

WATER PERMIT NO. 8759-3

Name of Applicant: Ernest Namminga

Address: 40786 310th Street, Springfield SD 57062

Phone: 605-286-3873

Amount of Water Claimed: 1.78 cfs

Total Acres: 160

Source of Water Supply: Groundwater

Water to be used for: Irrigation

County: Bon Homme

Type of Waste Disposal System:

Location: Approx. 11 miles northeast of Tyndall

PRIORITY

Date Received: 5-8-2023

Application/License Fee: \$1,050.00

Corrected Application Received:

Period of Annual Use: April 1 – October 31

Remarks:

Diversion Point: Approximate center of NE 1/4
Section 10 -T93N-R61W

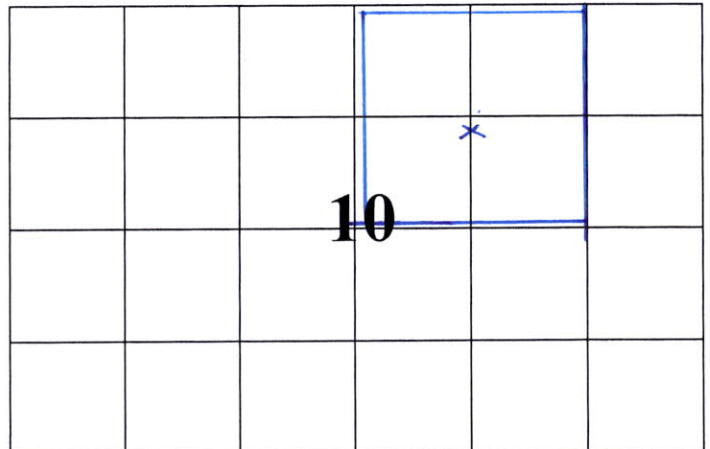
Land to be Irrigated: NE 1/4 Section 10 -T93N-
R61W

Depth of Well: 238

Well Driller: Thein Well Company

Remarks:

Type of Map: aerial



Reviewed and the Number Assigned on: 5-8-2023

By: Rachel Rodriguez

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8759-3

Date of first receipt of application May 8, 2023.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8759-3 to Ernest Namminga, 40786 310th Street, Springfield SD 57062 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. 8759-3 appropriates 1.78 cubic feet of water per second (cfs) from one well to be completed into the Choteau: West Aquifer (approximately 238 feet deep) located in the approximate center of the NE 1/4 Section 10 for irrigation of 160 acres located in the NE 1/4 Section 10; all in T93N-R61W. This site is located approximately 11 miles southwest of Tyndall SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is May 8, 2023.
4. The date of approval of Permit No. 8759-3 is July 31, 2023.
5. One-fifth of the construction is to be completed on or before January 31, 2026.
6. All construction is to be completed on or before July 31, 2028.
7. Water is to be put to beneficial use on or before July 31, 2032.
8. 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. 8759-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8759-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

AUG 31 2023
date



RECEIVED

MAY 08 2023

PAID

MAY 08 2023

OFFICE OF
WATERFORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: SD DANR, Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8759-3</u> Hydrologic Unit <u>10170101</u> Basin <u>Lewis & Clark Lake</u> Newspaper <u>Tyndall Tribune & Register</u> <u>Daily Press & Dakotan</u> (office use only)
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Ck# 2283
Rec't# 05/08/23

Application for Permit to Appropriate Water for Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
_____1. Name to Appear on Irrigation Permit Ernest Namminga

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 40786 310th St Springfield SD 57062
(Address) (City) (State) (Zip Code)Phone (605) 286-3873 Mobile _____ Email ernmore@goldenwest.net2. Amount of water claimed 26 *CFS or 500 **GPM _____ ***AF Total Acreage 160
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply groundwater aquifer4. Location of point of diversion one well in SE 1/4 NE 1/4 (approximate center)
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
Section 10 T-093N R-61W County Bon Homme5. County or counties where water will be used Bon Homme6. Annual period during which water is to be used April 1 - October 317. List below each forty-acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>NE 1/4 Sec 10</u>	<u>160</u>		
<u>TWP 93 R 61 W</u>			

8. Give a description of the project. (Attach sheet if more space is needed)

I, Ernest R. Namminga May 3, 2023, 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.

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 Ther Well Co
(if yes, please provide copies of logs)

b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

For either existing or proposed wells:

c) Well Depth (required) 238 Depth to Top of Water Bearing Material 150 Depth to Water from Surface _____

d) Distance to nearest domestic well on applicant's property 1/2 mile Property owned by others 2 miles

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

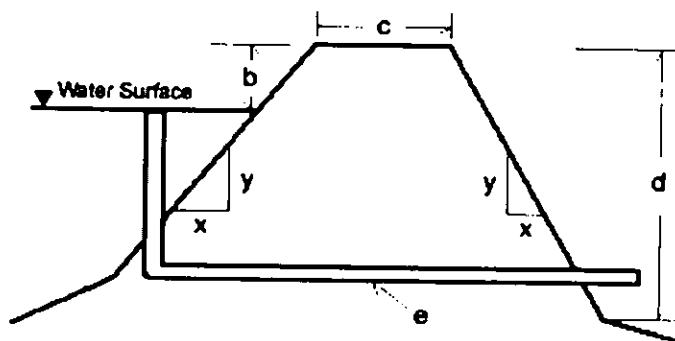
a) Surface Dimensions _____ Depth _____

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) Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres

ERNIE NEMMINGA - AVON SD

Legend
Feature 1

310th St

310th St

408th Ave

Ernie Nemminga TH # 2 240'

Ernie Nemminga Th # 1 225'

408th Ave

Google Earth



Location SE 1/4 NE 1/4 Sec 10 Twp 93 Rg 61

E

1 Mile

Date:

Ernie Nemminga TH # 1 Avon SD

Top Soil	0	8
Clay- Gray / Black	8	17
Clay- Brown	17	22
Clay- Gray	22	27
Clay Brown w/ chalk fragments	27	30
Clay Gray	30	76
Chalk Gray Pebbly	76	132
Clay Gray Sandy	132	157
Clay Sandy & Rocky	157	159
Gravel	159	164
Clay W/ Gravel Layers	164	170
Gravel W/ a few clay layers	170	178
Clay Gray	178	185
Gravel	185	189
Clay Gray	189	203
Chalk Tan	203	209
Chalk Gray/ white	209	225

Location SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec 10 Twp 93 Rg 61

North

August 29, 2022

1 Mile

PROPOSED USE:

METHOD OF DRILLING:
MUD RORARY

☐ Steel ☐ Plastic ☐ Other

PIPEWEIGHT	DIAMETER		FROM	TO	HOLE DIAMETER	
LB/FT	IN		FT	FT		IN
LB/FT	IN		FT	FT		IN
LB/FT	IN		FT	FT		IN

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	18	Lb/gal	Ft	225.0 Ft
		Lb/gal	Ft	Ft

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Slot Size	Set From	Feet to	Feet
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WAS A PACKER OR SEAL USED?

☐	Yes	☐	No
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Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes. How?

Lab to which water quality sample sent for analysis ☒ No, Why Not?

TEST HOLE ONLY

City, State, Zip: SPRINGFIELD SD 57062

DEPTH

FORMATION

FROM

TO

SEE ATTACHED LOG

FEET

If flowing: closed in pressure PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

☐ 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

TH # 1 EASTERN MOST

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: **THEIN WELL COMPANY, INCORPORATED**

Signature of License Representative: _____

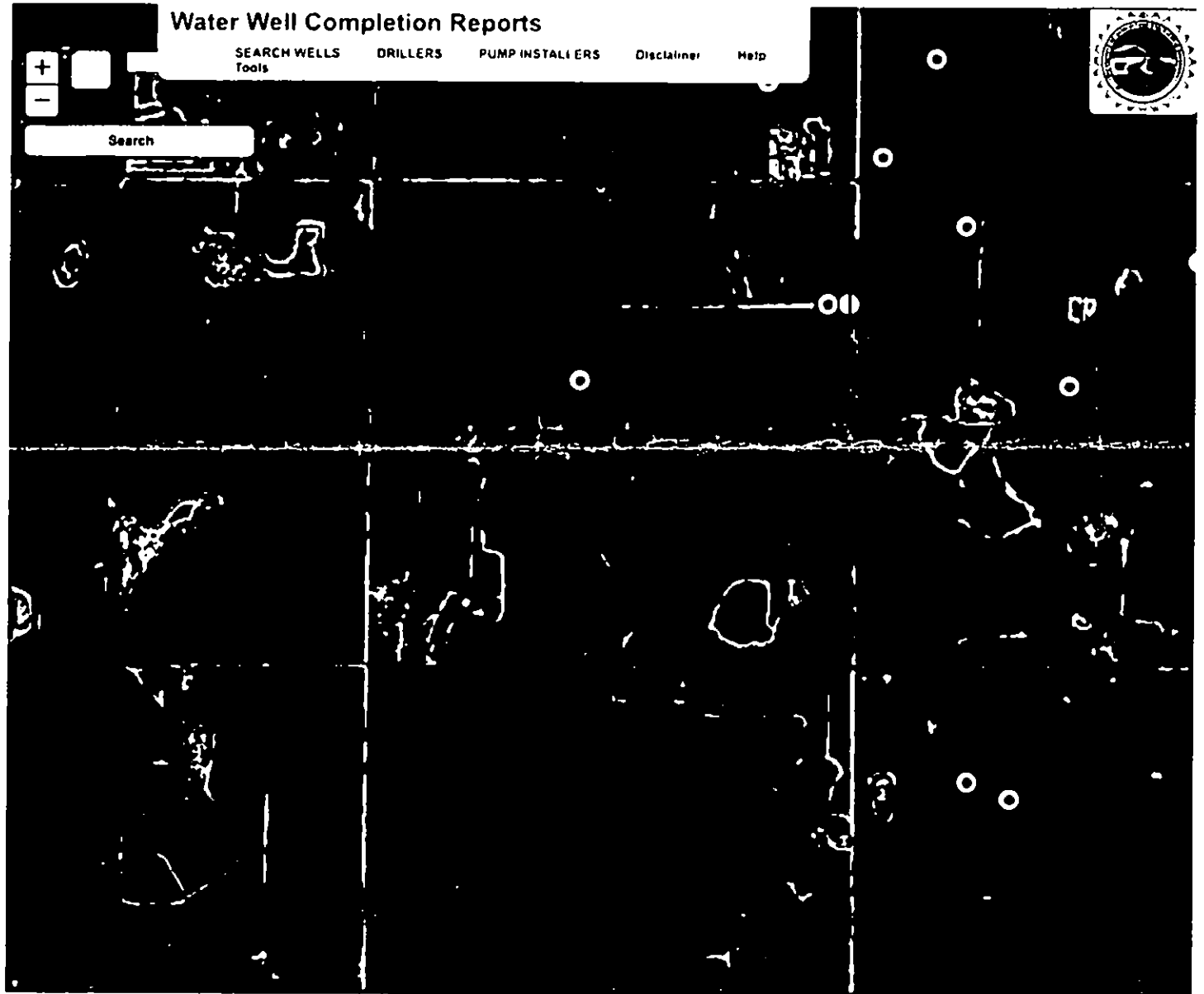
Signature of Well Owner or Equitable Property Holder:

Date:

OFFICE OF
WATER

Ernie Nemminga TH # 2 Avon SD

Top Soil	0	6
Clay Brown	6	27
Clay Blue	27	31
Gravel & Clay	31	40
Clay Blue Sandy & Pebbly	40	132
Clay hard Blue	132	162
Gravel	162	167
Clay	167	187
Sand & Gravel	187	206
Clay	206	212
Gravel med w/ coarse layers	212	229
Clay Gray	229	237
Chalk	237	240



**Water Rights Program
File Documentation**

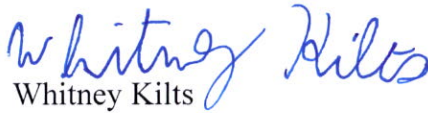
NAME OF PERSON OR FILE: Water Permit Application No. 8759-3

DATE: June 27, 2023

RE: Water Permit Application No. 8759-3-call to Ernest Namminga

COMMENTS:

I called Mr. Namminga to verify target aquifer for this Application No. 8759-3. Mr. Namminga verified that the target aquifer material was the sand and gravel and not the chalk.



Whitney Kilts
Natural Resources Engineer

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date May 8, 2023

RECEIVED OF Ernest/Xinnia Namminga 40786 310th St., Springfield SD 57062

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

Fee for Application for Permit No. <u>8759-3</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>8759-3</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
En



**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. 8759-3, Ernest Namminga**

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. 8759-3, Ernest Namminga, 40786 310th Street, Springfield SD 57062.

The Chief Engineer is recommending APPROVAL of Application No. 8759-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 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. 8759-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8759-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
July 6, 2023

Report to the Chief Engineer
Water Permit Application No. 8759-3
Ernest Namminga
July 5, 2023

Water Permit Application No. 8759-3 filed by Ernest Namminga proposes to appropriate water at a maximum diversion rate of 1.78 cubic feet per second (cfs) from one well to be completed into the Choteau: West aquifer (approximately 238 feet deep) for irrigation use. The proposed well location is the approximate center of the NE $\frac{1}{4}$ of Section 10-T93N-R61W. The proposed land to be irrigated is 160 acres located in the NE $\frac{1}{4}$ of Section 10-T93N-R61W. This site is in Bon Homme County approximately eleven miles southwest of Tyndall, SD.

Aquifer: Choteau: West (CH:W)

Aquifer Information

The Choteau: West aquifer is a basal aquifer that underlies portions of Charles Mix, Douglas, and Bon Homme Counties (Hedges et al., 1982). Figure 1 shows the approximate areal extent of the aquifer. The aquifer lies primarily within the Choteau bedrock valley and is made up of buried outwash and western stream deposits (Kume, 1977; Jorgensen, 1971). The Choteau: West aquifer is primarily under confined conditions (Kume, 1977 and Water Rights, 2023c). Based on Hedges et al. (1982), the management unit has an estimated areal extent of approximately 218,400 acres and contains about 1,474,200 acre-feet of recoverable water. Groundwater movement in the aquifer is generally toward the south (Kume, 1977).

Two test holes were submitted with this application. The lithology for the test holes for this application is shown in Table 1, test hole 2 is closest to the proposed well site. The applicant indicated the target aquifer material is sand and gravel deposits. In this area, that aquifer material corresponds with the Choteau: West aquifer (Water Rights, 2023b), with the top of the aquifer in test hole 2 at 187 feet below grade. In this area, clay lenses within the sand and gravel of the Choteau: West aquifer are common (SDGS, 2023; Water Rights, 2023a). Based on area well information, the aquifer is expected to be under confined conditions (Water Rights, 2023a and 2023c).

Report on Water Permit Application No. 8759-3

Table 1: Test hole report submitted with Application No. 8759-3					
Test hole 1			Test hole 2		
Description	From (ft)	To (ft)	Description	From (ft)	To (ft)
top soil	0	8	top soil	0	6
clay- gray/black	8	17	clay brown	6	27
clay-brown	17	22	clay blue	27	31
clay-gray	22	27	gravel and clay	31	40
clay brown w/ chalk fragments	27	30	clay blue sandy & pebbly	40	132
clay gray	30	76	clay hard blue	132	162
chalk gray pebbly	76	132	gravel	162	167
clay gray sandy	132	157	clay	167	187
clay sandy & rock	157	159	sand & gravel	187	206
gravel	159	164	clay	206	212
clay w/gravel layers	164	170	gravel med w/ coarse layers	212	229
gravel w/ a few clay layers	170	178	clay gray	229	237
clay gray	178	185	chalk	237	240
gravel	185	189	bottom of test hole 240 ft		
clay gray	189	203			
chalk tan	203	209			
chalk gray/white	209	225			
bottom of test hole 225 ft					

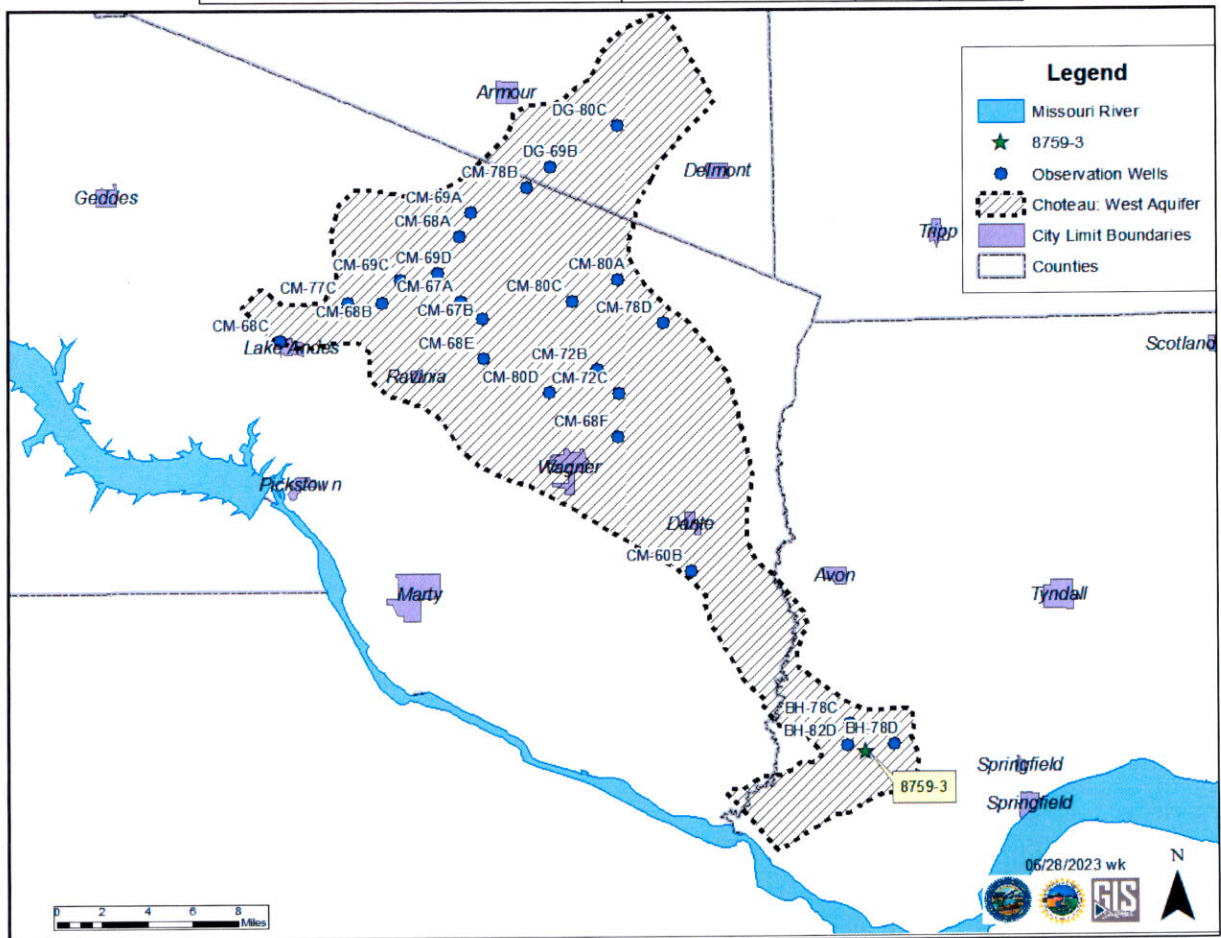


Figure 1: Approximate extent of the Choteau: West aquifer, location of the well site for this application, and observation wells completed into the Choteau: West aquifer (Hedges et al., 1982; Water Rights, 2023c)

In the area of this application, there is a history of difficulty in determining if the target aquifer is the Choteau: West aquifer or the Niobrara aquifer, even when test holes have been drilled

(Water Rights, 2023b). This is likely due to the slope of the side of the bedrock valley the Choteau: West aquifer is lying in and the presence of chalk blocks within the sand and gravel of the Choteau: West aquifer in this area (SDGS, 2023; Water Rights, 2023a). The shallowest aquifer material of mappable extent in the immediate vicinity of the proposed well site for this application is typically either the sand and gravel of the Choteau: West aquifer or the Niobrara (NBRR) aquifer (typically called chalk rock by drillers) (Jensen, 2012). Figure 2 shows the location of the proposed well site for this application and the first occurrence of aquifer materials for the area from Jensen (2012). A first occurrence of aquifer materials map is typically not a map that identifies individual glacial aquifers. Rather, it is a map with a range of depths to geologic materials of a mappable extent that have the potential to produce water. Jensen (2012) suggests that in the area of the well site for this application, the northern boundary of the Choteau: West aquifer is likely further south than mapped by Hedges et al. (1982), however, given the limited density of test holes deep enough to encounter the Niobrara Formation drilled with a geologist on site in the area (SDGS, 2023) the boundary suggested by Jensen (2012) should be treated as being approximate. The Choteau: West aquifer directly overlays and is adjacent to the Niobrara Formation in this area (SDGS, 2023; Water Rights, 2023a). Since the Niobrara Formation in this area can act as an aquifer (Water Rights, 2023a), there is likely some movement of water between the Niobrara aquifer and the Choteau: West aquifer. However, due to the lack of a long-term records from an observation well completed into this portion of the Niobrara aquifer, there is little to no data to evaluate the extent of the connection between the two aquifers in this area. This lack of data limits the evaluation of the nature of the boundary between the two aquifers in this area and evaluation of how the boundary will affect the amount of drawdown between a pumping well and the boundary. Additionally, Jensen (2012) suggests that the connection between the extent of the Choteau: West aquifer in Bon Homme County and the extent of the Choteau: West aquifer in Charles Mix and Douglas Counties is more limited than what was mapped by Hedges et al. (1982). The water rights/permits shown in Figure 2 are summarized in Table 2.

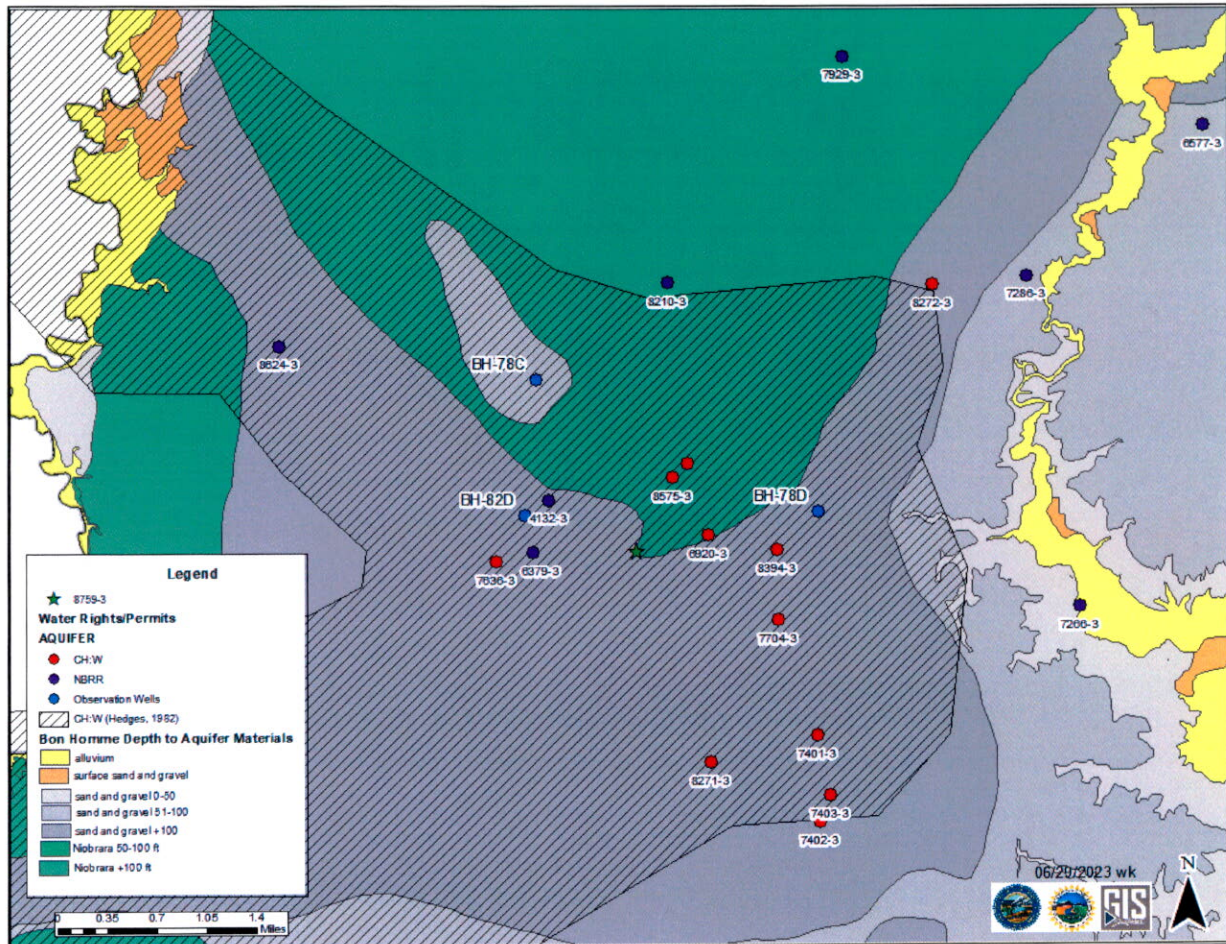


Figure 2: Area of the well site for this application, observation wells completed into the Choteau: West (CH:W) aquifer, water rights/permit permitted for the Choteau: West and Niobrara (NBRR) aquifers approximate extent of the Choteau: aquifer from Hedges et al. (1982) and depth in feet to first occurrence of aquifer materials from Jensen (2012) (Water Rights, 2023B and 2023c)

Report on Water Permit Application No. 8759-3

Table 2: Summary of Water Rights/Permits Shown in Figure 2								
Permit No.	Last Name	First Name	Priority Date	Status	Aquifer	Use	Rate (cfs)	Acres
2320A-3	NAMMINGA	ERNEST R	08/04/1975	LC	CH:W	IRR	1.78	248
4132-3	TJEERDSMA	HAROLD	01/27/1978	LC	NBRR	IRR	2	164
6379-3	VANDERLEI	LEON	01/02/2003	LC	NBRR	IRR	1.67	136
6577-3	BOCHMAN	DOUGLAS	01/24/2005	LC	NBRR	IRR	1.08	76
6920-3	FOUR WINDS ENTERPRISES LLC		12/10/2007	LC	CH:W	IRR	1.78	131
7266-3	JELSMA	VERLYN & JEREMIE	09/06/2011	LC	NBRR	IRR	1.33	109
7286-3	KOZAK	BRIAN	12/14/2011	LC	NBRR	IRR	1.44	185
7401-3	VANDERLEI	LEON	08/06/2012	LC	CH:W	IRR	2	190
7402-3	VANDERLEI	CRAIG	08/20/2012	LC	CH:W	IRR	1.78	241
7403-3	VANDERLEI	CRAIG	08/20/2012	LC	CH:W	DOM	0.075	n/a
7636-3	JELSMA	VERLYN	01/07/2013	LC	CH:W	IRR	0.58	69
7704-3	JELSMA	IVAN	02/21/2013	LC	CH:W	IRR	1.78	133
7929-3	BIEREMA	BRAD	12/02/2013	LC	NBRR	IRR	1.11	135
8210-3	VANDERLEI	CRAIG	03/25/2016	LC	NBRR	IRR	1.11	130
8271-3	VANDERLEI	LEON	03/12/2004	LC	CH:W	IRR	1.89	399
8272-3	VANDERLEI	CRAIG	03/16/2017	LC	CH:W	IRR	1.11	68
8394-3	VANDERLEI	CRAIG	04/08/2010	LC	CH:W	IRR	1.89	266
8575-3	NAMMINGA	ERNEST R	12/21/2021	LC	CH:W	IRR	1.78	124
8624-3	JOHNSON	MARK	03/28/2022	PE	NBRR	IRR	1.56	160

The production well completion report has been submitted for the well for Water Permit No. 8624-3. The report indicates that the well was screened into sand and gravel indicating the production well for Permit No. 8624-3 is completed into the Choteau: West aquifer and not the Niobrara aquifer as permitted (Water Rights, 2023b).

A review of the production well for Water Right No. 6379-3 permitted for the Niobrara aquifer indicated that the well is screened into 15 feet of coarse gravel and 14 feet of chalk directly underlying the coarse gravel (Water Rights, 2023b). The static water level at the time of completion (July 17, 2003) for this well was 120 feet below grade, using the State of South Dakota's one meter resolution bare earth LiDAR DEM land surface elevation at this well is estimated to be approximately 1,450 feet (NAVD88) so water level at time of completion is estimated approximately 1,330 feet (NAVD88). Observation well BH-82D monitoring the Choteau: West aquifer is located approximately 0.26 miles north of the well for Water Right No. 6379-3, had a measured water level of 134.5 ft below the top of casing (well stick up 1.6 ft) on July 12, 2003 (Water Rights, 2023c). Using the State of South Dakota's one meter resolution bare earth LiDAR DEM land surface elevation at this well, it is estimated to be approximately 1,450 feet (NAVD88) so the water level on July 12, 2003, is estimated at approximately 1,317.1 feet (NAVD88). Given this similarity in water level elevation and the screen information, it is extremely likely that the production well for Water Right No. 6379-3 is pumping some amount of water directly from the Choteau: West aquifer.

A well completion report for Water Right No. 4132-3 is not available; however, the licensing inspection does contain some basic information on the well. The inspection report for Water Right No. 4132-3 indicates the production well is 250 feet deep with a screen length of 80 feet, a static water level of 160 below grade, and the well was likely drilled around 1978 (Water Rights, 2023b). Using the State of South Dakota's one meter resolution bare earth LiDAR DEM land surface elevation at this well is estimated to be approximately 1,486.7 feet (NAVD88), so the approximate bottom of the well is 1,236.7 feet (NAVD88), estimated top of the well screen is 1,316.7 feet (NAVD88), and approximate water level elevation is 1,326.7 feet (NAVD88). Observation well BH-82D monitoring the Choteau: West aquifer is located approximately 0.30 miles southwest of the well for Water Right No. 4132-3, the earliest water level reading for BH-82D is 137.3 ft below top of casing (approximately 1,314.3 ft (NAVD88)) (Water Rights, 2023b).

In reviewing the lithology for BH-82D the top of the Choteau: West aquifer is likely at 188 ft below grade (1,262 ft (NAVD88)) and the top of the Niobrara Formation at 233 ft below grade (1,217 ft (NAVD88)) (Water Rights, 2023c). Even accounting for the top of the Niobrara Formation at the well site for Water Right No. 4132-3 being expected to be higher in elevation than at the location of BH-82D (due to the slope of the side of bedrock valley), based on the available information, there is a high probability that the production well for Water Right No. 4132-3 is at least partially screened into the Choteau: West aquifer.

Based on the above discussion, Water Right No. 4132-3, Water Right No. 6379-3, and Water Permit No. 8624-3 will be included in the hydrologic budget for this application despite being permitted for the Niobrara aquifer.

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 section will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within this aquifer.

Water Availability

Water Permit Application Nos. 8759-3 proposes to appropriate water from the Choteau: West aquifer for irrigation use. The probability of unappropriated water being available from an 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.” If the source of the water is older or lower than the Greenhorn Formation and the application is for a water distribution system defined in SDCL 46-1-6 (17), the Board need not consider the recharge/withdrawal issue. This application is not for a water distribution system as defined in SDCL 46-1-6 (17) and the Choteau: West aquifer is not older and stratigraphically lower than the Greenhorn Formation. Therefore, the withdrawal/recharge issue must be considered.

Observation Wells

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on 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 annual recharge.

The Water Rights Program monitors 25 observation wells completed into the Choteau: West aquifer, two (CM-68B and BH-82D) of which have had measurements recently suspended due to maintenance considerations. The majority of the observation wells in the Choteau: West aquifer have a stable to slightly increasing trend over their periods of record with some observation

wells also documenting seasonal pumping of nearby irrigation wells but returning to pre-irrigation pumping levels with the end of the irrigation season and spring recharge. The hydrograph for observation well CM-68F (Figure 3) located approximately 17 miles northwest of the well site for this application is representative of the general behavior of the majority of observation wells in the Choteau: West aquifer. These observation wells indicate the aquifer responds well to climatic conditions because water levels rise during wetter periods and decline to a stable water level during drier periods. Additionally, the water levels in the majority of Choteau: West aquifer observation wells display that the amount of recharge to and natural discharge from the aquifer exceeds pumping. Aquifer behavior 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 Choteau: West 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 from the aquifer for the proposed appropriation. However, the hydrographs of two observation wells in Bon Homme County (BH-82D and BH-78D) are not representative of the other observation wells in the aquifer (Water Rights, 2023c).

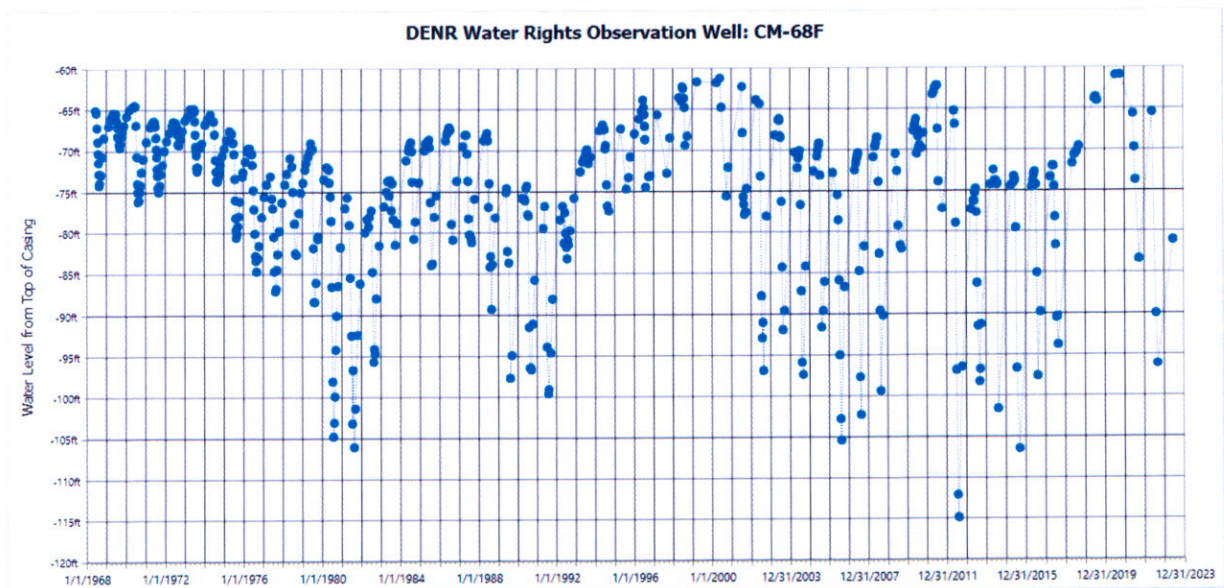


Figure 3: Hydrograph for Observation Well CM-68F (Water Rights, 2023c)

The nearest observation wells to the proposed well site for this application are BH-82D (0.8 miles to the west), BH-78D (1.3 miles to the east), and BH-78C (1.4 miles to the northwest) (Water Rights, 2023c). The hydrographs for these observation wells are shown in Figures 4, 5, and 6. Although included in this report, Jensen (2012) and the hydrograph for BH-78C are both suggestive of observation well BH-78C being completed into a sand and gravel deposit not directly connected to the Choteau: West aquifer. Therefore, the remaining observation well analysis will focus on observation wells BH-82D and BH-78D.

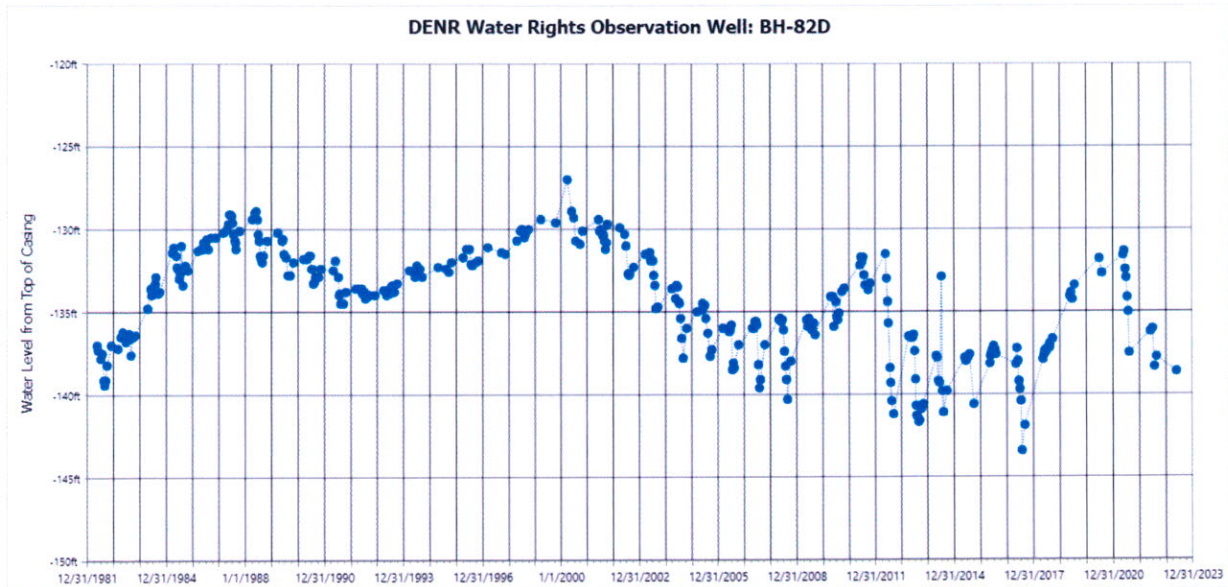


Figure 4: Hydrograph for Observation Well BH-82D (Water Rights, 2023c)

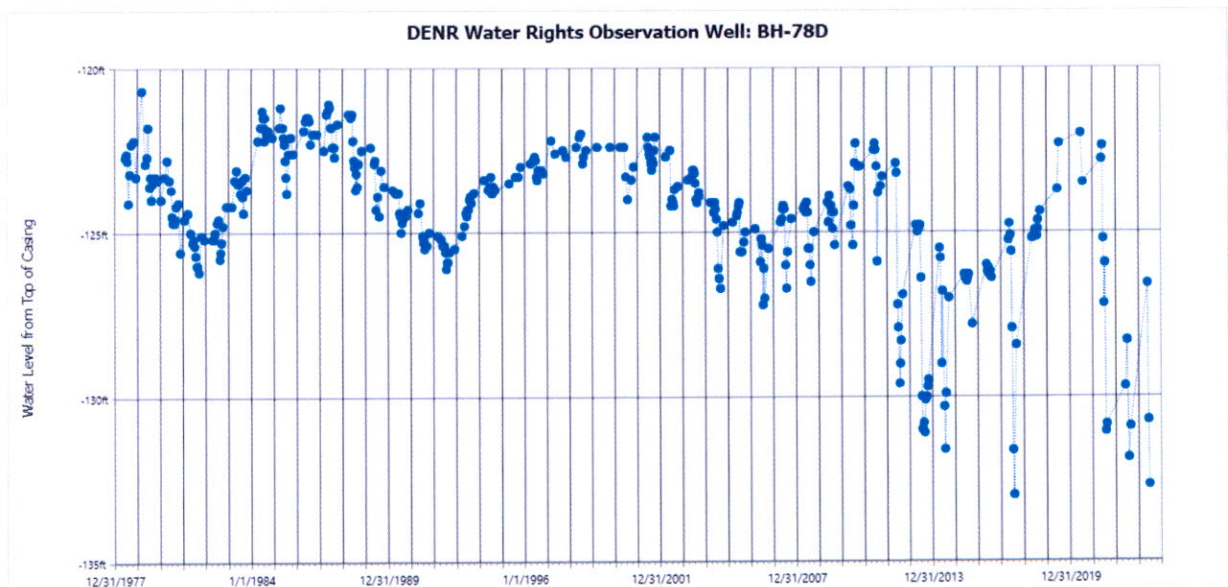


Figure 5: Hydrograph for Observation Well BH-78D (Water Rights, 2023c)

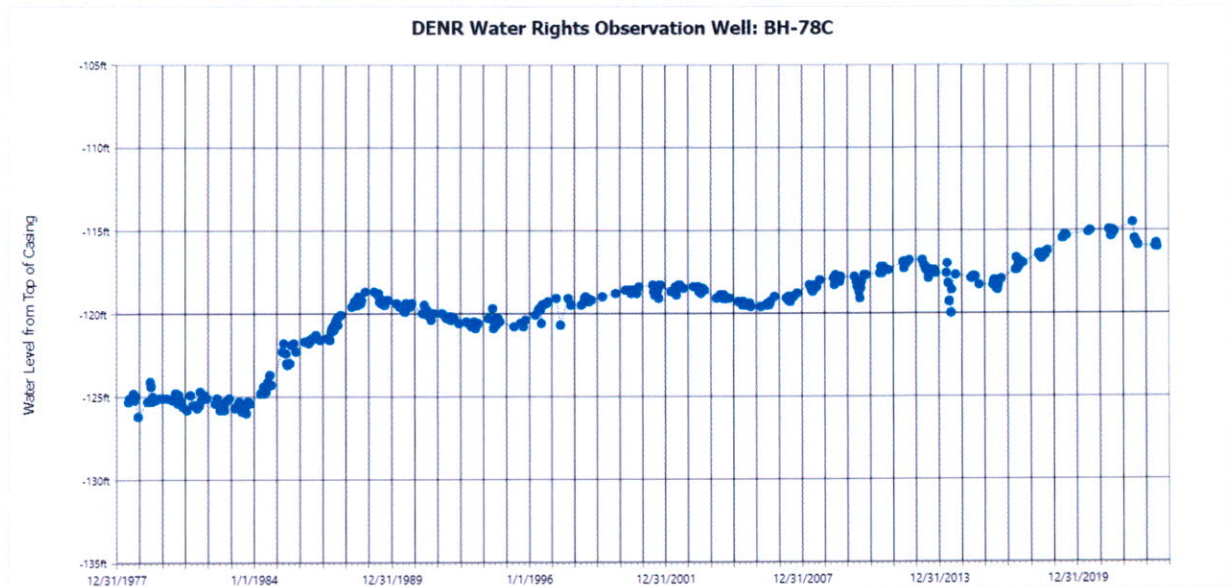


Figure 6: Hydrograph for Observation Well BH-78C (Water Rights, 2023c)

The hydrographs for observation wells BH-82D and BH-78D have slightly decreasing trends over the period of record; however, within this trend the aquifer still responds to responds well to climatic conditions (for example the response to the wetter conditions in 2019). The aquifer is under confined conditions at the location of both of these observation wells (Water Rights, 2023c). In considering the hydrograph for BH-82D, the aquifer appears to have stabilized in relation to development around 2012. In considering the hydrograph for BH-82D, additional data is needed to determine is the aquifer is still stabilizing in relation to newer appropriations in the area or has stabilized. From the measuring point (top of casing) the top of the aquifer at BH-82D is approximately 189.4 feet below the measuring point and at BH-78D is approximately 133 feet below the measuring point (Water Rights, 2023c). The lowest recorded water level for BH-78D was approximately 133.01 feet below top of casing (July 25, 2017) and the lowest recorded water level for BH-82D was 143.43 feet below top of casing (July 25, 2017). At the lowest measured water level for BH-82D there was approximately 45 feet of artesian head pressure remaining and at the lowest measured water level for BH-78D approximately at the top of the aquifer (approximately 0.01 feet below the top of aquifer). In considering Figure 2, these observation wells are located between high-capacity irrigation wells and an aquifer boundary, which could result in additional drawdown due to pumping during the irrigation season compared to other directions from the pumping wells.

Hydrologic Budget

Recharge

Some recharge for the management unit is from the adjacent till (Kume, 1977). In the areas where the management unit is in contact with the Niobrara aquifer, the potential exists for some recharge to the management unit from the Niobrara aquifer (Kume, 1977). Water movement between aquifers can occur when the potentiometric surface (water level) in one aquifer is higher than the potentiometric surface in a connected aquifer, with water movement occurring from

higher to lower potentiometric surface. Mathiowetz (2016) notes that the most likely area for recharge from the Niobrara to occur is in the township located at T98N-R63W and potentially other areas along the northwest side of the aquifer. In Bon Homme County some recharge is received via seepage from Dry Choteau Creek and Choteau Creek (Jorgensen, 1971). Utilizing the recharge rates recommended by Hedges et al. (1985) for use by management and development programs for confined aquifers of 0.15 to 0.60 inches per year and an area of 218,400 acres, the estimated annual recharge to the management unit is 2,730 to 10,920 acre-feet per year with the midpoint of this range being 6,825 acre-feet per year. When using the general range of recharge to the confined aquifers recommended by Hedges et al. (1985), the Water Rights Program has historically targeted the midpoint of the range for evaluating the balance between recharge and withdrawals, unless information (like observation well data) exists to indicate recharge is higher or lower than the middle of the range (Water Rights, 2023b).

Withdrawals

Withdrawals from the management unit consist of natural losses to springs (in the southern part of the management unit), seepage to surrounding bedrock or drift, and pumping from wells (Kume, 1977). Mathiowetz (2016) notes that based on observation well data along the eastern edge of the management unit there is potential for water to move into the Niobrara aquifer where it is in contact with the management unit. Withdrawals due to wells can be split into irrigation and non-irrigation uses. The majority of water rights/permits for this management unit are for irrigation use. Due to the relatively low diversion rate of domestic wells, the development of rural water systems over a large portion of the area where the Choteau: West aquifer is the upmost aquifer available, and the availability of shallower aquifers over a large extent of the Choteau: West aquifer; withdrawals from domestic wells are assumed to be a negligible portion of the hydrologic budget.

Jensen (2023) in a report dated March 29, 2023, reviewed average annual appropriative use to this aquifer. The best available information indicates there have been no significant changes to average annual non-irrigation appropriative use since this review. Jensen (2023) estimated water use for the six non-irrigation water rights/permits authorized to appropriate water from the Choteau: West aquifer at approximately 351 acre-feet per year. There are no future use permits reserving water from the Choteau: West aquifer (Water Rights, 2023b).

Jensen (2023), to reflect the current development of irrigation water rights/permits more accurately, used the average annual withdrawal rate from water use reported on irrigation questionnaires for irrigation water rights/permits from the Choteau: West aquifer from 2012 to 2021 (approximately 3,029 acre-feet per year) and estimated one foot of water per acre per year of use for recently issued irrigation water permits that have not yet reported water use (477 acre-feet per year). The estimated average annual irrigation use from the Choteau: West aquifer by Jensen (2023) did not include estimated average use from Water Right No. 4132-3, Water Right No. 6379-3, and Water Permit No. 8624-3. Annual reported use for Water Right No. 4132-3 and Water Right No. 6379-3 is summarized in Table A1 in Appendix A. To be consistent with the irrigation data from Jensen (2023) average annual use for Water Right No. 4132-3 and Water Right No. 6379-3 from 2012 to 2021 is 216 acre-feet per year. The well for Water Permit No. 8624-3 was completed in August 2022 (Water Rights, 2023b), so water use for the permit will be estimated at one foot of water per acre per year (136 acre-feet per year). This results in a total estimated average annual

withdrawal rate for the irrigation appropriations of 3,858 acre-feet per year (Jensen, 2023 and Water Rights, 2023e). Using the same rate of one foot of water per acre per year of use, water use associated with this application for irrigation is conservatively estimated at 160 acre-feet per year.

Summary

Estimated average annual recharge to the Choteau: West aquifer ranges from 2,730 acre-feet per year to 10,920 acre-feet per year, with the midpoint of this range being 6,825 acre-feet per year. The estimated average withdrawal rate from the Choteau: West aquifer totals to approximately 4,369 acre-feet/year; (non-irrigation: 351 acre-feet per year; irrigation: 3,858 acre-feet per year; and this application: 160 acre-feet per year). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the Choteau: West aquifer for the proposed appropriation, which is supported by the review of observation well data for the aquifer.

Potential for Unlawful Impairment

Water rights/permits currently authorized from the Choteau: West aquifer in the vicinity of the well site of this application are shown in Figure 2 and summarized in Table 2. The nearest water right/permit to the proposed well site for this application is Water Right No. 6920-3 for irrigation located approximately 0.51 miles to the east-northeast (Water Rights, 2023b). The nearest domestic well on file with the Water Rights Program to the well site for this application likely completed into the Choteau: West aquifer is located approximately 1.8 miles to the southeast (well locations based on the location report filed by the well driller); however, there may be closer domestic wells completed into the Choteau: West aquifer not on file with the Water Rights Program.

The exact amount of drawdown as a result of the diversion requested by this application cannot be quantified without aquifer testing. However, the Theis equation can be used to roughly estimate drawdown from a pumping well in a confined aquifer. Utilizing a transmissivity of 12,700 ft²/d (Kume, 1977), a storativity of 0.00005 (Duffield, 2019), and a time of 45.3 days the calculated drawdown estimated at a distance of 0.5 mile is 7.92 feet, one mile is 6.58 feet, and 1.3 miles is 6.08 feet (Utah, 2010). The time of 45.3 days would allow for the application of 160 acre-feet of water at a continuous pumping rate of 1.78 cfs, which is a slightly conservative scenario. At the nearest observation well (BH-82B) located 0.8 miles from the well site for this application, at the lowest recorded reading for the observation well there was still approximately 45 feet of artesian head pressure at the location of observation well BH-82B. At the lowest recorded reading for observation well BH-78D, the water level is near the top of the aquifer and nearing unconfined conditions, drawdown as a result of pumping in unconfined conditions is typically less than in confined conditions. However, since at the maximum recorded drop in artesian head pressure due to pumping at this observation well is near the top of the aquifer, out of an abundance of caution, a qualification that withdrawals should be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights is suggested.

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 Choteau: West aquifer at their location. A review of the complaints on file with the Water Rights Program indicate that there is not a recent history of unlawful impairment occurring with Choteau: West aquifer wells in Bon Homme County (Water Rights, 2023d). When considering the statutes (SDCL 46-1-4 and 46-6-6.1), rule (ARSD 74:02:04:20(7)), the artesian head pressure at the nearest observation well to the well site for this application at its lowest recorded water level, and the lack of recent well interference complaints from the Choteau: West aquifer in the area, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment to 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.

Historical Concerns

In the 1950’s in this area there was some concern over the impact of irrigation development on artesian head pressure. This concern was part of a study reported on in Walker (1961). Walker (1961) concluded that irrigation pumping had caused some domestic wells to stop flowing or created the need for pumps to be lowered as a result of the sensitivity of the artesian head pressure to irrigation pumping. The concerns have since been dealt with, and there have been no further issues in the area for several years. Concerns such as these are now addressed by SDCL 46-6-6.1 in which artesian head pressure is not protected as a means of groundwater delivery.

Conclusions

1. Water Permit Application No. 8759-3 filed by Ernest Namminga proposes to appropriate water at a maximum diversion rate of 1.78 cfs from one well to be located approximate center of the NE ¼ of Section 10-T93N-R61W completed into the Choteau: West aquifer for the irrigation 160 acres located in the NE ¼ of Section 10-T93N-R61W.

2. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Choteau: West aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the diversion by Water Permit Application No. 8759-3 will not unlawfully impair adequate wells for existing water rights/permits or domestic uses.



Whitney Kilts
Natural Resources Engineer III
SDDANR-Water Rights Program

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Appendix A: Irrigation Data for Water Right No. 4132-3 and Water Right No. 6379-3

Table A1: Reported Irrigation for Water Right Nos. 4132-3 and 6379-3 (Water Rights, 2023e)				
	Permit No	4132-3	6379-3	Total Reported Irrigation
	Priority Date	01/27/1978	01/02/2003	
	Acres	164	136	
Year	Reported Irrigation (acre-feet)			
2021		102.47	114.9	217.37
2020		14.09	80.1	94.19
2019		0	22.1	22.1
2018		0	0	0
2017		159.09	56.68	215.77
2016		34.25	58.33	92.58
2015		62.97	91.92	154.89
2014		198.86	106.06	304.92
2013		95.5	258.52	354.02
2012		324.81	374.53	699.34
2011		63.64	66.29	129.93
2010		15.47	30.93	46.4
2009		0	14.14	14.14
2008		186.93	176.77	363.7
2007		113.35	200.34	313.69
2006		167.93	148.49	316.42
2005		79.55	149.15	228.7
2004		234.77	106.06	340.83
2003		139.2	64.96	204.16
2002		215.44		215.44
2001		47.73		47.73
2000		127.27		127.27
1999		51.7		51.7
1998		27.84		27.84
1997		50		50
1996		95.45		95.45
1995		27.84		27.84
1994		0		0
1993		0		0
1992		6		6
1991		32		32
1990		0		0
1989		35		35
1988				0
Overall Average		82.1	111.6	142
Average (2012-2021)		99.2	116.314	215.5



**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.**

July 7, 2023

Ernest Namminga
40786 310th Street
Springfield SD 57062

Dear Mr. Namminga:

Water Permit Application No. 8759-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Tyndall Tribune & Register printed at Tyndall SD (Ph # 605 589-3242) and the Daily Press & Dakotan printed at Yankton SD (Ph # 605 665-7811). 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. 8759-3 to Appropriate Water

Notice is given that Ernest Namminga, 40786 310th Street, Springfield SD 57062 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Choteau: West Aquifer (approximately 238 feet deep) located in the approximate center of the NE 1/4 Section 10 for irrigation of 160 acres located in the NE 1/4 Section 10; all in T93N-R61W. This site is located approximately 11 miles southwest of Tyndall SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8759-3 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 July 31, 2023.

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 31, 2023.

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_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, July 7, 2023 10:58 AM
To: tyndalltribune@gmail.com
Subject: 8759-3 Ernest Namminga - Public Notice
Attachments: 8759-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on July 19, 2023.

Ernest Namminga, 40786 310th Street, Springfield SD 57062, (605 286-3873) 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.

Thank you,

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



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, July 7, 2023 10:59 AM
To: Michael Pietz
Subject: 8759-3 Ernest Namminga - Public Notice
Attachments: 8759-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on July 19, 2023.

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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



AFFIDAVIT OF PUBLICATION

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ERNEST NAMMINGA
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SPRINGFIELD SD 57062

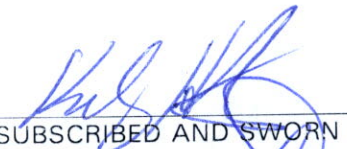
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
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PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION NO.

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 19th DAY OF July, 2023
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$39.68 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 07/19/2023

FILED ON: 07/19/2023



SUBSCRIBED AND SWORN TO BEFORE ME THIS 19th DAY OF July, 2023



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/15/2028

Ad text : NOTICE OF APPLICATION NO. 8759-3 to Appropriate Water

Notice is given that Ernest Namminga, 40786 310th Street, Springfield SD 57062 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Choteau: West Aquifer (approximately 238 feet deep) located in the approximate center of the NE 1/4 Section 10 for irrigation of 160 acres located in the NE 1/4 Section 10; all in T93N-R61W. This site is located approximately 11 miles southwest of Tyndall SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8759-3 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 Engineers 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 31, 2023.

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 31, 2023.

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 approxiamate cost of \$39.68 and can be viewed free of charge at www.sdpublinotices.com.

Published on July 19, 2023.

Affidavit of Publication

RECEIVED

State of South Dakota }
County of Bon Homme } SS

JUL 24 2023

OFFICE OF
WATER

Rebecca Tip Being first duly sworn
says that the **Tyndall Tribune & Register** is a legal
weekly newspaper for publication of legal and other official
notices as required by Chapter 298 of the Session
Laws of South Dakota, 1939; that it has bona fide paid
circulation of more than two hundred copies weekly;
that it is published in English language in the City of
Tyndall, Bon Homme County, South Dakota, and has
been admitted to the United States mail under second
class mailing privilege for more than one year prior to
the first publication of the notice herein mentioned, and
that it is printed in an office maintained at the place of
publication at Tyndall, South Dakota, and that deponent
is the publisher in charge of the advertising department
of said newspaper; that the advertisement headed

E. Namminga
Notice of Appl. No. 8759-3
Appropriation of Water
108 @ 300

a printed copy of which is hereto attached, was printed
and published in said newspaper for *one* successive
weeks, upon the following dates:

<i>July 19, 23</i>	20.....	20.....
.....	20.....	20.....
.....	20.....	20.....
.....	20.....	20.....

That the full amount of the fee charged for the publica-
tion of said notice, *\$ 43.00*, inures to the benefit
of the publisher of said newspaper, that no agreement or
understanding for the division thereof has been made
with any other person, and that no part has been agreed
to be paid to any person whomsoever.

Rebecca Tip, publisher
Subscribed and sworn to before me this

19 day *July* 20*23*

Peggy Schelske
Notary Public
SEAL
South Dakota
Notary Public, South Dakota

My commission expires: 10-24-2021

NOTICE OF APPLICATION

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Published once at an approximate cost of \$43.09 and can be viewed free of charge at www.sdpublicnotices.com

(July 19)

SEAL
NOTARIAL PUBLIC
JAN 14 2024
SOUTH DAKOTA

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, July 7, 2023 11:19 AM
To: ernmore@goldenwest.net
Subject: 8759-3 Ernest Namminga - Public Notice
Attachments: 8759-3_rec.pdf; 8759-3 Ltr.pdf; 8759-3_Pub.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(s) as soon as possible to authorize publication and arrange for payment. This information is also being mailed to you today.

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

AUG 31 2023

Ernest Namminga
40786 310th Street
Springfield SD 57062

Dear Mr. Namminga:

Enclosed is Water Permit No. 8759-3 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,

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

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.: 8759-3

Name of Applicant: Ernest Namminga

Date of Posting: 7/18/2023

Date of Removal: 8/31/2023

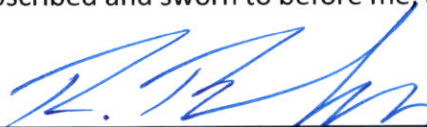


Ron Duvall, Engineer III

8/31/2023

Date

Subscribed and sworn to before me, a notary public, this 31 day of August, 2023.



Notary Public - South Dakota
My commission expires: **Rachel Rodriguez**
My Commission Expires
May 16, 2029

(SEAL)



11-02

OFFICE OF
WATER

Ernie Namminga – 12" Irrigation well 7/24/23

Near Avon SD GPS: N42 53 25.8 W98 02 09.1

<i>Formation</i>	<i>From</i>	<i>To</i>
Top soil	0	2
Clay – rocky – tan/brown	2	25
Clay blue	25	77
Clay – gravelly – blue	77	88
Clay gray soft & sandy	88	102
Clay gray firm	102	150
Sand & gravel w/a few clay layers	150	159
Gravel	159	168
Clay blue w/sand layers	168	174
Sand & gravel	174	181
Gravel	181	191
Clay	191	193
Gravel	193	210
Clay & coarse sand layers	210	219
Gravel	219	238
Chalk gray – sandy	238	239
Chalk gray soft / some hard layers	239	247

Ernie Namminga

near Avon SD

Legend

 Feature 1

310th St

310th St

310th St

408th Ave

408th Ave

N42 53 25.8 W98 02 09.1  12" Irrigation well 237' 3"



Google Earth

2000 ft

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

Date Mar 27, 2026

MAIL TO: PMB 2020

DANR - Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3182

Phone: (605) 773-3352

FROM: Ernest Namminga
(name)40786 310th Street
(address)Springfield
(city)SD
(state)57062
(zip)605-286-3873
(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. 8759-3 states that the water use system is to be constructed byJuly 31, 2028, and water is to be put to beneficial use by July 31, 2032.
(date) (date)The water use system was completed on June 20, 2025.
(date)Applying the water to beneficial use was completed on June 20, 2025.
(date)

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

Ernest Namminga
(signature)

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8759-3**

I have this day, March 27, 2026, made a thorough examination of the water use system owned by Ernest Namminga, 40786 310th Street, Springfield, SD 57062, holder of Permit No. 8759-3, bearing the priority date of May 8, 2023. This permit authorizes the diversion of 1.78 cu. ft. per second of the waters of groundwater (Choteau: West Aquifer) authorizing the irrigation of 160 acres located in Bon Homme County.

Inspection contacts: Ernest Namminga and Tristin Namminga

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Thein Well Company, Inc.
- 2) No. of Wells: 1
- 3) Depth(s): 218 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 12 inches
- 2) Length: 178 feet
- 3) Type: Plastic

Screen:

- 1) Diameter: 12 inches
- 2) Length: 40 feet
- 3) Type: PVC
- 4) Static water level: 145.5 feet

Pump:

- 1) Make: BW
- 2) Model: Unknown
- 3) Capacity: 800 gpm

Motor:

- 1) Make: US Motor
- 2) Model No.: HF48
- 3) Horsepower rating: 100 hp

B. Works used to transport water to place of use:

- 1) Type: PVC Size: 8 inches Length: 190 feet

C. Works used to apply water to beneficial use:

Center Pivot:

- 1) Make: T&L
- 2) Overall length: 1,290 feet
- 3) Number of towers: 8
- 4) End gun: Yes Range: 100 feet
- 5) Capacity: 800 gpm

Chemigation Equipment:

- 1) Does chemigate: No, although they may use the pivot for fertilizer sometime in the future.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: Yes
2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: New in 2025
3) Exceptions to compliance are: None

E. Condition and Location:

- 1) The system is in good condition with the point(s) of diversion located as follows:
The well is 1,410 feet west and 1,520 feet south of the northeast corner of Section 10-T93N-R61W (Latitude 42.89045, Longitude -98.03568—approx. center of the NE1/4).
2) The works are capable of diverting and conveying to the places of use 1.78 cu. ft. per second of water from the well which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows:

Section 10-T93N-R61W

<u>NW1/4NE1/4</u>	<u>32 acres</u>
<u>NE1/4NE1/4</u>	<u>32 acres</u>
<u>SW1/4NE1/4</u>	<u>33 acres</u>
<u>SE1/4NE1/4</u>	<u>33 acres</u>

comprising a total of 130 acres of land and the license should be issued for 1.78 cfs.

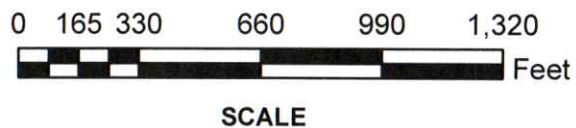
- 3) All structures, wells and lands on map: Yes

F. Comments or other permit(s) associated with the project: The pump and motor information was obtained from Quality Well Service.

Keith DeJong, PE Ret.
Water Rights Inspector
DANR, Water Rights Program

Date report completed: April 8, 2026

Water Permit No. 8759-3



Keith DeJong
Keith DeJong, PE Ret.
Staff Engineer
March 27, 2026



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 16 2026

8759-3

Ernest Namminga
40786 310th St
Springfield SD 57062

Dear Mr. Namminga:

Enclosed is Water License No. 8759-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

So long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact Amanda Dewell, Permitting Administrator, at 605-773-3352.

Sincerely,

Adam Mathiowetz, PE
Acting Chief Engineer
SD DANR – Water Rights Program

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8759-3**

(1) Ernest Namminga, 40786 310th Street, Springfield, SD 57062, made Application No. 8759-3, May 8, 2023, for a water permit to divert 1.78 cubic feet of water per second from one well (Choteau: West Aquifer), Bon Homme County, for irrigation purposes. Permit No. 8759-3, with a priority date of May 8, 2023, was approved on July 31, 2023, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before July 31, 2028, and for the application to beneficial use of water on or before July 31, 2032.

The permit holder submitted a Notice of Completion of Works and Application of Water to Beneficial Use form on March 27, 2026. The Notice stated the diversion system was completed and the water was placed to beneficial use on June 20, 2025.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,410 ft W & 1,520 ft S of the NE corner Section 10-T93N-R61W (approx. center NE $\frac{1}{4}$)
(Latitude 42.89045 & Longitude -98.03568)

(3) The amount of appropriation may not exceed 2 ac-ft annually for each acre of land to which water is actually and beneficially applied for irrigation purposes. The water is to be used during the following described annual period: April 1 – October 31.

(4) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

Section 10-T93N-R61W
NW $\frac{1}{4}$ NE $\frac{1}{4}$ - 32 acres NE $\frac{1}{4}$ NE $\frac{1}{4}$ - 32 acres
SW $\frac{1}{4}$ NE $\frac{1}{4}$ - 33 acres SE $\frac{1}{4}$ NE $\frac{1}{4}$ - 33 acres
TOTAL: 130 acres

(5) Pursuant to South Dakota Water Law 46-5-30, Ernest Namminga, the holder and/or owner of Water Right No. 8759-3, is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from one well (Choteau: West Aquifer) with a priority date of May 8, 2023, from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8759-3 and subject to the following qualifications:

1. The well approved under Water Permit No. 8759-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8759-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *(The well was drilled in 2023 by Thein Well Co. Inc. A copy of the well completion report is on file with the Water Rights Program.)*
3. This permit is approved subject to the irrigation water use questionnaire being submitted each year.



Adam Mathiowetz, PE
Acting Chief Engineer
SD DANR – Water Rights Program

JUN 16 2026

date

