

WATER PERMIT NO. 8599-3

Name of Applicant: **Farron Pratt & Michelle Pratt**

Address: **1900 Dawson Rd, Vermillion SD 57069**

Phone: **605 202-0428**

Amount of Water Claimed: **0.17 add'l cfs**

Total Acres: **17.5 add'l acres**

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

Water to be used for: **irrigation**

County: **Clay**

Type of Waste Disposal System:

Location: **6 miles southwest of Centerville SD**

PRIORITY

Date Received: **2-24-22**

Application/License Fee: **\$ 700**

Corrected Application Received:

Period of Annual Use: **April 1 – October 31**

Remarks: **Add'l acres and diversion rate on Water Permit No. 6819-3. Requesting a diversion rate greater than the statutory limit.**

Diversion Point: **NE 1/4 SE 1/4 Sec 21-T95N-R52W**

Land to be Irrigated: **SE 1/4 Sec 21-T95N-R52W**

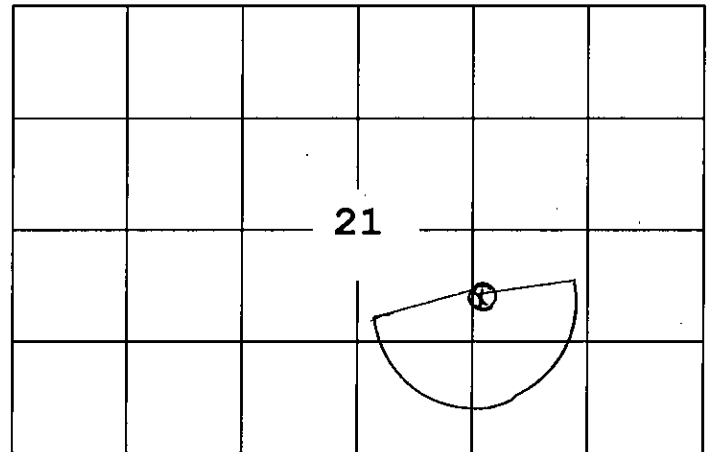
Depth of Well: **110 feet deep**

Well Driller: **Hammond Wetmore Drilling**

Remarks:

Type of Map: **aerial**

Prepared by:



Reviewed and the Number Assigned on: **2-24-22**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8599-3

Date of first receipt of application February 24, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8599-3 to Farron Pratt & Michelle Pratt, 1900 Dawson Rd, Vermillion SD 57069 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. 8599-3 appropriates an additional 0.17 cubic feet of water per second (cfs) and irrigates 17.5 additional acres to what is currently authorized by Water Right No. 6816-3. Water Right No. 6816-3 appropriates 1.39 cfs from one well identified as the Lower Vermillion Missouri Aquifer (110 feet deep) located in the NE 1/4 SE 1/4 Section 21 to irrigate 47.5 acres located in the SE 1/4 Section 21; all in T95N-R52W. The notice serves as clarification that the well is located in what is now identified as the Upper Vermillion Missouri:South Aquifer. This permit appropriates an additional 0.17 cfs from the existing well to irrigate an additional 17.5 acres located in the area described above. This permit and Water Right No. 6816-3 will authorize a total of 1.56 cfs for irrigation of 65 acres. This site is located approximately 6 miles southwest of Centerville 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 February 24, 2022 (0.17 cfs and 17.5 acres).
4. The date of approval of Permit No. 8599-3 is April 18, 2022.
5. One-fifth of the construction is to be completed on or before October 18, 2024.
6. All construction is to be completed on or before April 18, 2027.
7. Water is to be put to beneficial use on or before April 18, 2031.
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 this Permit and Water Right No. 6816-3 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, this Permit and Water Right No. 6816-3 authorize a maximum, combined, diversion rate of 1.56 cfs for the irrigation of 65 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
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

APR 28 2022
date



RECEIVED

FEB 24 2022

PAID

FEB 24 2022

Ck# 3113

Rec't#

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8599-3</u> (office use only) Hydrologic Unit <u>10170102</u>	WATER RIGHTS PROGRAM
	Basin <u>Vermillion R.</u>	
	Newspaper <u>Plain Talk</u>	
	<u>Press & Dakotan</u>	

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 6816-3
(Use predates Mar 2, 1955)

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

Increasing acreage under center pivot irrigation1. Name to Appear on Irrigation Permit Farron Pratt & Michelle Pratt

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

Mailing Address 1900 Dawson Rd Vermillion SD 57069
(Address) (City) (State) (Zip Code)

Phone _____ Mobile 605 202-0428 Email fpratt@firstdakota.com

2. Amount of water claimed 1.56 *CFS or 700 **GPM ***AF Total Acreage 65 ^{17.5} _{add'l ac}
(*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 under existing well

4. Location of point of diversion 1 well in N1/2 SE1/4 section 21-T95-R52W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
(NE1/4 SE1/4) County Clay

5. County or counties where water will be used Clay County6. Annual period during which water is to be used APRIL 1 - October 31

7. 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>NW1/4 SE1/4 21-95-52</u>	<u>12</u>	<u>SE1/4 SE1/4 21-95-52</u>	<u>15</u>
<u>NE1/4 SE1/4 21-95-52</u>	<u>22</u>	<u>SW1/4 SE1/4 21-95-52</u>	<u>16</u>

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

Adding an additional tower to existing center pivot & moving center point to west to allow for additional length. This will increase acreage from 47.5 to 65 acres.
Requesting diversion rate greater than statutory limit.

I, Farron Pratt OWNER, 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 ____ 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 Hammad - Watmore Drilling

For either Existing or Proposed Wells:

c) Well Depth (required) 100 Ft Depth to Top of Water Bearing Material ____ Depth to Water from Surface ____d) Distance to nearest domestic well on applicant's property N/A Property owned by others No**2. Wastewater Disposal System Information**

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

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

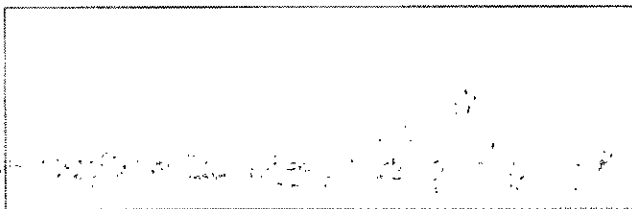
a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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



b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres

SOUTH DAKOTA WATER WELL COMPLETION REPORT

6816-3
11-02Location nw 1/4 se 1/4 Sec 21 Twp 95n Rg 52w

County

Clay

North

Please mark well
location with an "X"

W

E

Well Completion Date

2/3/2008

1 Mile

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)

2,000.0 ft. from septic system (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Direct Rotary

CASING DATA:

If other describe

PIPEWEIGHT LB/FT	DIAMETER IN	FROM FT	TO FT	HOLE DIAMETER IN
	16.00	0.0	50.0	22.00

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight Lb/gal	From Ft	To Ft
port grt	19	9.5	0.0	45.0

Describe grouting procedure
tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 16.00 Inches Length 60.0 Feet

Material pvc

Slot Size 0.080 Set From 50.0 Feet to 110.0 Feet

Other information

WAS A PACKER OR SEAL USED?

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? HTH tablets☐ No, Why Not?
Lab sample sent to for
water quality analysisWell Owner: Roger Hansen

Business Name:

Address:

City, State, Zip:

Box BCentervilleSD57014

WELL LOG:

DEPTH

FORMATION	FROM	TO
Silt, brown, clayey; colluvium	0	32
Clay, brown, pebbly	32	46
gravel, medium to coarse	46	113

STATIC WATER LEVEL

23.0 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?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

30.0 Ft. After2.0 Hrs. pumped725.0 GPM

Ft. After

Hrs. pumped

GPM

If pump installed, pump rate:

700.0 GPM

RECEIVED

REMARKS

FEB - 2 2009

WATER RIGHTS
PROGRAM

This well was drilled under license #

666

And this report is true and accurate.

Drilling firm: Hammond Wetmore Drilling

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

12/04/08

Aerial Map



PC PEOPLESTM
COMPANY
INNOVATIVE. REAL ESTATE. SOLUTIONS.

Map Center: 43° 1' 43.87, -96° 59' 35.85

0ft 922ft 1844ft

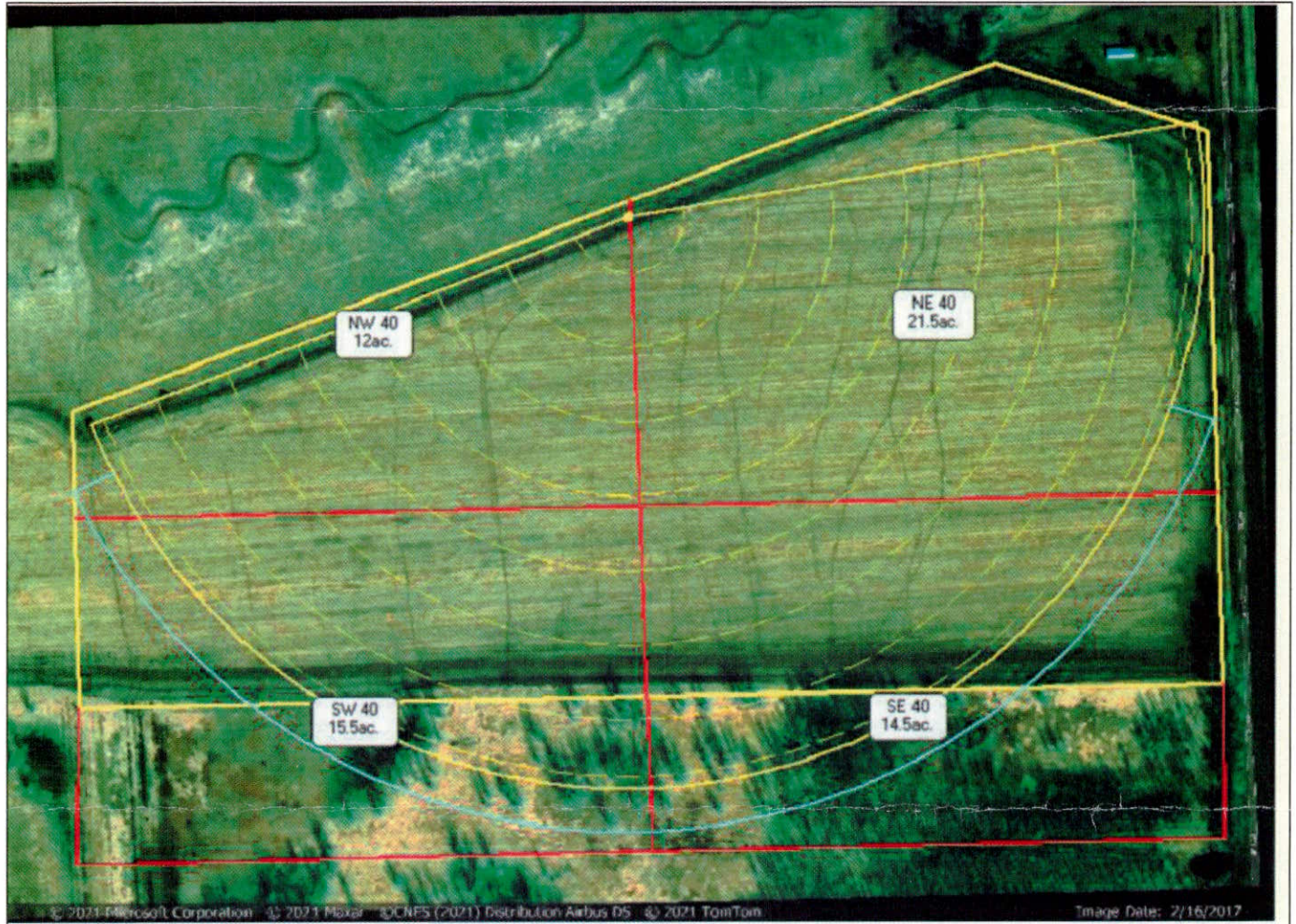
Maps Provided By:
surety[®]
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21-95N-52W
Clay County
South Dakota



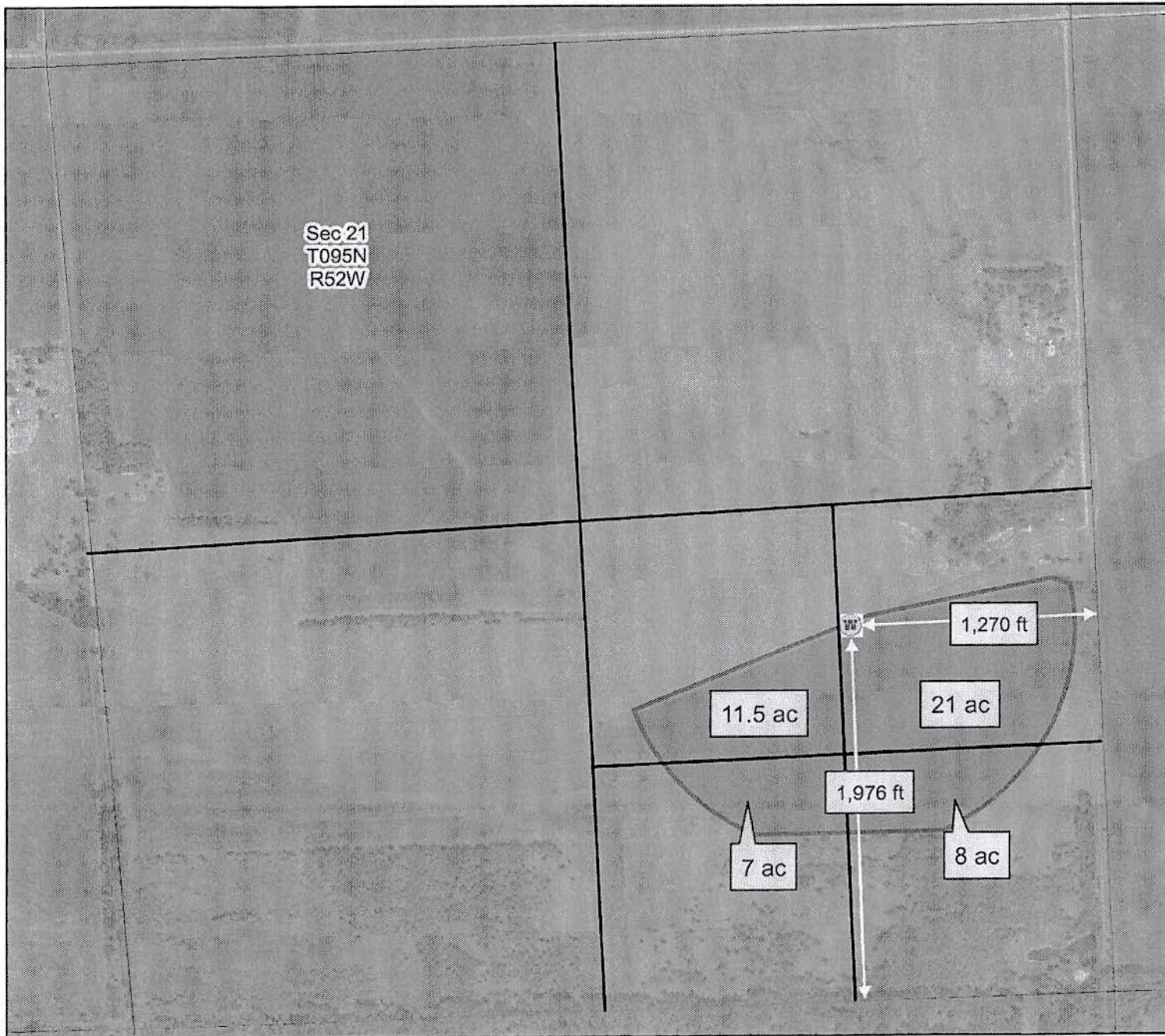
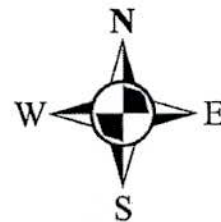
8/22/2019

Field borders provided by Farm Service Agency as of 5/21/2008.



Lindsay Manufacturing Co. Omaha, NE 800-829-5300 office

Roger Hansen
Hansen Properties
PO Box B
Centerville, SD - Clay County
Water Permit No. 6816-3



0 0.1 0.2 0.4 Miles

 Well Site

 Irrigated Acres

 Section Boundaries - PLSS

Adam Mathiowetz

Adam Mathiowetz
DENR Water Rights Program
August 12, 2013



RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date February 24, 2022

RECEIVED OF Farron/Michelle Pratt 1900 Dawson Rd., Vermillion SD 57069

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

Fee for Application for Permit No. <u>8599-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>500.00</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>8599-3</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>700.00</u>

By *Eric Gronlund*
Chief Engineer
vm



**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. 8599-3, Farron & Michelle Pratt**

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. 8599-3, Farron & Michelle Pratt, 1900 Dawson Road, Vermillion SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 8599-3 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 this Permit and Water Right No. 6816-3 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, this Permit and Water Right No. 6816-3 authorize a maximum, combined, diversion rate of 1.56 cfs for the irrigation of 65 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
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
March 28, 2022

Report to the Chief Engineer
On Water Permit Application No. 8599-3

Farron Pratt & Michelle Pratt

March 28, 2022

Water Permit Application No. 8599-3 proposes to appropriate water at a maximum instantaneous diversion rate of 0.17 cubic feet per second (cfs) from one well completed into the Upper Vermillion Missouri: South aquifer and authorized by Water Right No. 6816-3 for the irrigation of 17.5 acres located in the SE ¼ of Section 21-T95N-R52W.

The applicant holds Water Right No. 6816-3, which authorizes a maximum instantaneous diversion rate of 1.39 cfs from one well completed into the Lower Vermillion Missouri aquifer (110 feet deep) located in the NE ¼ SE ¼ of Section 21 for the irrigation of 47.5 acres located in the SE ¼ of Section 21; all in T95N-R52W. The well authorized by Water Right No. 6816-3 is coded as withdrawing from the Lower Vermillion Missouri aquifer and the water permit application for this water right was processed preceding work completed by the South Dakota Geological Survey (SDGS) and Buhler (2014) analyzing the approximate Upper Vermillion Missouri: South aquifer boundary. The work completed by the SDGS and Buhler (2014) has indicated the existing well (110 feet deep) located in the NE ¼ SE ¼ of Section 21-T95N-R52W is withdrawing from the Upper Vermillion Missouri: South aquifer.

The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. If approved, Water Permit Application No. 8599-3 and Water Right No. 6816-3 will collectively authorize a maximum instantaneous diversion rate of 1.56 cfs from one well completed into the Upper Vermillion Missouri: South aquifer for the irrigation of 65 acres. The site of interest is located in Clay County approximately six miles southwest of Centerville, SD.

AQUIFER: Upper Vermillion Missouri: South (UVM: S)

HYDROGEOLOGY:

The Upper Vermillion Missouri aquifer is a glacial outwash that is composed of fine sand to medium-pebble gravel (Lindgren and Hansen, 1990; Niehus, 1997). The aquifer generally lays in a bedrock valley that trends northwest to southeast with the direction of groundwater movement generally to the south/southeast (Lindgren and Hansen, 1990; Holmes and Filipovic, 2015). Most of the Upper Vermillion Missouri aquifer is overlain by till that can be up to 160 feet thick but in some localized areas, the aquifer can be encountered near the ground surface (Holmes and Filipovic, 2015). From 2013 to 2014, the SD DENR-Geological Survey completed a study to further understand the geologic and hydrologic conditions of the Upper Vermillion Missouri aquifer (Holmes and Filipovic, 2015). As a result, the aquifer is now divided into three management units (i.e. North, South, and West) that were adopted by the Water Management Board at the March 6, 2014 meeting (Water Rights, 2014). It is worth noting that of the south boundary of the Upper Vermillion Missouri aquifer Buhler (2014) states, "Although the southern boundary has not been delineated at this time, data shows that it extends south several miles from

the original border as it merges with or transitions into the Lower Vermillion Missouri aquifer.” Although described as not yet delineated, the mapping and areas presented in Buhler (2014) reflected a southern boundary for the Upper Vermillion Missouri aquifer extending several miles south from the original border and includes sufficient information to allow for the examination of water availability in the South management unit of the Upper Vermillion Missouri aquifer.

The existing well proposed to be used is located in the South management unit of the Upper Vermillion Missouri aquifer. The areal extent of the Upper Vermillion Missouri: South aquifer is approximately 78,820 acres in Clay, Lincoln, and Turner Counties (Figure 1) (Buhler, 2014). The Upper Vermillion Missouri: South aquifer is generally under confined conditions except near the Clay-Turner County line where the aquifer is in hydrologic connection with the overlying Parker-Centerville aquifer (Holmes and Filipovic, 2015; Lindgren and Hansen, 1990; Niehus, 1997).

A water well completion report was submitted with Water Permit Application No. 8599-3 for the well authorized by Water Right No. 6816-3. The well completion report lists “Silt, brown, clayey; colluvium” from 0 to 32 feet below the ground surface, “Clay, brown, pebbly” from 32 to 46 feet, and “gravel, medium to coarse” from 46 to 113 feet below the ground surface. The well was screened in “gravel, medium to coarse” from 50 to 110 feet, and had a static water level of 23 feet at the time of well completion (February 3, 2008). Based on the submitted water well completion report, and water well completion reports and lithologic logs on file for nearby water rights/permits and observation wells, the Upper Vermillion Missouri: South aquifer is expected to be confined at the existing well site (SDGS, 2022; Water Rights, 2022a, 2022b and 2022c).

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 Upper Vermillion Missouri: South aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8599-3 proposes to appropriate water from the Upper Vermillion Missouri: South 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

Upper Vermillion Missouri: South aquifer is not older than or stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010), and 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 Upper Vermillion Missouri: South aquifer must be considered.

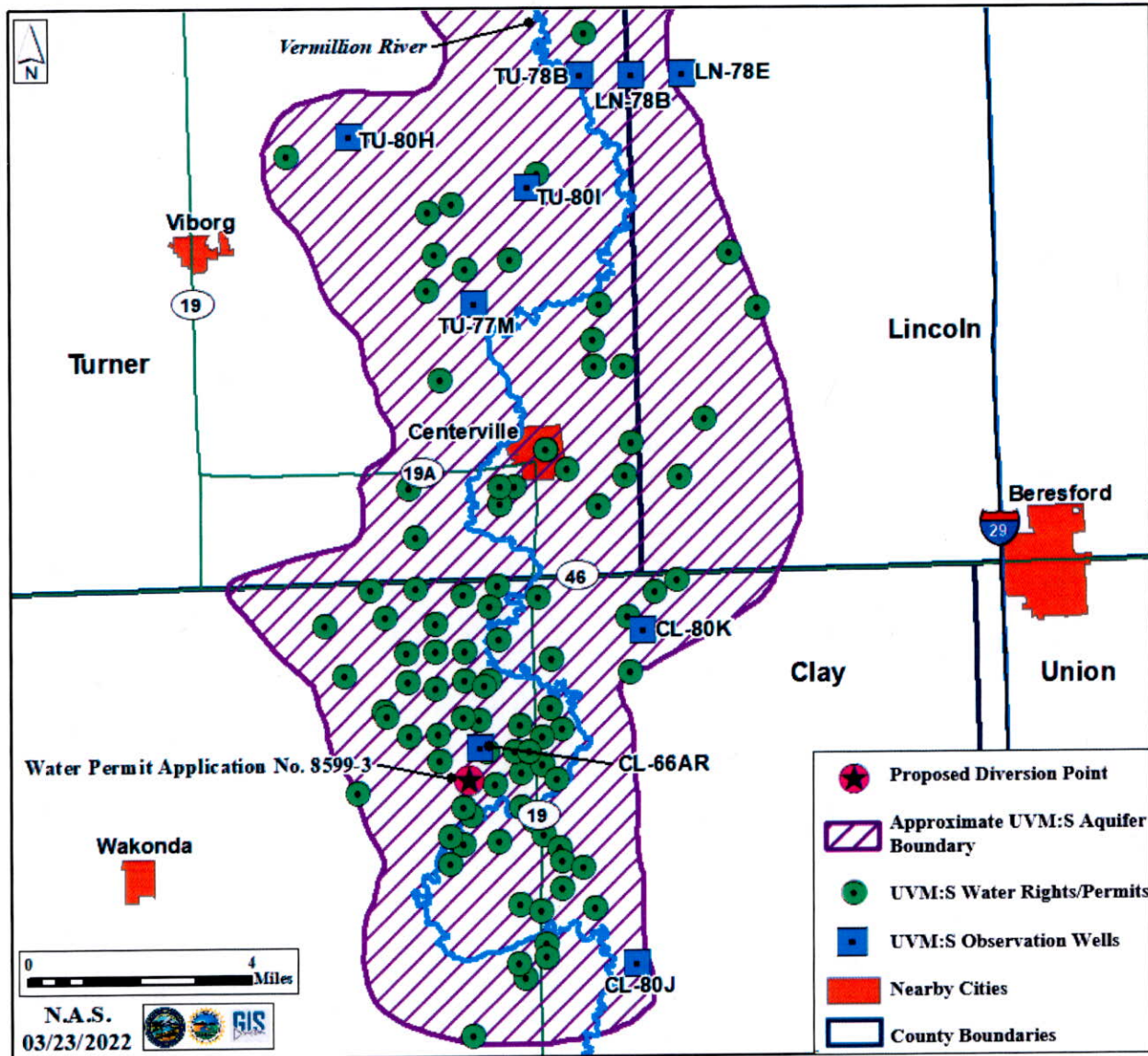


Figure 1. Map of the approximate Upper Vermillion Missouri: South aquifer delineated from Buhler (2014), the location of the existing well proposed to be used by Water Permit Application No. 8599-3, and the Upper Vermillion Missouri: South aquifer water rights/permits and observation wells (Water Rights, 2022a and 2022b)

HYDROLOGIC BUDGET:

Recharge

Recharge to the Upper Vermillion Missouri aquifer occurs primarily through the infiltration of precipitation where the aquifer is at or near the ground surface. Additional recharge occurs where the Upper Vermillion Missouri aquifer is in direct contact with the Parker-Centerville aquifer (Holmes and Filipovic, 2015; Lindgren and Hansen, 1990; Niehus, 1997). There has been no quantification of the specific recharge rate to the Upper Vermillion Missouri: South aquifer. However, Hedges and others (1985) estimated a recharge rate of 0.25 inches per year using a regional flow net analysis for the entire Upper Vermillion Missouri as delineated at that time. The Upper Vermillion Missouri aquifer as delineated by Hedges and others (1982) had the North, South, and West management units as one singular aquifer. Applying the 0.25 inches per year recharge rate over the current areal extent of the Upper Vermillion Missouri: South aquifer leads to an estimated recharge rate of 1,642 acre-feet per year for the Upper Vermillion Missouri: South aquifer. This recharge rate is lower than what the observation well data shows and Buhler's (2014) flow net analysis estimate.

2014 Flow Net Analysis

Buhler (2014) completed an analysis of the Upper Vermillion Missouri aquifer that indicates recharge exceeded withdrawals from the Upper Vermillion Missouri: South aquifer by an estimated 5,637 to 8,223 acre-feet per year at that time based on estimated groundwater outflow from the Upper Vermillion Missouri: South aquifer. Buhler's (2014) analysis included all previously defined Upper Vermillion Missouri and Lower Vermillion Missouri aquifer water rights/permits that are now identified as withdrawing water from the South management unit of the Upper Vermillion Missouri aquifer. On the March 6, 2014, Water Management Board meeting, the Board approved twelve water permit applications: Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3, and 7919-3 (Water Rights, 2014 and 2022b). However, Water Permit Nos. 7623-3 and 7653-3 were cancelled in 2018 (Water Rights, 2022b). The remaining ten water permits authorize the irrigation of approximately 1,295.83 acres (Water Rights, 2022b). Buhler (2014) calculated an average annual application rate per permitted acre from the Upper Vermillion Missouri aquifer of six inches per permitted acre. Using Buhler's (2014) *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer, the average annual withdrawal rate that is expected from these ten Upper Vermillion Missouri: South aquifer water permits is approximately 648 acre-feet per year.

The Water Management Board has approved 24 additional water permit applications (plus one pending application) for wells completed into the Upper Vermillion Missouri: South aquifer since the March 6, 2014, Board meeting and the use type for each permit is irrigation (Water Rights, 2022b). These 24 water permits (plus one pending application) authorize the irrigation of approximately 2,475.06 acres (Water Rights, 2022b). Using Buhler's (2014) *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer, the average annual

withdrawal rate that is expected from these Upper Vermillion Missouri: South aquifer water permits is approximately 1,237.53 acre-feet per year.

Discharge

Discharge from the Upper Vermillion Missouri aquifer is primarily through evapotranspiration where the aquifer is near the ground surface, subsurface outflow to other glacial aquifers, and through well withdrawals (Lindgren and Hansen, 1990; Water Rights, 2022b and 2022c).

Currently, there are 89 water rights/permits authorized to appropriate water from the Upper Vermillion Missouri: South aquifer, plus one pending water permit application – No. 8588-3 requesting to irrigate 160 acres in Lincoln County (Water Rights, 2022b). The average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits (approved after the March 6, 2014, Water Management Board meeting, plus the pending application) is approximately 1,885 acre-feet per year.

Table 1 summarizes these 34 Upper Vermillion Missouri: South aquifer water rights/permits, plus the pending water permit application, and their estimated use based on Buhler's (2014) *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer. Collectively, the average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits (approved after the March 6, 2014, Water Management Board meeting or currently pending) is approximately 1,885 acre-feet per year (Table 1). Therefore, since Buhler's (2014) analysis estimated recharge exceeds withdrawals by 5,637 to 8,223 acre-feet per year, there is a reasonable probability that unappropriated water is available to supply this proposed appropriation.

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

Hydrologic Budget Summary

Buhler's (2014) analysis of the Upper Vermillion Missouri aquifer indicates recharge exceeded withdrawals from the Upper Vermillion Missouri: South aquifer by an estimated 5,637 to 8,223 acre-feet per year at that time. That analysis included all previously defined Upper Vermillion Missouri and Lower Vermillion Missouri aquifer water rights/permits that are now identified as withdrawing water from the South management unit of the Upper Vermillion Missouri aquifer (Buhler, 2014). The average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits, either approved after the March 6, 2014, Water Management Board meeting or currently pending, is approximately 1,885 acre-feet per year. Therefore, there is a

reasonable probability that unappropriated water is available to supply this proposed appropriation.

Table 1. The average annual withdrawal rate for the Upper Vermillion Missouri: South aquifer water rights/permits that were either approved after the March 6, 2014, Water Management Board meeting, or are currently pending (Water Rights, 2022b)

Permit No.	Name	Priority Date	Status	Use	Acres	Estimated Use (acre-feet/year)
6811A-3	Jesse & Tanya Vandestroet	04/10/2014	PE	IRR	115	57.5
6820A-3	Jesse & Tanya Vandestroet	01/23/2014	PE	IRR	43	21.5
7383-3	Metabank	07/20/2012	PE	IRR	25	12.5
7384-3	Nicholas & Courtney Blake	07/20/2012	PE	IRR	80	40
7441-3	Jason or Alicia Knutson	09/26/2012	PE	IRR	140	70
7442-3	Leah Johnson	09/26/2012	PE	IRR	40	20
7466-3	Bethel Hagen Trust	10/18/2012	PE	IRR	152	76
7467-3	Cleland Hagen Trust	10/18/2012	PE	IRR	152	76
7600-3	Michael D Stevens	12/28/2012	PE	IRR	180	90
7601-3	Michael D Stevens	12/28/2012	PE	IRR	132	66
7603-3	Michael D Stevens	12/28/2012	PE	IRR	120	60
7690-3	Tim or Dave Ostrem	12/20/2013	PE	IRR	160	80
7693-3	Metabank	02/06/2013	PE	IRR	27.7	13.85
7900-3	Leon Thompson	09/11/2013	PE	IRR	136	68
7919-3	Larry & Marlene Erickson	10/23/2013	PE	IRR	83.83	41.915
7945-3	Brad R or Linda R Trudeau	01/17/2014	PE	IRR	60	30
7947-3	Leon, Holly and Jordan Rozeboom	01/23/2014	PE	IRR	133.44	66.72
7948-3	Majestic Farms LLP	01/23/2014	PE	IRR	55.02	27.51
7949-3	Jesse & Tanya Vandestroet	01/23/2014	PE	IRR	100.9	50.45
7964-3	Paul, Mike & John Shubeck	02/12/2014	PE	IRR	128	64
7976-3	Vasgaard Properties	02/27/2014	PE	IRR	160	80
7990-3	Robert P Walsh	04/02/2014	PE	IRR	240	120
7993-3	Jesse & Tanya Vandestroet	04/10/2013	PE	IRR	53	26.5
7994-3	Metabank	04/10/2014	PE	IRR	72	36
7995-3	Jesse & Tanya Vandestroet	04/10/2014	PE	IRR	25	12.5
8007-3	Louis Latendresse	04/18/2014	PE	IRR	150	75
8037-3	Tyler Anderson	06/10/2014	PE	IRR	103	51.5
8070-3	Hansen Irrigated Farms LLC	01/07/2015	PE	IRR	96	48
8071-3	Hansen Irrigated Farms LLC	01/07/2015	PE	IRR	51	25.5
8072-3	Jesse & Tanya Vandestroet	01/07/2015	PE	IRR	40	20
8469-3	Double A Farms LLC	03/15/2021	PE	IRR	114	57
8470-3	Nicholas Blake	03/22/2021	PE	IRR	160	80
8492-3	Tim or Kari Ostrem	02/19/2021	PE	IRR	180	90
8542-3	Tyler Anderson	08/09/2021	PE	IRR	103	51.5
8588-3	T & D Farms	02/03/2022	pending	IRR	160	80
PE: Water Permit, IRR: Irrigation				TOTAL:	3,771	1,885

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 nine observation wells completed into the Upper Vermillion Missouri: South aquifer (Water Rights, 2022a). The three closest observation wells to the well the applicant proposes to use are CL-66AR (approximately 0.6 miles northeast), CL-80K (approximately four miles northeast), and CL-80J (approximately 4.5 miles southeast) (as shown in Figure 1). The hydrographs for these observation wells are displayed in Figures 2 to 4 (Water Rights, 2022a). 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 DANR Water Rights Observation Well on the hydrographs.

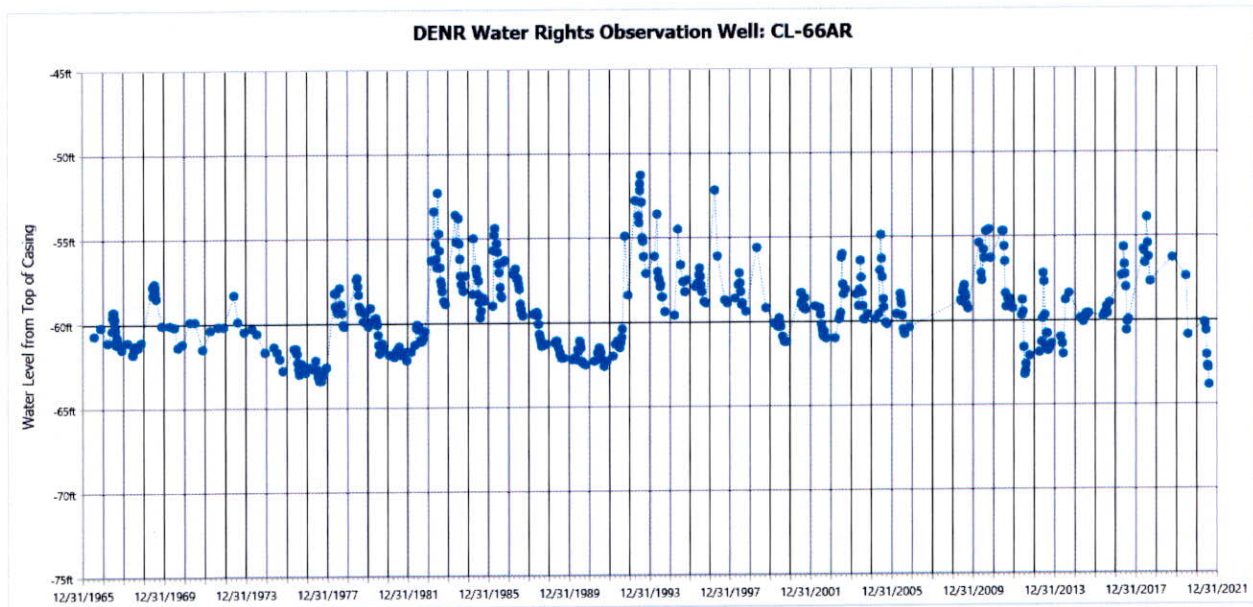


Figure 2. Hydrograph for observation well CL-66AR (Water Rights, 2022a)

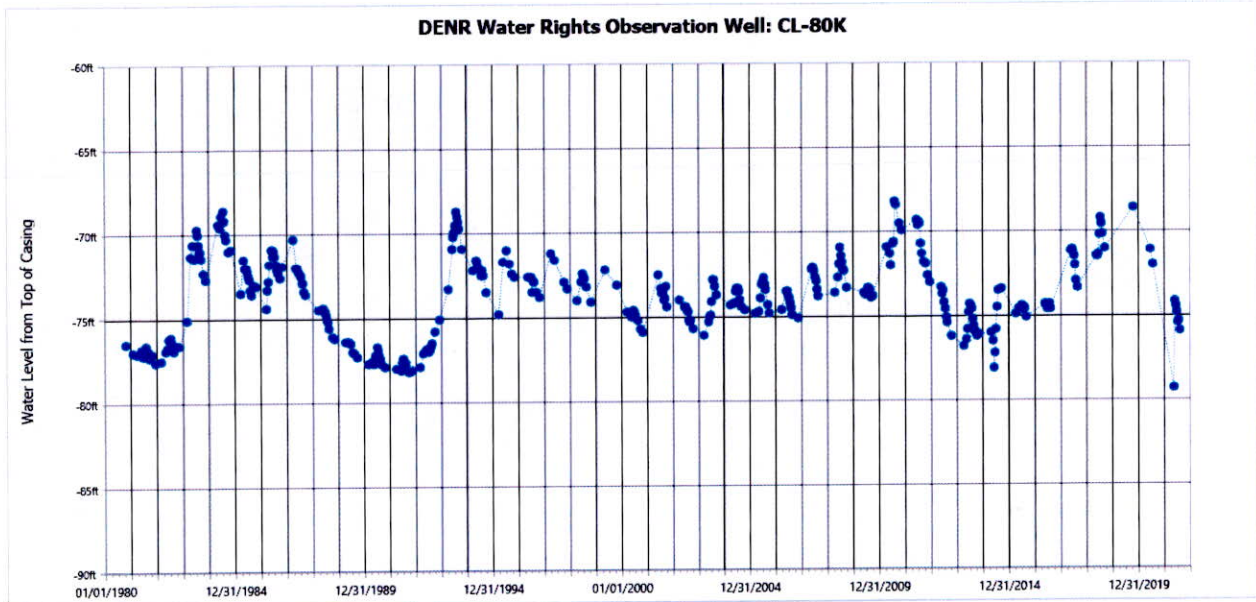


Figure 3. Hydrograph for observation well CL-80K (Water Rights, 2022a)

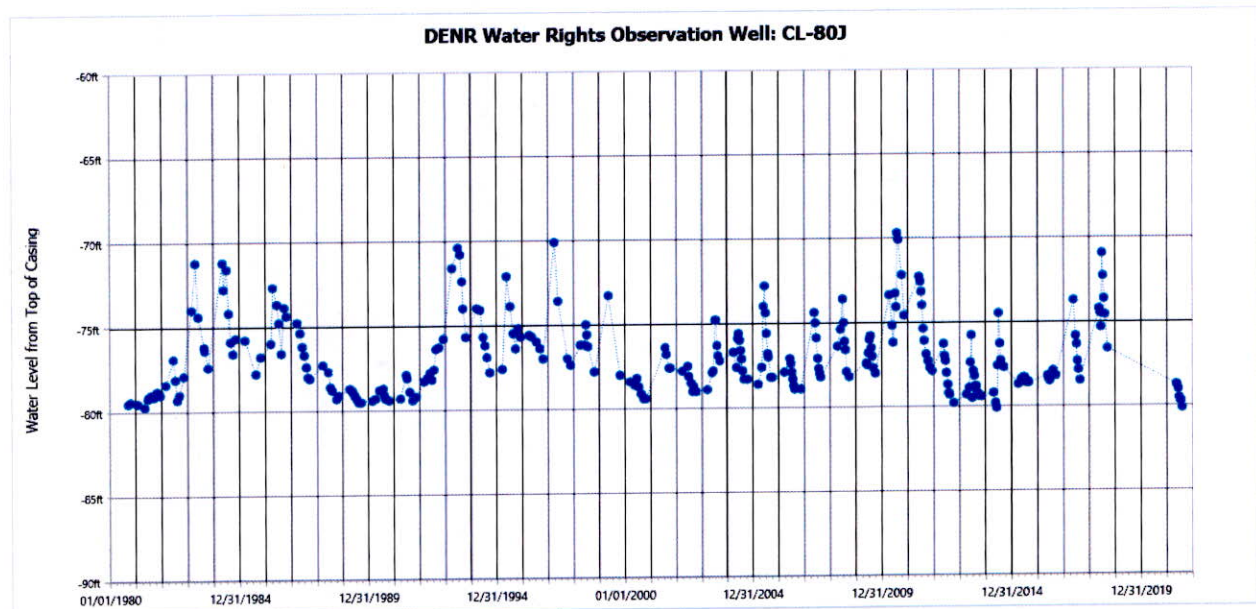


Figure 4. Hydrograph for observation well CL-80J (Water Rights, 2022a)

The hydrographs for the observation wells display stable to increasing water levels over their respective periods of record. The hydrographs for these three observation wells were compared to the hydrographs for the other observations wells completed into the Upper Vermillion Missouri: South aquifer and each displayed a similar trend as shown on the hydrographs displayed in Figures 2 to 4 (Water Rights, 2022a). The hydrographs for the Upper Vermillion Missouri: South aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods (early spring snowmelt and precipitation) and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Upper Vermillion Missouri: South 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. It is worth noting the most recent water level readings for the Upper Vermillion Missouri: South aquifer observation wells are approximately the lowest readings on the hydrographs displayed in Figures 2 to 4. These water level readings are not of concern at this time as they were measured during the middle of the irrigation season in 2021 (Water Rights, 2022a).

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 89 water rights/permits authorized to appropriate water from the Upper Vermillion Missouri: South aquifer, plus one pending water permit application – No. 8588-3 (Water Rights, 2022b). The wells authorized by Water Right No. 973-3 and Water Permit No. 7994-3 are located within approximately one-half mile of the existing well proposed to be used by this application (as shown in Figure 5) (Table 2) (Water Rights, 2022b).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Upper Vermillion Missouri: South aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.9 miles northwest of the existing well (Water Rights, 2022c).

There could potentially be other domestic wells completed into the Upper Vermillion Missouri: South aquifer near the well the applicant proposes to use that are not on file with the DANR-Water Rights Program.

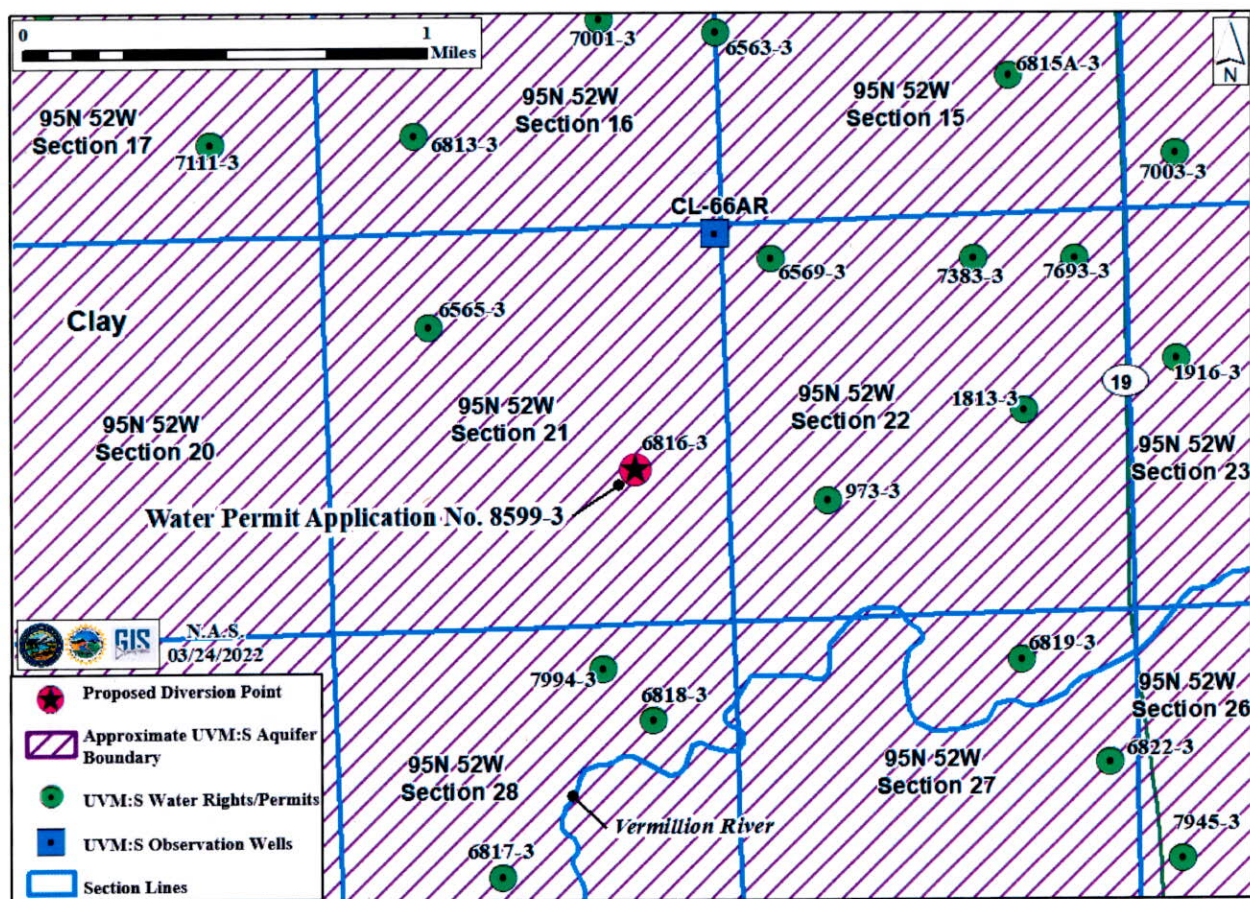


Figure 5. Location of the existing well proposed to be used by Water Permit Application No. 8599-3 with the Upper Vermillion Missouri: South aquifer water rights/permits and observation well within approximately one mile (Water Rights, 2022a and 2022b)

Table 2. Upper Vermillion Missouri: South aquifer water rights/permits within approximately one mile of the existing well proposed to be used, as shown in Figure 5 (Water Rights, 2022b)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Acres in IRR
973-3	Nicholas & Courtney Blake	LC	IRR	1.78	131
1813-3	Metabank	LC	IRR	2.06	144
1916-3	Troy & Sheila Gust	LC	IRR	1.33	169
6563-3	Rus Farms Real Estate LLC	LC	IRR	1.78	242.5
6565-3	Metabank	LC	IRR	1.78	130
6569-3	Smit Revocable Trust	PE	IRR	1.11	42
6813-3	Rus Farms Real Estate LLC	LC	IRR	1.78	187
6815A-3	Rus Farms Real Estate LLC	LC	IRR	1.78	264.5
6816-3	Farron & Michelle Pratt	LC	IRR	1.39	47.5
6817-3	Metabank	PE	IRR	2.0	130
6818-3	Metabank	PE	IRR	1.55	117
6819-3	Metabank	LC	IRR	1.39	102
6822-3	Hansen Properties	PE	IRR	1.11	36
7001-3	Rus Farms Real Estate LLC	LC	IRR	1.78	170
7003-3	Metabank	LC	IRR	0.67	31
7111-3	Kari Ostrem	LC	IRR	1.78	130
7383-3	Metabank	PE	IRR	0.56	25
7693-3	Metabank	PE	IRR	0.67	27.7
7945-3	Brad R or Linda R Trudeau	PE	IRR	1.78	60
7994-3	Metabank	PE	IRR	0	72
LC: Licensed Water Right; PE: Water Permit, IRR: Irrigation					

The Upper Vermillion Missouri: South aquifer is generally under confined conditions except near the Clay-Turner County line where the aquifer is in hydrologic connection with the overlying Parker-Centerville aquifer (Holmes and Filipovic, 2015; Lindgren and Hansen, 1990; Niehus, 1997). The Upper Vermillion Missouri: South aquifer is confined at the existing well site based on the submitted water well completion report, and water well completion reports and lithologic logs on file for nearby water rights/permits and observation wells (SDGS, 2022; Water Rights, 2022a, 2022b and 2022c). 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 Upper Vermillion Missouri: South aquifer near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well TU-77M (approximately 8.5 miles north of the existing well) has five high-yield (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) irrigation wells within approximately two miles of it (Water Rights, 2022a and 2022b). The lithologic log on file for TU-77M noted the well was drilled 185 feet below the ground surface, with a casing stick up height of 2.1 feet, and the top of aquifer approximately 108 feet below the top of the well casing

(SDGS, 2022). The water level reading measured in 2010 in observation well TM-77M is likely an incorrect reading (Water Rights, 2022a). Therefore, the lowest recorded static water level on the hydrograph (shown in Figure 6) is approximately 67 feet from the top of the well casing, which indicates there was still approximately 40 feet of artesian head pressure in TU-77M even during drier periods when high-yield irrigation wells are expected to be pumping more water (Water Rights, 2022a).

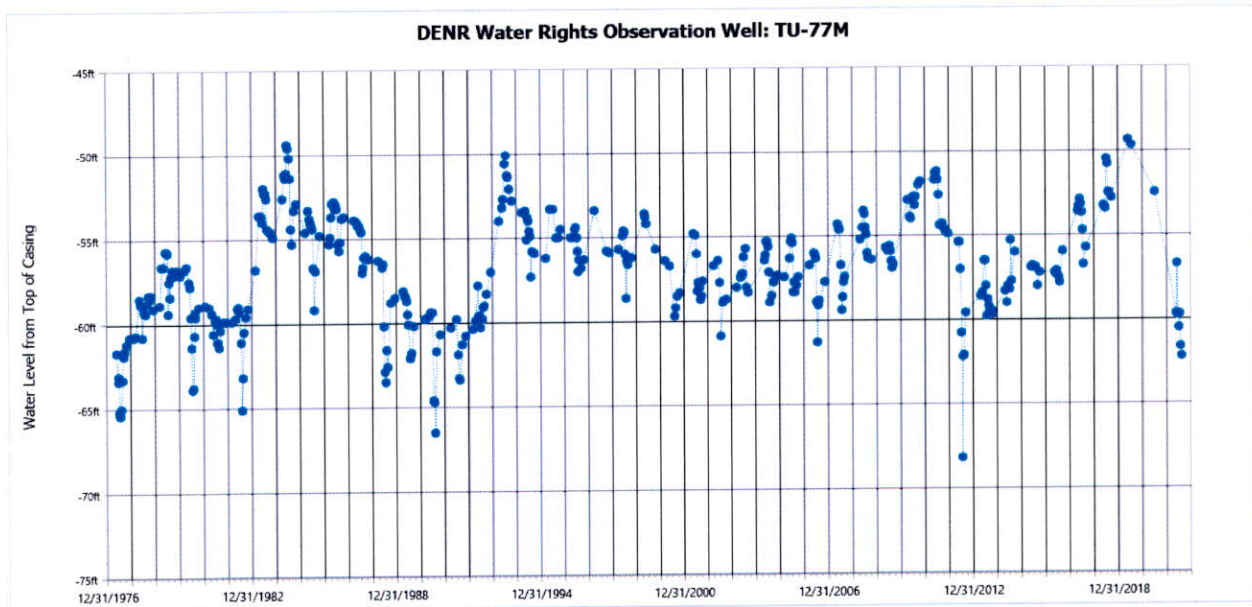


Figure 6. Hydrograph for observation well TU-77M (Water Rights, 2022a)

Within approximately one mile of the existing well site, water well completion reports on file for appropriative water users have saturated aquifer thicknesses ranging from approximately 60 to 100 feet (Water Rights, 2022b and 2022c). This would generally allow for enough thickness 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 is not expected to unlawfully impair nearby adequate wells. In Clay, Lincoln, and Turner Counties, there are no complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Upper Vermillion Missouri: South aquifer (Water Rights, 2022d).

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 Upper Vermillion Missouri: South 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 saturated aquifer thickness near the existing well site, the artesian head pressure in observation wells and appropriative user's wells completed into the aquifer near the existing well site, and the lack of well interference complaints for adequate wells completed into the Upper Vermillion Missouri: South aquifer, 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. In addition, this is an existing well authorized by Water Right No. 6816-3 and has been in use since 2008 with no reported well interference complaints. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

SDCL 46-5-6:

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of 1.0 cfs per 70 acres, or "the equivalent thereof." The statute does provide that: "The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires..."

If approved, Water Permit Application No. 8599-3 and Water Right No. 6816-3 will collectively authorize a maximum instantaneous diversion rate of 1.56 cfs from one well for the irrigation of 65 acres, from April 1 to October 31, or at a rate of 1.68 cfs per 70 acres. The applicant provided the reason for exceedance being due an additional tower being added to an existing center pivot, and moving the center point west to allow for additional coverage. This type of reason has been accepted by the Water Management Board in past.

CONCLUSIONS:

1. Water Permit Application No. 8599-3 proposes to appropriate water at a maximum instantaneous diversion rate of 0.17 cfs from one well completed into the Upper Vermillion Missouri: South aquifer and authorized by Water Right No. 6816-3 for the irrigation of 17.5 acres.
2. The applicant holds Water Right No. 6816-3, which authorizes a maximum instantaneous diversion rate of 1.39 cfs from one well completed into the Lower Vermillion Missouri aquifer (110 feet deep) for the irrigation of 47.5 acres. The work completed by the SDGS and Buhler (2014) has indicated the existing well (110 feet deep) is withdrawing from the Upper Vermillion Missouri: South aquifer.
3. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. If approved, Water Permit Application No. 8599-3 and Water Right No. 6816-3 will collectively authorize a maximum instantaneous diversion rate of 1.56 cfs from one well completed into the Upper Vermillion Missouri: South aquifer for the irrigation of 65 acres.
4. Based on Buhler's (2014) Flow Net Analysis and the observation well data, there is a reasonable probability that unappropriated water is available from the Upper Vermillion Missouri: South aquifer to supply the proposed appropriation.
5. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8599-3 will not unlawfully impair adequate wells for existing water right/permit holders and domestic users.



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

Reviewed by:



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

References

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- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A., 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
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- Water Rights, 2022d. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Schlaak, Karen

From: Schlaak, Karen
Sent: Wednesday, March 30, 2022 10:29 AM
To: 'fpratt@firstdakota.com'
Subject: Water Permit Application No. 8599-3
Attachments: 3148.pdf

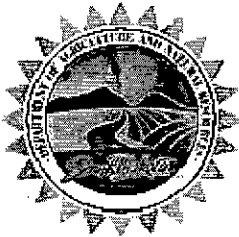
Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for your water permit application. As stated in the letter, please contact the paper(s) as soon as possible to authorize publication and arrange for payment. This information is being mailed to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

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

Website: <https://danr.sd.gov>



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FARRON/MICHELLE PRATT
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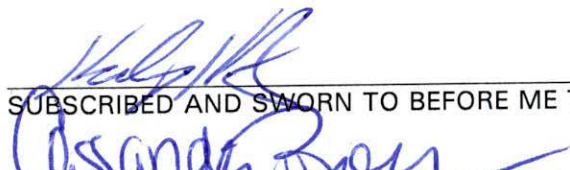
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
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AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
4 + 8 NOTICE OF APPLICATION

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 8th DAY OF April, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$44.64 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: 04/08/2022

FILED ON: 04/08/2022


SUBSCRIBED AND SWORN TO BEFORE ME THIS 8th DAY OF April, 2022


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

NOTICE OF APPLICATION NO. 8599-3 to Appropriate Water

Notice is given that Farron Pratt & Michelle Pratt, 1900 Dawson Rd, Vermillion SD 57069 have filed an application for a water permit to appropriate an additional 0.17 cubic feet of water per second (cfs) and irrigate 17.5 additional acres to what is currently authorized by Water Right No. 6816-3. Water Right No. 6816-3 appropriates 1.39 cfs from one well identified as the Lower Vermillion Missouri Aquifer (110 feet deep) located in the NE 1/4 SE 1/4 Section 21 to irrigate 47.5 acres located in the SE 1/4 Section 21; all in T95N-R52W. The notice serves as clarification that the well is located in what is now identified as the Upper Vermillion Missouri:South Aquifer. This application proposes to appropriate an additional 0.17 cfs from the existing well to irrigate an additional 17.5 acres located in the area described above. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This application, if approved, and Water Right No. 6816-3 will authorize a total of 1.56 cfs for irrigation of 65 acres. This site is located approximately 6 miles southwest of Centerville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8599-3 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 April 18, 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 April 18, 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 \$44.64.

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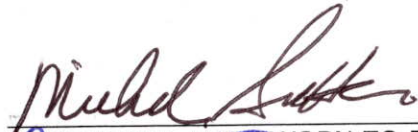
STATE OF SOUTH DAKOTA
COUNTY OF CLAY

MICHELE SCHIEVELBEIN, BEING FIRST DULY SWORN ON OATH DEPOSES AND SAYS THAT (S)HE IS THE ADVERTISING DIRECTOR OF YANKTON MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED AND CIRCULATED IN THE CITY OF VERMILLION, 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 8th DAY OF April, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID NOTICE TO WIT \$44.48 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: 04/08/2022

FILED ON: 04/08/2022



SUBSCRIBED AND SWORN TO BEFORE ME THIS 8th DAY OF April, 2022



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

Ad text : NOTICE OF APPLICATION NO. 8599-3 to Appropriate Water

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APR 11 2022

WATER RIGHTS
PROGRAM

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8599-3 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 April 18, 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 April 18, 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 \$44.48.
Published April 8, 2022.

Schlaak, Karen

From: Schlaak, Karen
Sent: Wednesday, March 30, 2022 9:55 AM
To: Kelly Kronaizl
Subject: 8599-3, Farron & Michelle Pratt
Attachments: 8599-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on April 8, 2022 in both the Plain Talk and the Press & Dakotan.

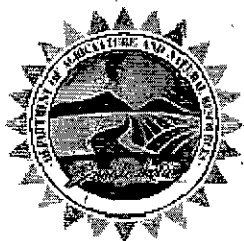
Farron & Michelle Pratt, 1900 Dawson Rd, Vermillion SD 57069 (605 202-0428) has been notified to contact you to authorize publication and arrange for payment.

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**

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.**

March 30, 2022

Farron & Michelle Pratt
1900 Dawson Rd
Vermillion SD 57069

Dear Mr. & Mrs. Pratt:

Water Permit Application No. 8599-3 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 Plain Talk printed at Vermillion (Ph # 605 624-2695) and the Press & Dakotan printed at Yankton (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,

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.

NOTICE OF APPLICATION NO. 8599-3 to Appropriate Water

Notice is given that Farron Pratt & Michelle Pratt, 1900 Dawson Rd, Vermillion SD 57069 have filed an application for a water permit to appropriate an additional 0.17 cubic feet of water per second (cfs) and irrigate 17.5 additional acres to what is currently authorized by Water Right No. 6816-3. Water Right No. 6816-3 appropriates 1.39 cfs from one well identified as the Lower Vermillion Missouri Aquifer (110 feet deep) located in the NE 1/4 SE 1/4 Section 21 to irrigate 47.5 acres located in the SE 1/4 Section 21; all in T95N-R52W. The notice serves as clarification that the well is located in what is now identified as the Upper Vermillion Missouri:South Aquifer. This application proposes to appropriate an additional 0.17 cfs from the existing well to irrigate an additional 17.5 acres located in the area described above. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This application, if approved, and Water Right No. 6816-3 will authorize a total of 1.56 cfs for irrigation of 65 acres. This site is located approximately 6 miles southwest of Centerville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8599-3 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.

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Published once at the total approximate cost of_



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

APR 28 2022

Farron & Michelle Pratt
1900 Dawson Rd
Vermillion SD 57069

Dear Mr. & Mrs. Pratt:

Enclosed is Water Permit No. 8599-3 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

8599-3

June 23, 2023

Farron & Michelle Pratt
1900 Dawson Rd
Vermillion SD 57069

8599-3

Dear Mr. & Ms. Pratt:

I am writing in regard to your Water Permit No. 8599-3. The water permit authorizes diversion of water from groundwater, one well, completed into the Lower Vermillion Missouri Aquifer, for the irrigation of 17.5 acres in the SE ¼ of Section 21, T95N, R52W.

In reviewing your 2022 irrigation questionnaire, we have found discrepancies in the amount of water used and have some concerns. Enclosed is a copy of your questionnaire for reference purposes.

Water Permit No. 8599-3 allows you to use up to two acre-feet (ac-ft) (24 inches) of water, per acre, per year. On the questionnaire you reported substantially more water use. The following information is what was reported and what is authorized:

- 17.5 acres irrigated
- Reported water use – 71.1 ac-ft of water (approximately 49 inches)
- Authorized water use – 35 acre-feet (17.5 acres x 2 ac-ft per year)

We realize that water use depends greatly on climactic conditions and may vary year to year. However, it is very rare that irrigators come close to the 24 inches per acre that is authorized. Typical water use is between 8 and 12 inches per acre. Often, irrigators do not keep track of their days or hours actually pumped and estimate numbers for the questionnaires in an effort to get them completed and back in on time. While we appreciate returning the forms in a timely manner each year, we need the forms to reflect accurate information to ensure everyone is limiting their use to the amount of water appropriated to them.

The information we receive each year from irrigators across the state is very valuable. The water use data supplied by irrigators is one of the tools we use to help determine whether an aquifer or stream is nearing full appropriation.

If you do in fact apply as much water as claimed on your questionnaire, you are exceeding the limits of your water permit and will have to reduce your discharge to stay within the authorized limit. If you simply estimated your water use, we ask that you please ensure the information reported is as accurate as possible. As stated before, the information you provide to us is very valuable. If you have any questions, please contact me.

Sincerely,

Amanda Dewell
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

File No. 8599-3

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: FARRON PRATT

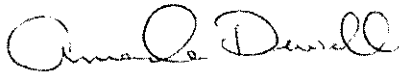
DATE: 7-7-23

TELEPHONE: 605-202-0428

RE: IQ OVERUSE LETTER

COMMENTS:

Farron called to confirm that he did not use as much water as he'd reported for 2022. He accidentally double reported the same information on each questionnaire. We discussed recording on one IQ and then noting on the 2nd to refer to the other since all acres are being irrigated by a single system.



Amanda Dewell
Water Rights Program