial

- Name to Appear on Water Permit Travis Hinch
Mailing Address 10850 Sandough Rd Belle Fourche SD 57017
(Address) (City) (State) (Zip Code)
Phone _____ Mobile 605-210-1111 Email Travis.hinch@trucking@gmail.com
- Amount of water claimed 0.055 *CFS or 25 **GPM and 15 ***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 well NW 1/4 SE 1/4
- Location of point of diversion 1/4 SE 1/4 SE 27 T128N R12E County Butte
(example - 3 wells in SW 1/4 NE 1/4 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? _____
(example - NW 1/4 section 12-T104N-R53W)
- County or counties where water will be used Butte
- Annual period during which water is to be used year round Jan 1 - Dec 31
- 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)

I, Travis Hinch, 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.

2021-08

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 0 Have test holes been drilled? ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 1 Provide copy of log(s), if available. Drilled by Grp Drilling #327

For either existing or proposed wells:

c) Well Depth (required) 1597 Depth to Top of Water Bearing Material 1439 Depth to Water from Surface 1439

d) Distance to nearest domestic well on applicant's property 75 ft to house Property owned by others _____

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) Septic

b) System Capacity (gallons) 1500 gal Year Constructed 2004

c) Connected to the City of _____ Sanitary System

3. Dugout Information

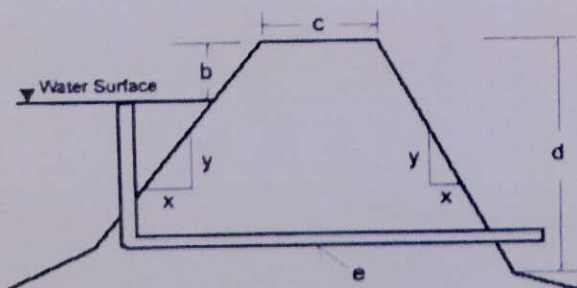
a) Surface Dimensions _____ Depth _____

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) Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

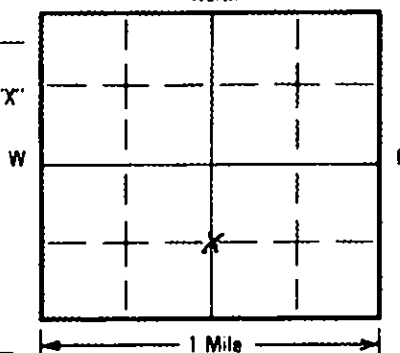
Location $\frac{1}{4}$ SE $\frac{1}{4}$ Sec 27 Twp 8 N Rg 2

County

Butte

North

Please mark well location with an "X"



Well Completion Date

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? _____ ft. from _____ (identify source).

PROPOSED USE:

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
25 LB/FT	12 IN	0 FT	28 FT	12 1/4 IN
15.50 LB/FT	5 1/2 IN	0 FT	821 FT	7 3/8 IN
11.6 LB/FT	4 1/2 IN	260 FT	1439 FT	5 IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
	140	lb./gal	0	821 ft
	20	lb./gal	260	1439 ft

Describe grouting procedure Flush joint 1 1/2" with cement
hand pumped through drill pipe and 4"SCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information Drilled out cement at 821 ft3 1/2" BIT 1439-1592WAS A PACKER OR SEAL USED? ☐ YES ☐ NOIf so, what material? Cement

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

☒ YES, How: 1st disinfection☐ NO, Why Not? _____

Laboratory sent to for water quality analysis

Rapid City EnergyWell Owner: Don & Kay LinchBusiness Name: Linch TruckingAddress: PO Box 615
Belle Fourche SD 57717

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Gray Brown shale	0	35
Gray Sand Gray clay	35	220
Hard sand pyrite coal	220	306
Sundance	306	830
Spotted Red Bed	830	1220
Limestone Gyps	1220	1300
o pebble	1300	1430
Limestone Gyps	1430	1440
Fine Sand and Gravel	1440	1592

STATIC WATER LEVEL _____ Feet

If flowing: closed in pressure 100 PSI PSI

GPM flow _____ through _____ inch pipe

Controlled by ☒ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? yes

WELL TEST DATA:

☐ Pumped Describe: _____☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED

DEC 15 2003

WATER RIGHTS PROGRAM

This well was drilled under license # 327

And this report is true and accurate.

Drilling firm Glenn R. Kline

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: 12-3-03



Belle Fourche

8N 2E
Section: 21

8N 2E
Section: 22

8N 2E
Section: 28

8N 2E
Section: 27

8N 2E
Section: 33

8N 2E
Section: 34

8N
Section

8N
Section

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, September 19, 2022 4:02 PM
To: Travislinchtrucking@gmail.com
Subject: Water Permit Application

Travis,

Ron forwarded your water permit application to me. In order to complete the application, a few items need to be addressed.

- Please complete Item No. 2, the amount of water claimed. We need the pump rate in gallons per minute (gpm).
- In addition to the pump rate, the application needs to include the annual volume in either gallons/year or acre feet/year. In calculating the annual volume, be reasonable but also plan for the maximum annual volume of use from the well at full development.
- The application/license fee will be based on the amount of water claimed. Once we know that amount, the fee can be determined. An application requesting 45 gpm or less will be \$300.
- Do you agree the well is located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 27-T8N-R2E.

If you have questions, please contact Ron Duvall or me.

Karen Schlaak

DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>



Schlaak, Karen

From: Travis Linch <travislinchtrucking@gmail.com>
Sent: Tuesday, September 20, 2022 10:44 AM
To: Schlaak, Karen
Subject: [EXT]
Attachments: 20220920_094221.jpg

I do agree on coordinates. Where or how do I pay the \$300?

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date September 30, 2022

RECEIVED OF Don Linch PO Box 615 Belle Fourche SD 57717-0615 (Travis Linch)

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

Fee for Application for Permit No. <u>2024-1</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>100.00</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>2024-1</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>300.00</u>

By Eric Gronlund
Chief Engineer
ONE

Report to the Chief Engineer
On Water Permit Application No. 2024-1

Travis Lynch

November 10, 2022

Water Permit Application No. 2024-1 proposes to appropriate an amount of water not to exceed 15 acre-feet annually at a maximum instantaneous diversion rate of 0.055 cubic feet per second (cfs) from one existing well completed into the Minnelusa aquifer (1,597 feet deep) located in the NW ¼ SE ¼ of Section 27-T8N-R2E for commercial use. The site of interest is located in Butte County on the south side of Belle Fourche, SD.

AQUIFER: Minnelusa (MNI.S)

HYDROGEOLOGY:

The Lower Permian and Upper Pennsylvanian aged, Minnelusa Formation consists mainly of yellow to red cross-stratified sandstone, limestone, dolomite, and shale (Strobel et al., 1999). Generally, the three units include: an upper unit consisting of red to white sandstone (up to approximately 200 feet thick), the middle unit consisting of dolomite, sandstone, and shale with anhydrite in subsurface (approximately 200 to 300 feet thick), and lower unit consisting of sandstones and dolomites with basal red shale (approximately 0 to 300 feet thick) (Rahn and Gries, 1973). The upper part of the Minnelusa Formation may also contain anhydrite which has generally been eradicated as a result of a change in depositional environment and dissolution where the formation outcrops (Carter et al., 2001b). The dissolution of the anhydrite has resulted in collapse features that have been filled with breccia (Carter et al., 2001b; Driscoll et al., 2002). The thickness of the Minnelusa Formation in the Black Hills within South Dakota ranges from approximately 375 feet thick near Belle Fourche to approximately 1,175 feet near Edgemont (Carter et al., 2001b; Driscoll et al., 2002).

The Minnelusa aquifer generally occurs within the upper sandstone units of the Minnelusa Formation (Kyllonen and Peter, 1987). The Minnelusa Formation is disconformably overlain by the Opeche Shale, which is overlain by the Minnekahta Limestone (Permian-aged) (Carter et al., 2001b). The Opeche Shale acts as a confining layer that restricts the flow of water between the Minnelusa and Minnekahta aquifers (Strobel et al., 1999). The Minnelusa Formation is unconformably overlying the Madison (Pahasapa) Limestone (Long and Putnam, 2009). The lower unit of the Minnelusa Formation acts as a confining layer between the Minnelusa and Madison aquifers as a result of the low permeability of the unit; however, weathering and brecciation may have increased the permeability in outcrop areas of the lower unit of the Minnelusa Formation (Kyllonen and Peter, 1987; Long and Putnam, 2009).

In western South Dakota, the Minnelusa Group is estimated to underlie approximately 23,114,880 acres, and the Minnelusa aquifer is estimated to contain approximately 755,555,520 acre-feet of recoverable water in storage (Allen et al., 1985). In Butte County, the Minnelusa Group is estimated to underlie approximately 1,440,000 acres, and the Minnelusa aquifer is

estimated to contain approximately 43,200,000 acre-feet of recoverable water in storage (Allen et al., 1985). It should be noted that the amount of recoverable water within the Minnelusa aquifer may vary from one location to another as a result of the characteristics and overall areal extent of the aquifer.

The Minnelusa Formation outcrops in the Black Hills (shown in Figure 1) but is otherwise buried in South Dakota (Strobel et al., 1999). The Minnelusa aquifer can exist under both confined and unconfined aquifer conditions (Long and Putnam, 2009; Water Rights, 2022b and 2022d). The Minnelusa aquifer is generally unconfined where the formation outcrops in the Black Hills in South Dakota (Long and Putnam, 2009; Water Rights, 2022b and 2022d). The Minnelusa aquifer is generally confined where the formation dips to the east causing the hydraulic head to be above the top of the formation (Long and Putnam, 2009; Water Rights, 2022b and 2022d). The direction of groundwater movement in the Minnelusa aquifer is generally radially outward from the outcrop in the Black Hills in South Dakota (Carter et al., 2001b).

A water well completion report was submitted with Water Permit Application No. 2024-1 for the existing well proposed to be used (Water Rights, 2022d). The report indicated “Gray Brown Shale” from 0 to 35 feet below the ground surface, “Gray Sand Gray Clay” from 35 to 220 feet, “Hard Sand Pyrite Coal” from 220 to 306 feet, “Sundance” from 306 to 830 feet, “Spearfish Red Bed” from 830 to 1,220 feet, “Limestone Gype” from 1,220 to 1,300 feet, “Opeche” from 1,300 to 1,430 feet, “Limestone Gype” from 1,430 to 1,440 feet, and “Fine Sand and Fractured” from 1,440 to 1,597 feet (Water Rights, 2022d). The well log may be misidentifying the Spearfish Formation as the Opeche Shale. At the time of completion (December 2003) the well was determined to be flowing with a closed in pressure of approximately 100 pounds per square inch (psi) (Water Rights, 2022d). Based on the submitted well completion report, and water well completion reports on file, the Minnelusa aquifer is confined at the existing well site (Water Rights, 2022d).

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 Minnelusa aquifer.

WATER AVAILABILITY:

Water Permit Application No. 2024-1 proposes to appropriate water from the Minnelusa aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.” The Minnelusa aquifer is older than and stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010); however, the applicant’s proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the Minnelusa aquifer must be considered.

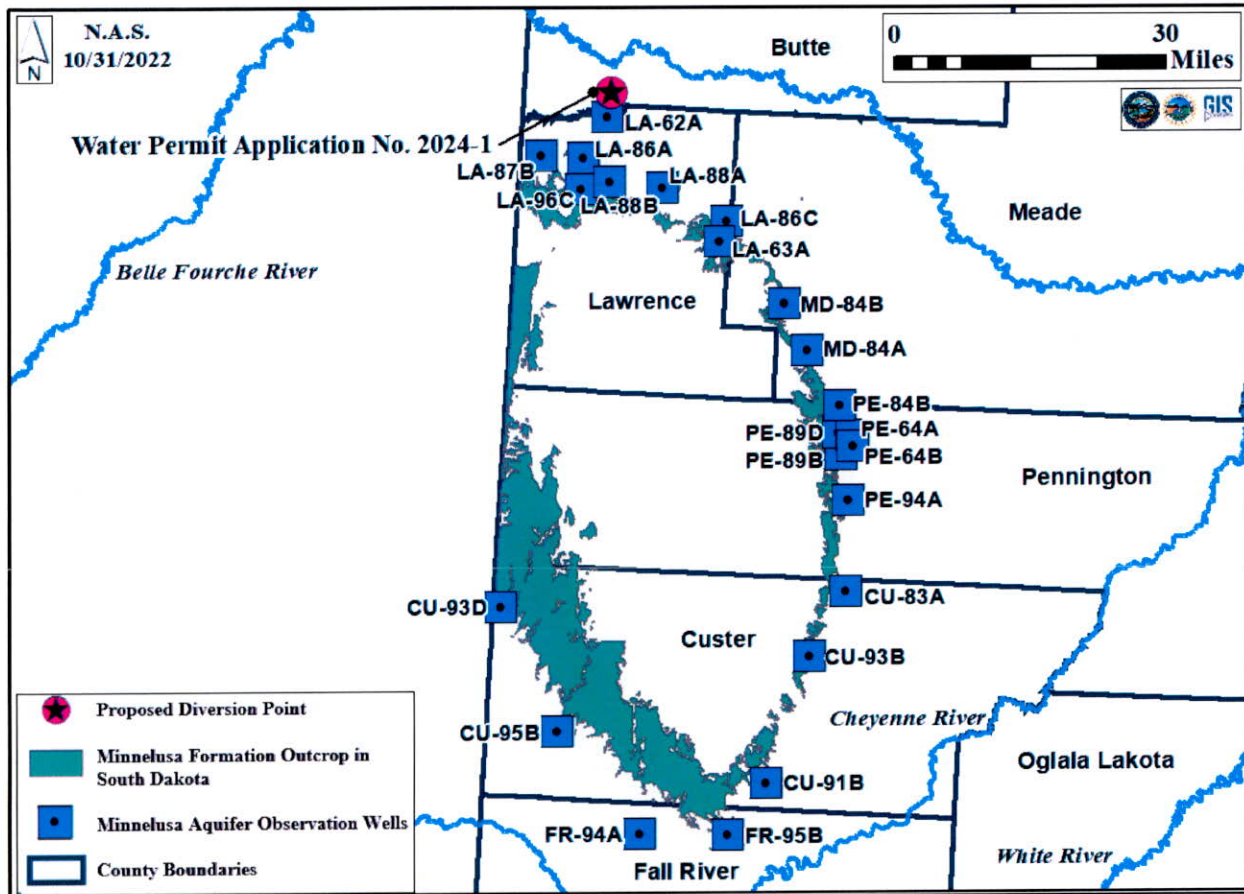


Figure 1. Minnelusa Formation outcrop in the Black Hills in South Dakota (Strobel et al., 1999), the Minnelusa aquifer observation wells in the Black Hills (Water Rights, 2022b), and the existing well site for Water Permit Application No. 2024-1 (Water Rights, 2022c)

HYDROLOGIC BUDGET:

Water Permit Application No. 2024-1 is approximately nine miles from the nearest Minnelusa Formation outcrop. It is possible to withdraw an amount of water from a localized area that will induce recharge from nearby areas, while the overall hydrologic budget remains balanced. Therefore, the hydrologic budget of the Minnelusa aquifer will be assessed in its entirety (in South Dakota) and on a localized scale (Carter et al., 2001b).

Statewide Recharge

Recharge to the Minnelusa aquifer is primarily through streamflow losses and the infiltration of precipitation where the formation outcrops (Carter and Driscoll, 2001a; Driscoll et al., 2002). Driscoll and others (2002) noted that the Madison aquifer receives more recharge than the Minnelusa aquifer as a result of the Madison outcrop having an upslope location to the Minnelusa outcrop within the Black Hills in South Dakota.

Carter and others (2001a) analyzed streamflow and precipitation data from 1931 to 1998 within the Black Hills of South Dakota and Wyoming to determine the average annual recharge to the Madison and Minnelusa aquifers. The average annual recharge rate to the Madison and Minnelusa aquifers from streamflow contributions was estimated to be approximately 93 cfs, or 67,500 acre-feet per year; plus 251 cfs, or 181,760 acre-feet per year from precipitation falling on the outcrop in the Black Hills, for a combined estimated average annual recharge rate of 344 cfs, or 249,260 acre-feet per year.

Carter and others (2001a) determined that of the combined estimated average annual recharge rate, approximately 55% of the total recharge goes to the Madison aquifer, and the remaining 45% recharges to the Minnelusa aquifer. Therefore, the estimated average annual recharge rate to the Minnelusa aquifer is approximately 112,167 acre-feet per year.

Statewide Discharge

Discharge from the Minnelusa aquifer is primarily through well withdrawals (Water Rights, 2022d) and flow to headwater and artesian springs (Carter and Driscoll, 2001a).

Currently, there are 188 water rights/permits authorized to withdraw water from the entirety of the Minnelusa aquifer in South Dakota, plus one pending water permit application— Water Permit No. Application 2853-2 requesting to appropriate up to 52 acre-feet per year from the Minnelusa aquifer (Water Rights, 2022c). Additionally, there is one future use permit reserving water from the Minnelusa aquifer - Future Use Permit No. 439-2 (Water Rights, 2022c). Future Use Permit No. 439-2 is held by the City of Rapid City and authorizes the reservation of groundwater, water from infiltration galleries on springs, and the Madison and Minnelusa aquifer wells used by the city for municipal use (Water Rights, 2022c). For the purpose of estimating the average annual withdrawal rate from the Minnelusa aquifer, Future Use Permit No. 439-2 is assumed to be developable for a total of 3,367 acre-feet per year (Water Rights, 2022c).

Of the 189 Minnelusa aquifer water rights/permits, 48 are for irrigation use and 141 are for non-irrigation use (including the pending application) (Water Rights, 2022c). Table 1 summarizes the 141 non-irrigation water rights/permits authorized to appropriate water from the Minnelusa aquifer with the estimated annual use for each water right/permit as determined by their authorized maximum diversion rate or annual volume. The use type determined for each water right/permit was based on the primary use categorized for each water right/permit as some permits have multiple use types (Water Rights, 2022c). 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 authorized maximum 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, 2022c).

No water rights/permits that are authorized to withdraw from the Minnelusa aquifer were identified as being connected to a rural water system (Drinking Water Program, 2022; Water Rights, 2022c). Overall, the estimated average annual withdrawal rate from the Minnelusa aquifer by the non-irrigation water rights/permits is approximately 12,892 acre-feet per year (Table 1) (Water Rights, 2022c).

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

Use Type	No. of Water Rights/Permits	Authorized Annual Volume (acre-feet/year)	Authorized Diversion Rate (cfs)	Total Estimated Use (acre-feet/year)
RWS	2		0.597	259
SHD	46	6.75	7.14	3,110
REC	1	18.4		18
COM	52	96	3.93	1,804
DOM	8		0.981	426
FWP	1		1.6	695
WDS	1	6.1		6.1
INS	10		0.828	360
IND	11	52	7.17	3,168
MUN	9		7.01	3,045
TOTAL:	141	179.3	29.3	12,892
RWS: Rural Water System, SHD: Suburban Housing Development, REC: Recreation,				
COM: Commercial, DOM: Domestic, FWP: Fish & Wildlife Propagation, WDS: Water Distribution System				
INS: Institutional, IND: Industrial, MUN: Municipal				

Water Permit No. 2773-2 and Water Right No. 1709-1 are both authorized to withdraw from the Madison and Minnelusa aquifers (Water Rights, 2022c). Water Permit No. 2773-2 has not been fully developed at this time; however, the well is only authorized to be constructed into a single water source. For the purpose of estimating the average annual withdrawal rate from the Minnelusa aquifer, the well authorized to be constructed by Water Permit No. 2773-2 will be assumed to be completed into the Minnelusa aquifer. Water Permit No. 2773-2 is authorized to irrigate 100 acres (Water Rights, 2022c), and assuming an application rate of one foot per authorized acre per year, the average annual withdrawal rate for Water Permit No. 2773-2 is estimated to be approximately 100 acre-feet per year. Water Right No. 1709-1 authorizes the maximum instantaneous rate of approximately 0.25 cfs from two wells completed into the Minnelusa aquifer (Water Rights, 2022c), and assuming the permit holder pumps 60% of full time at their respective authorized maximum diversion rate, the average annual withdrawal rate for Water Right No. 1709-1 is estimated to be approximately 109 acre-feet per year.

Currently, there are 48 irrigation water rights/permits authorized to appropriate water from the Minnelusa aquifer (Water Rights, 2022c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire since 1979. The estimated average annual withdrawal rate for the Minnelusa aquifer irrigation water rights/permits that have reported over the period of record (1982 to 2021) is approximately 2,332 acre-feet per year (Table 2) (Water Rights, 2022a). Table 2 lists only 44 water rights/permits as reporting in 2021 as Water Permit No. 1867-2 and Water Right Nos. 889-1 and 1703-2 are no longer irrigating and Water Right Nos. 1183-1 was divided into two water rights (Nos. 1183A-1 and 1183B-1) to reflect new ownership in December 2021 (Water Rights, 2022c). However, Table 2 is still reflective of the reported estimated use authorized by Water Right Nos. 1183A-1 and 1183B-1 (Water Rights, 2022a and 2022c).

Table 2. Reported historic irrigation use from Minnelusa aquifer (Water Rights, 2022a)

Year	No. of Permits Reporting	Reported Pumpage (acre-feet)
1982	29	1,736.9
1983	35	4,337
1984	32	3,626.6
1985	33	5,199.1
1986	33	2,956.3
1987	34	2,946
1988	37	3,918.5
1989	37	2,985.5
1990	37	3,290.8
1991	41	2,652.2
1992	41	3,002
1993	42	1,003.6
1994	43	2,950.4
1995	37	1,126.9
1996	39	1,704
1997	39	1,986
1998	40	2,866.8
1999	40	1,082.7
2000	41	2,815
2001	43	2,300.8
2002	43	2,692.4
2003	44	2,310.8
2004	44	2,645
2005	44	2,820
2006	43	2,713.2
2007	44	2,846.9
2008	45	1,509.6
2009	45	1,549.5
2010	44	1,588.3
2011	44	1,540.6
2012	44	3,368.9
2013	44	2,290.3
2014	44	1,281.9
2015	45	936.8
2016	45	1,759.4
2017	46	2,366.4
2018	47	817.5
2019	44	375.3
2020	44	1,487.1
2021	44	1,887.54
Min	29	375.27
Max	47	5,199
Avg	41	2,332

There are domestic wells completed into the Minnelusa aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2022d). However, Carter and others (2001b) estimated an average annual withdrawal rate from the Minnelusa aquifer for domestic and livestock use from 1987 to 1996 to be approximately 970 acre-feet per year. It is likely that water withdrawals from the Minnelusa aquifer for domestic and livestock use has increased since 1996; however, 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 some of the areas where the Minnelusa aquifer is a viable aquifer; it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water estimated by Carter and others (2001b) for average annual withdrawals for domestic and livestock use from the Minnelusa aquifer will be assumed to be a probable minimum average annual withdrawal rate from the aquifer.

Statewide Hydrologic Budget Summary

The estimated average annual recharge rate to the Minnelusa aquifer is approximately 112,167 acre-feet per year. The estimated average annual withdrawal rate from the Minnelusa aquifer is approximately 19,785 acre-feet per year (including the estimated use for Water Permit Application No. 2024-1, if approved) (Table 3). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the Minnelusa aquifer for the proposed appropriation

Table 3. Estimated use from this outwash deposit of the Minnelusa aquifer (Water Rights, 2022a, 2022c, and 2022d)

Type of Water Right/Permit	Estimated Use (acre-feet/year)
Non-Irrigation (including pending application)	12,892
Irrigation	2,332
Future Use Reservations	3,367
Water Permit No. 2773-2 and Water Right No. 1709-1	209
Domestic & Livestock Use	970
Water Permit Application No. 2024-1 (<i>if approved, assuming full volume appropriation</i>)	15
TOTAL:	19,785

Localized Hydrologic Budget: *Carter, Driscoll, Hamade, & Jarrell (2001b)*

Carter and others (2001b) calculated hydrologic budgets for subareas of the Madison and Minnelusa aquifers for the Black Hills (in SD and WY) during the water years of 1987 to 1996. The budgets were calculated by dividing the Black Hills into nine subareas with the intent of minimizing groundwater flow to and from adjacent subareas. These subareas were determined based on several factors, including locations of major artesian springs, streamflow loss zones, and areas dominated by precipitation recharge. The existing well site for Water Permit Application No. 2024-1 is located in Subarea 1 (Figure 2). The hydrologic budget for Subarea 1 is displayed on Table 4 (Carter et al., 2001b).

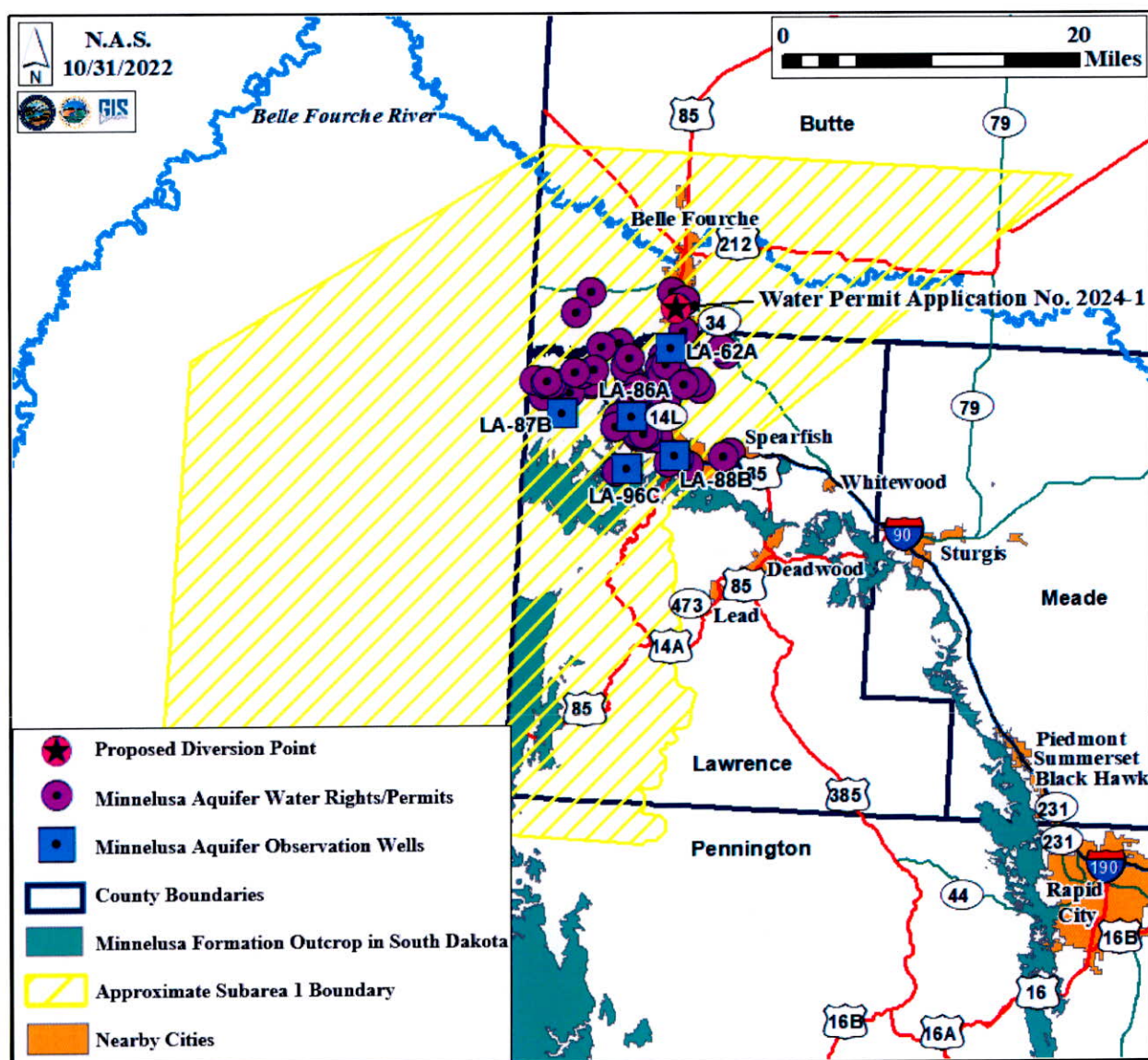


Figure 2. Subarea used for the Madison and Minnelusa aquifers localized hydrologic budgets (modified from Carter et al., 2001b), the Minnelusa Formation outcrop (Strobel et al., 1999), the location of the existing well site for Water Permit Application No. 2024-1, and the Minnelusa aquifer water rights/permits and observation wells within Subarea 1 (Water Rights, 2022b and 2022c)

Table 4. Estimated average annual hydrologic budget for Subarea 1 for the Madison and Minnelusa aquifers in the Black Hills (in SD and WY) for the water years 1987 to 1996 (modified from Carter et al., 2001b)

Subarea 1	Inflow:			Outflow:		
	Streamflow Recharge	Precipitation Recharge	Net Groundwater Inflow	Artesian Springflow	Wells	Net Groundwater Outflow
cfs	9.6	121.1	0	90.3	10.8	29.6
acre-feet/year	6,950.1	87,672.5	0	65,374.3	7,818.9	21,429.5

As shown in Table 4, Carter and others (2001b) estimated the average annual recharge rate to Subarea 1 for the Madison and Minnelusa aquifers due to streamflow, precipitation, and groundwater inflow recharge to be approximately 21,429.5 acre-feet per year. Carter and others (2001a) determined that of the combined average annual recharge rate, approximately 45% of the total recharge goes to the entire Minnelusa aquifer. Although 45% of the total recharge going to the Minnelusa aquifer is for the entirety of the Minnelusa Formation outcrop area in the Black Hills, this percentage can still be used to roughly approximate the average annual recharge rate to the Minnelusa aquifer in Subarea 1, which equates to approximately 9,643 acre-feet per year.

Currently in Subarea 1, there are 52 water rights/permits authorized to withdraw from the Minnelusa aquifer (Water Rights, 2022c). For the water rights/permits authorized for irrigation use, an application rate of one foot per authorized acre per year, was utilized for the purpose of estimating the average annual withdrawal rate from the Minnelusa aquifer. For the water rights/permits authorized for a non-irrigation use, appropriations limited by an instantaneous diversion rate were assumed to be pumping 60% of full time at the respective authorized maximum diversion rate and water rights/permits limited by an annual volume were assumed to withdraw their entire respective annual volume limitation. If the water right/permit had both irrigation and non-irrigation authorized uses, the estimated use for each was combined (one foot per acre per year application rate + 60% pumping of full time at the respective authorized maximum diversion rate). Including Water Permit Application No. 2024-1 (if approved), the average annual withdrawal rate from the Minnelusa aquifer is approximately 6,697 acre-feet per year from Subarea 1. Based on the hydrologic budget for the water rights/permits within Carter and others (2001b) Subarea 1, there is a reasonable probability unappropriated water is available from the Minnelusa aquifer for the proposed appropriation.

Groundwater models rely on several assumptions and the hydrologic budget for the subarea determined by Carter and others (2001b) does not account for other factors contributing to recharge. Additional recharge is likely available through upward leakage from underlying aquifers, through infiltration of precipitation at areas other than the Black Hills where the Minnelusa Formation outcrops, through streamflow losses, and through well withdrawals inducing groundwater inflow from outside the subarea.

OBSERVATION WELL DATA:

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

Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DNR-Water Rights Program monitors 23 observation wells completed into the Minnelusa aquifer (Water Rights, 2022b). The six closest observation wells to the well the applicant proposes to use are I.A-62A (approximately 2.7 miles south), I.A-86A (approximately 7.9 miles southwest), I.A-88B (approximately 10 miles south), I.A-87B (approximately 10.4 miles southwest), I.A-96C (approximately 11.3 miles southwest), and I.A-88A (approximately 12.2 miles southeast) (as shown in Figure 1) (Water Rights, 2022b). The hydrographs for these observation wells are displayed in Figures 3 to 8 (Water Rights, 2022b). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing. It is worth noting the hydrograph titles display DENR Water Rights Observation Well on the hydrographs when the titles should display DNR Water Rights Observation Well on the hydrographs.

The hydrographs for the observation wells display stable to slightly increasing water levels over their respective periods of record. The hydrographs for these six observation wells were compared to the hydrographs for the other observations wells completed into the Minnelusa aquifer and each displayed a generally similar trend as shown on the hydrographs displayed in Figures 3 to 8 (Water Rights, 2022b). The hydrographs for the Minnelusa aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions annually. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Minnelusa aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

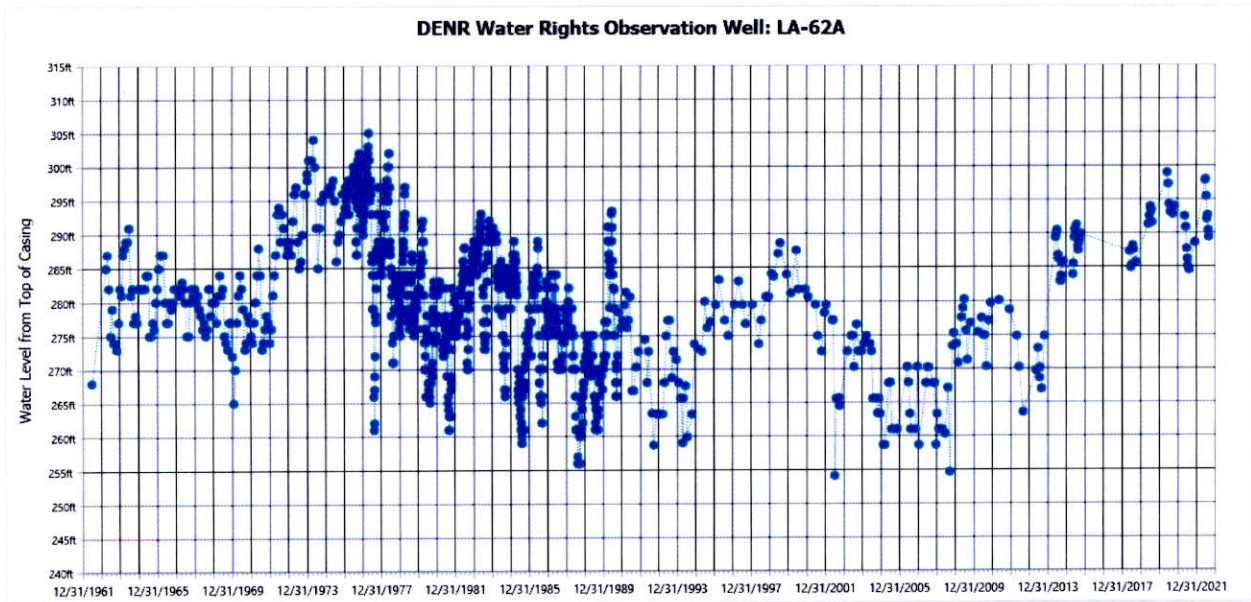


Figure 3. Hydrograph for observation well LA-62A (Water Rights, 2022b)

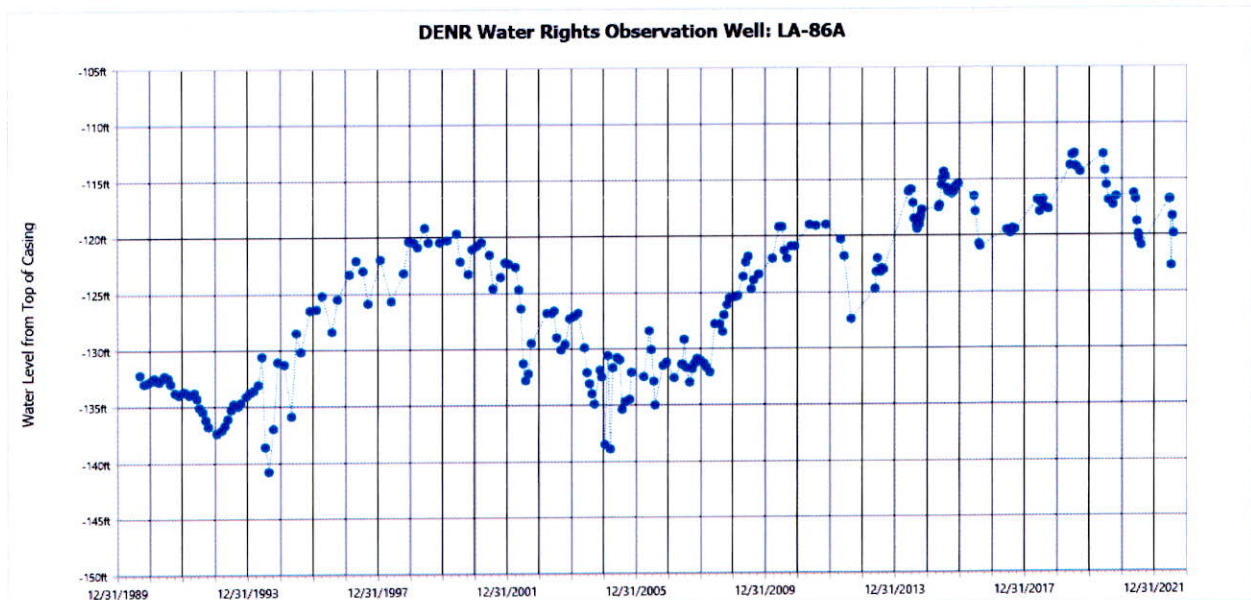


Figure 4. Hydrograph for observation well LA-86A (Water Rights, 2022b)

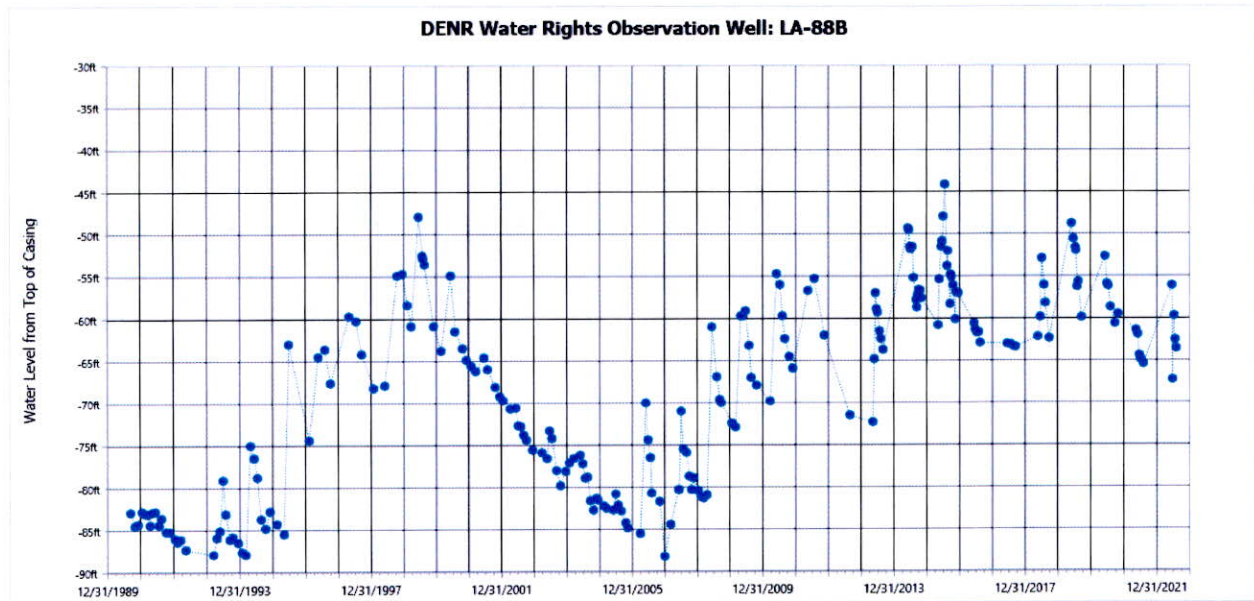


Figure 5. Hydrograph for observation well LA-88B (Water Rights, 2022b)

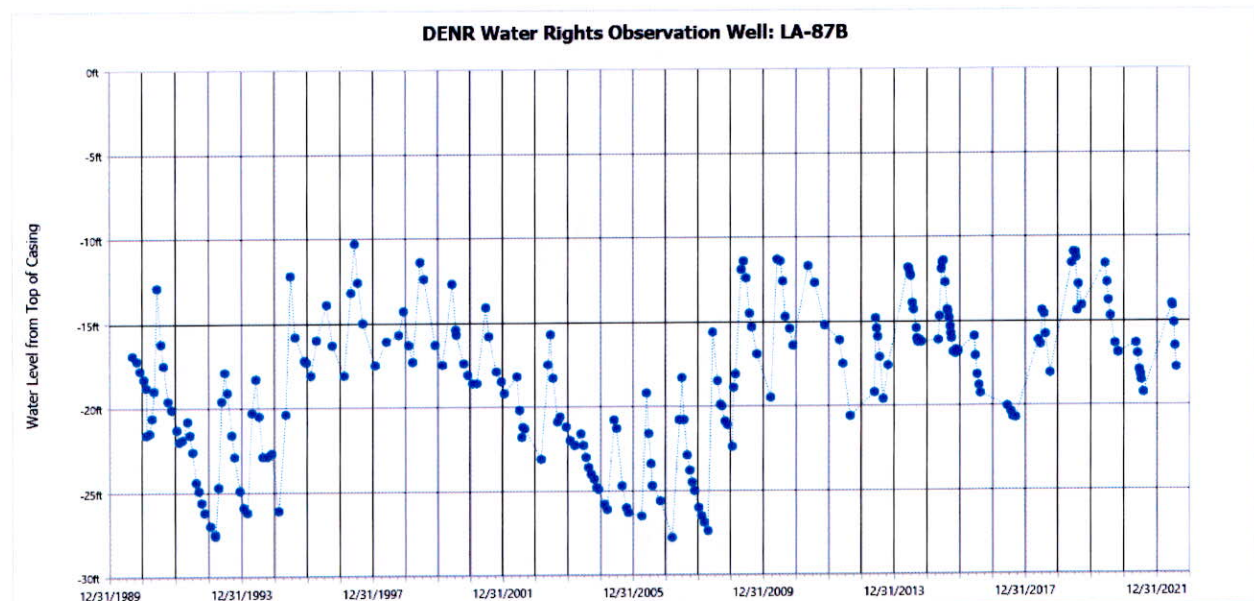


Figure 6. Hydrograph for observation well LA-87B (Water Rights, 2022b)

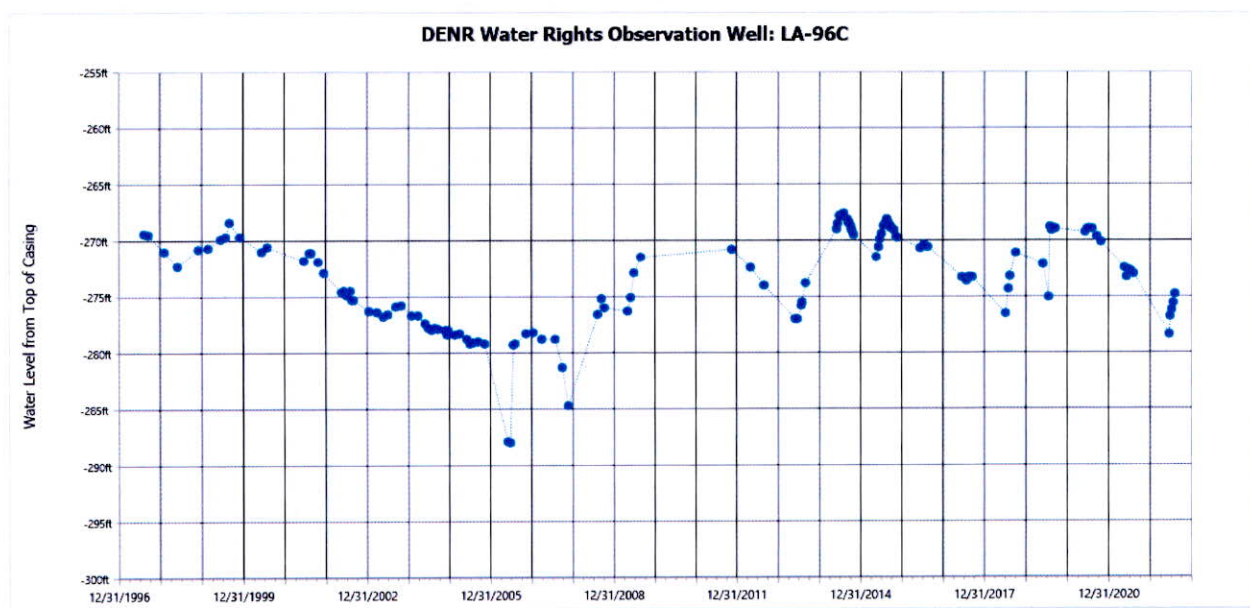


Figure 7. Hydrograph for observation well LA-96C (Water Rights, 2022b)

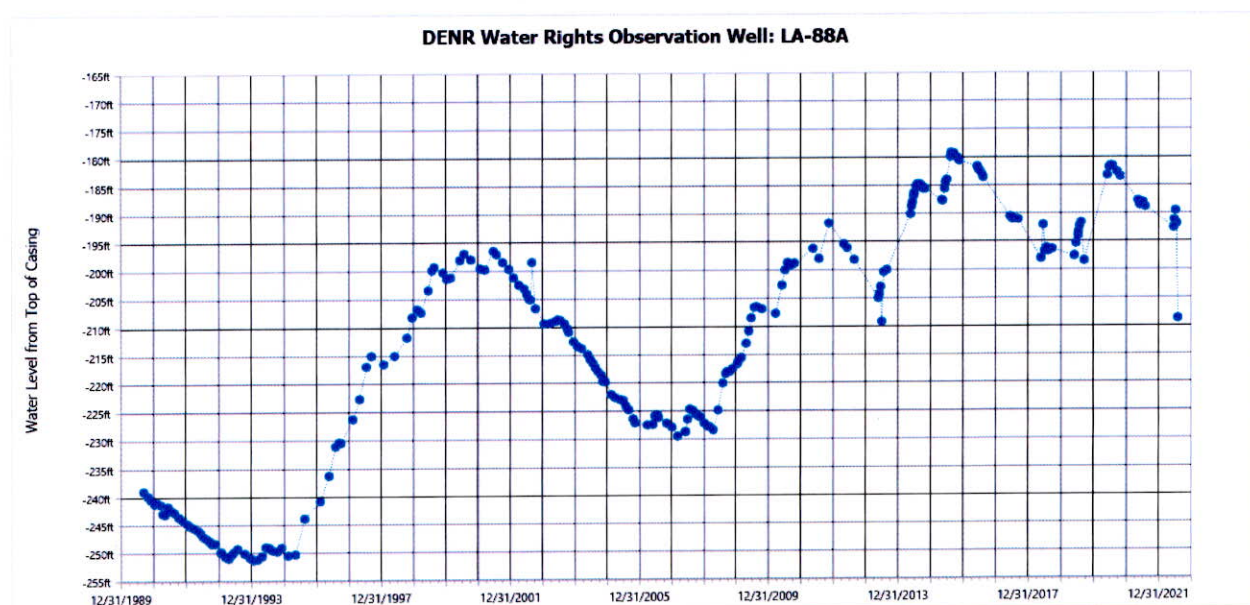


Figure 8. Hydrograph for observation well LA-88A (Water Rights, 2022b)

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 188 water rights/permits (plus Water Permit No. 2773-2 and Water Right No. 1709-1), and one pending application – Water Permit Application No. 2853-2, that are authorized to appropriate water from the Minnelusa aquifer in South Dakota, and one future use permit reserving water from the Minnelusa aquifer (Water Rights, 2022c). The closest water right/permit to the existing well site is Water Right No. 1823-1, which is held by Black Hills Water. The diversion points for Water Right No. 1823-1 are located approximately 0.8 miles northeast of the existing well site proposed for this application (Figure 9) (Table 5) (Water Rights, 2022c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Minnelusa aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.8 miles south of the existing well site (Water Rights, 2022d). There could potentially be other domestic wells completed into the Minnelusa aquifer near the well the applicant proposes to use that are not on file with the DANR-Water Rights Program.

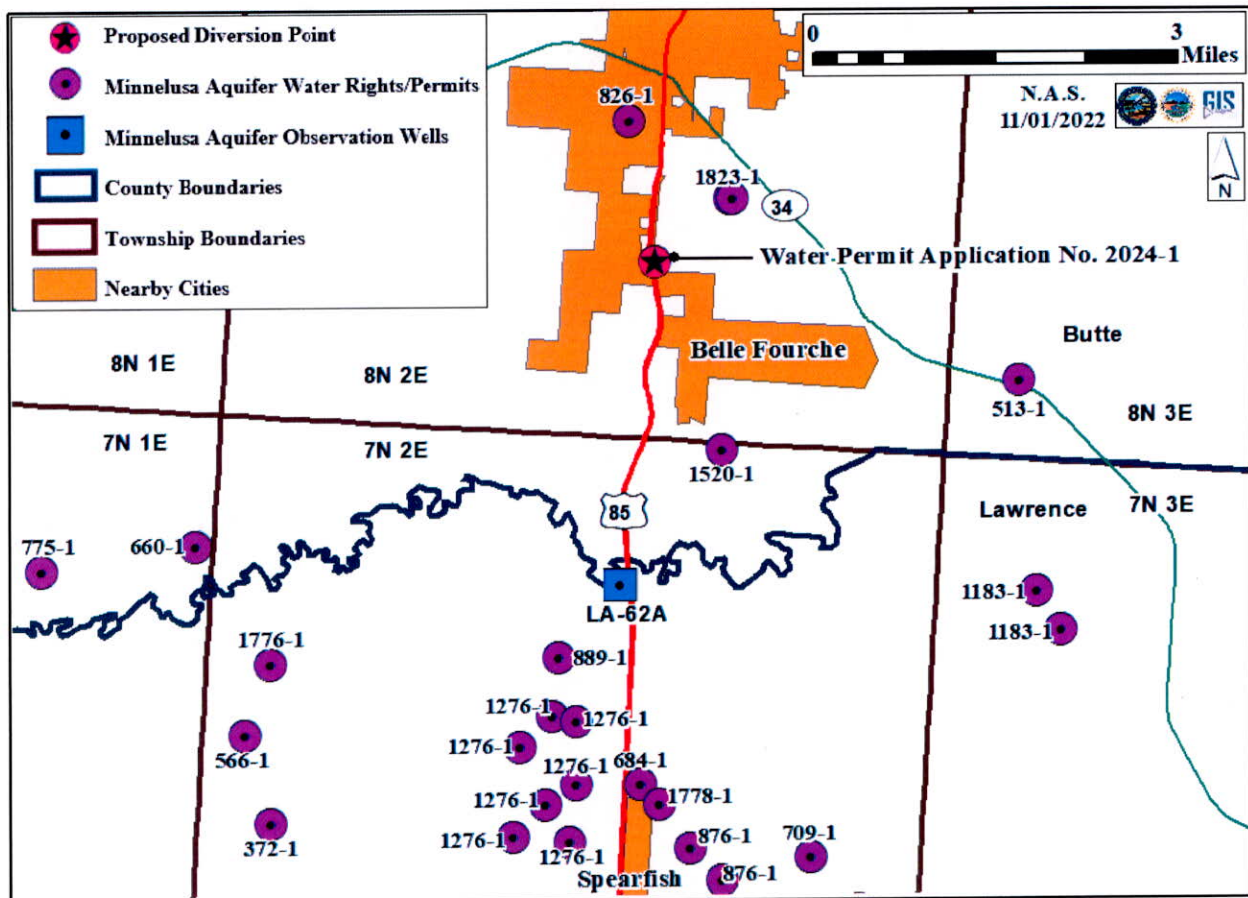


Figure 9. Location of the existing well site for Water Permit Application No. 2024-1 with the Minnelusa aquifer water rights/permits and observation well within approximately five miles (Water Rights, 2022b and 2022c)

Table 5. Water rights/permits authorized to withdraw water from the Minnelusa aquifer within approximately five miles of the existing well, as shown in Figure 9 (Water Rights, 2022c)

Permit No.	Name	Status	Use	Authorized Acres if IRR	Authorized Diversion Rate (cfs)
372-1	Richard D Sleep	LC	IRR	174	1.78
513-1	False Bottom Livestock	LC	IRR	193.7	1.11
566-1	Eric/Michelle Jennings	LC	IRR	121	1.1
660-1	John/Brenda Swanson	LC	IRR	263	1.77
684-1	Edgar & Carole Kellem	LC	IRR	133	1.1
709-1	Bernice G Cundy Trust	LC	IRR	71.5	1.0
775-1	John E Swanson	LC	IRR	138.5	1.97
826-1	Belk Fourche Country Club	LC	IRR	56.2	0.8
876-1	Gene E Johnson	PE	IRR	71.3	1.0
889-1	Crago Cattle Co	LC	IRR	149	2.1
1183-1	Mitch O'Connell	LC	IRR	148	2.1
1276-1	Gloria Delzer	LC	IRR	748.5	8.73
1520-1	Jeral & Dianne Shear	LC	IRR, DOM	13	0.23
1776-1	Kyle & Lucy Conklin	LC	IRR	141.2	0.67
1778-1	Spring Creek Ranch LLC	LC	SHD		0.4
1823-1	Black Hills Water	LC	RWS		0.53
LC: Licensed Water Right; PE: Water Permit; DOM: Domestic; IRR: Irrigation;					
RWS: Rural Water System; SHD: Suburban Housing Development					

The Minnelusa aquifer can exist under both confined and unconfined aquifer conditions (Long and Putnam, 2009; Water Rights, 2022b and 2022d). Based on the submitted well completion report, water well completion reports on file, and lithologic logs on file for nearby observation wells, the Minnelusa aquifer is expected to be confined at the applicant's existing well site (SDGS, 2022; Water Rights, 2022b and 2022d). Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer; however, in a confined aquifer, drawdown from pumping could extend a distance from the diversion point. The exact drawdown behavior of a well cannot be known without an aquifer performance test. However, observation wells completed into the Minnelusa aquifer near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well LA-62A (approximately 2.7 miles south of existing well site) has six high-yield (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) wells within approximately two miles of it (Water Rights, 2022b and 2022c). Some drawdown resulting from pumping can be seen on the hydrograph for LA-62A, along with the aquifer water level recovering in response to recharge during the spring season (Figure 3) (Water Rights, 2022b). The lithologic log on file for LA-62A noted the well was drilled approximately 1,306 feet below the ground surface with the top of aquifer materials approximately 1,178 feet below grade (SDGS, 2022). The lowest recorded static water level on the hydrograph is approximately 254 feet below grade, which indicates there was still approximately 920 feet of artesian head pressure in LA-62A even during a drier period when wells are expected to be pumping more water and

when water levels are generally naturally lower in response to drier conditions (Water Rights, 2022b).

Within approximately three miles of the existing well site, wells completed into the Minnelusa aquifer have a saturated aquifer thickness ranging from approximately 50 to 150 feet (SDGS, 2022; Water Rights, 2022d). This thickness generally allows for a pump to be placed 20 feet below the top of the aquifer, which is required for the well to be considered adequate under ARSD 74:02:04:20(6). Any drawdown as a result of the proposed diversion for this application is not expected to unlawfully impair nearby adequate wells. In Butte and Lawrence Counties, there are no substantiated complaints on file with the DNR-Water Rights Program regarding well interference for adequate wells completed into the Minnelusa aquifer (Water Rights, 2022e).

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 Minnelusa 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 estimated saturated thickness of the Minnelusa aquifer near the applicant’s existing well site, the artesian head pressure in observation wells near permitted/licensed diversion points, and the lack of well interference complaints, 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. Additionally, the well proposed to be used is an existing well that has been in place and is presumed to have been in use since roughly 2004 without any reported well interference complaints on file with the DNR-Water Rights Program (Water Rights, 2022d and 2022e). Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

Additional Considerations: Springs

In the past, there have been concerns that development of the Minnelusa aquifer will affect spring discharge. The nearest major springs that are sourced primarily by water from the Minnelusa aquifer are the Old Spearfish Hatchery Spring (approximately 5.6 miles southwest of the existing well) and the Higgins Gulch Spring (approximately 6.5 miles southwest of the existing well) (Driscoll et al., 2002). When considering the deferral of Water Permit Application No. 2585-2 for the Southern Black Hills Water System, the Water Management Board adopted a conclusion of law stating in part "...The only protection South Dakota law provides when considering an application for an underground water permit for flow from an artesian spring is under the public interest criteria" (Water Rights, 1997). Given the distance between the existing well site and the springs mentioned above, while considering the applicant's proposed maximum diversion rate, there is a reasonable probability Water Permit Application No. 2024-1 can be developed without making an impact that would be measurable above the natural fluctuations in the nearest spring.

CONCLUSIONS:

1. Water Permit Application No. 2024-1 proposes to appropriate an amount of water not to exceed 15 acre-feet annually at a maximum instantaneous diversion rate of 0.055 cfs from one existing well completed into the Minnelusa aquifer (1,597 feet deep) for commercial use. The site of interest is located in Butte County on the south side of Belle Fourche, SD.
2. Based on the observation well data and hydrologic budgets, there is a reasonable probability that unappropriated water is available from the Minnelusa aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 2024-1 will not unlawfully impair adequate wells for existing water right/permit holders and domestic users.

Nakaila Steen

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

Reviewed by:

Adam Mathiowetz

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

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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2024-1, Travis Linch**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2024-1, Travis Linch, 10850 Sourdough Rd, Belle Fourche SD 57717.

The Chief Engineer is recommending APPROVAL of Application No. 2024-1 because 1) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 2) the proposed use is a beneficial use and 3) 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. 2024-1 is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well approved under this permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If the wells are abandoned, the wells must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
3. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa aquifer.
4. Water Permit No. 2024-1 authorizes a total annual diversion of 15.0 acre-feet of water from the Minnelusa aquifer.

See report on application for additional information.

Eric Gronlund, Chief Engineer
November 10, 2022

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, November 14, 2022 8:36 AM
To: Travis Linch
Subject: Water Permit Application No. 2024-1
Attachments: 4394.pdf

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

Karen Schlaak
DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>



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DEC 05 2022

OFFICE OF
WATER

Affidavit of Publication

STATE OF SOUTH DAKOTA:

COUNTY OF LAWRENCE:

Letitia Lister of said County and State being first duly sworn, on her oath says: That the BLACK HILLS PIONEER is a legal daily newspaper of general circulation, printed and published in the City of Spearfish, in said County and State by Letitia Lister, and has been such a newspaper during the times hereinafter mentioned; and that said newspaper has a bonafide circulation of at least 200 copies weekly, and has been published within said County in the English language for at least one year prior to the first publication of the notice herein mentioned, and is printed in whole or in part in an office maintained at the place of publication; and that I, Letitia Lister, the undersigned, am the Publisher of said newspaper and have personal knowledge of all the facts stated in this affidavit; and that the advertisement headed:

Notice Of Application
No. 2024-1

a printed copy of which is hereto attached, was printed and published in said newspaper for 1 successive and consecutive weeks, the first publication being made on the 23rd day of Nov, 2022, and the last publication on the _____ day of _____, _____, that the full amount of fees charged for publishing same, to-wit: The sum of \$38.82, insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.

Letitia Lister
Subscribed and sworn to before me this 1st day of Dec, 2022

Karen Dargatz

Notary Public, Lawrence County, South Dakota

My commission expires: 7-18-2025

NOTICE OF APPLICATION NO. 2024-1 to Appropriate Water

Notice is given that Travis Linch, 10850 Sour-dough Rd, Belle Fourche SD 57717 has filed an application for a water permit to appropriate up to 15 acre-feet of water annually at a maximum pump rate of 0.055 cubic feet of water per second from one well completed into the Minnelusa Aquifer (1,597 feet deep) located in the NW 1/4 SE 1/4 Section 27-T8N-R2E for commercial use. This site is located on the south side of Belle Fourche SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2024-1 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it 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 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 December 5, 2022.

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 December 5, 2022.

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 \$39.79 and can be viewed free of charge at www.sd-publicnotices.com.

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RECEIVED

DEC 05 2022

OFFICE OF
WATER

Affidavit of Publication

STATE OF SOUTH DAKOTA:

COUNTY OF LAWRENCE:

Letitia Lister of said County and State being first duly sworn, on her oath says: That the BLACK HILLS PIONEER is a legal daily newspaper of general circulation, printed and published in the City of Spearfish, in said County and State by Letitia Lister, and has been such a newspaper during the times hereinafter mentioned; and that said newspaper has a bonafide circulation of at least 200 copies weekly, and has been published within said County in the English language for at least one year prior to the first publication of the notice herein mentioned, and is printed in whole or in part in an office maintained at the place of publication; and that I, Letitia Lister, the undersigned, am the Publisher of said newspaper and have personal knowledge of all the facts stated in this affidavit; and that the advertisement headed:

Notice Of Application
No. 2024-1

a printed copy of which is hereto attached, was printed and published in said newspaper for 1 successive and consecutive weeks, the first publication being made on the 23rd day of Nov, 2022, and the last publication on the _____ day of _____, _____, that the full amount of fees charged for publishing same, to-wit: The sum of \$38.82, insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.

Letitia Lister
Subscribed and sworn to before me this 1st day of Dec, 2022

Karen Dargatz

Notary Public, Lawrence County, South Dakota

My commission expires: 7-18-2025

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**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 NEWSPAPER RIGHT AWAY.**

November 14, 2022

Travis Linch
10850 Sourdough Rd
Belle Fourche SD 57717

Dear Mr. Linch:

Water Permit Application No. 2024-1 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Black Hills Pioneer printed at Spearfish SD (Ph # 605 642-2761). You will need to contact the newspaper 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 newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has 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,

Karen Schlaak

Karen Schlaak
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.

Instruction to Newspaper - Publish the Notice on November 23, 2022. The applicant is responsible for payment.

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Published once at the total approximate cost of_

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, November 14, 2022 8:34 AM
To: Black Hills Pioneer Spearfish (legals@bhpioneer.com)
Subject: 2024-1, Travis Linch
Attachments: 2024-1public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on November 23, 2022.

Travis Linch, 10850 Sourdough Rd, Belle Fourche SD 57717 (605 210-111) 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, Pierre SD 57501.

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

Karen Schlaak

DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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PIERRE SD 57501-3182
danr.sd.gov

DEC 21 2022

Travis Linch
10850 Sourdough Rd
Belle Fourche SD 57717

Dear Mr. Linch:

Enclosed is Water Permit No. 2024-1 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,

Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
on DANR Website**

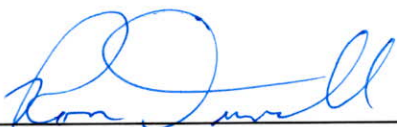
Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the 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.: 2024-1

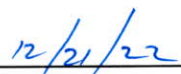
Name of Applicant: Travis Linch

Date of Posting: 11/21/2022

Date of Removal: 12/21/2022



Ron Duvall, Water Rights Permitting Administrator

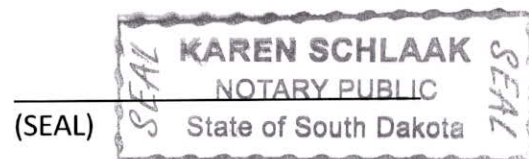


Date

Subscribed and sworn to before me, a notary public, this 21st day of dec, 20 22.



Notary Public - South Dakota
My commission expires: 4/1/2025



2024-1

RECEIVED

MAR 06 2023

OFFICE OF
WATER**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**

Date

2/1/23

TO: Water Rights Program, DANR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Travis Lynch

(name)

10850 Soudrough Rd

(address)

Belle Fourche SD

(city, state, zip)

605-210-1111

(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 2024-1 states that the water use system is to be constructed by

Dec 5 27

(date)

, and water is to be put to beneficial use by

Dec 5 31

(date)

The water use system was completed on

2/20/23

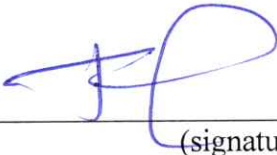
(date)

Applying the water to beneficial use was completed on

2/24/23

(date)

You may schedule an investigation so that the water license may be issued.



(signature)





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

March 7, 2023

2024-1

Travis Linch
10850 Sourdough Rd
Belle Fourche SD 57717

Dear Mr. Linch:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your water use system.

The system is now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of your project and the staff inspection has no bearing on your water permit.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us