

WATER PERMIT NO. 8537-3

Name of Applicant: **Berwald Family RLLP**

Address: **47143 196th St, Toronto SD 57268**

Phone: **605-690-3319**

Amount of Water Claimed: **2.0 cfs**

Total Acres: **160**

Source of Water Supply: **groundwater (3 wells)**

Water to be used for: **irrigation**

County: **Deuel**

Type of Waste Disposal System:

Location: **approximately 7 miles west of Toronto SD**

PRIORITY

Date Received: **8-3-21**

Application/License Fee: **\$ 1050**

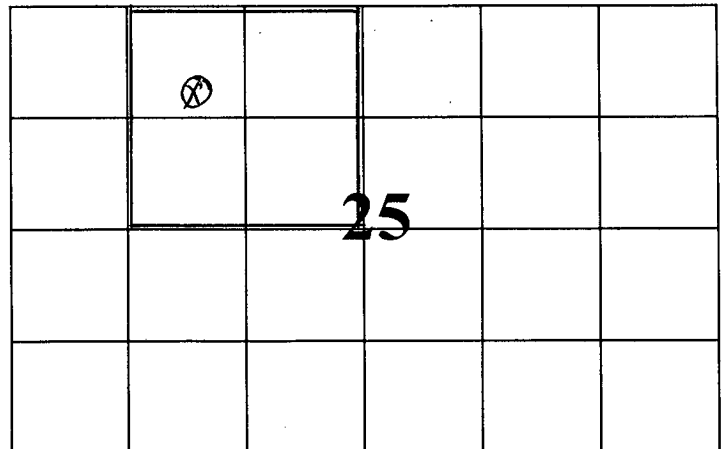
Corrected Application Received:

Period of Annual Use: **June 1 – September 30**

Remarks:

Diversion Point: **N 1/2 Sec 25-T113N-R50W**

Land to be Irrigated: **N 1/2 NW 1/4 Sec 25-T113N-R50W**



Depth of Well: **34 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **8-10-21**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave. Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8537-3</u>	(office use only) Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Clear Lake Courier, 874-2499 (Wed)</u>	
	<u>Brookings Register 692-6271</u>	

RECEIVED
AUG 03 2021
WATER RIGHTS
PROGRAM

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 Berwald Family RLLP

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

Mailing Address 47143 196th St Toronto SD 57268
(Address) (City) (State) (Zip Code)

Phone _____ Mobile 605 690-3319 Email austinberwald@hotmail.com

2. Amount of water claimed 2.0 *CFS or _____ **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 new wells - 3 if needed

4. Location of point of diversion N 1/2 NW 1/4 Section 25-T113N-R50W

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Deuel

5. County or counties where water will be used Deuel

6. Annual period during which water is to be used June 1 - September 30

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
NW 1/4 Sec 25-T113N-R50W	160		

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

I, s/Austin Berwald 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.

**SOUTH DAKOTA
WATER PERMIT NO. 8537-3**

Date of first receipt of application August 3, 2021.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8537-3 to Berwald Family RLLP, 47143 196th St, Toronto SD 57268 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. 8537-3 appropriates 2.0 cubic feet of water per second from up to three wells to be completed into the Big Sioux:Brookings Aquifer (approximately 33 feet deep) located in the N 1/2 NW 1/4 Section 25 for irrigation of 160 acres located in the NW 1/4 Section 25; all in T113N-R50W. This site is located approximately 7 miles west of Toronto 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: June 1 – September 30.
3. The date from which applicant may claim right is August 3, 2021.
4. The date of approval of Permit No. 8537-3 is October 18, 2021.
5. One-fifth of the construction is to be completed on or before April 18, 2024.
6. All construction is to be completed on or before October 18, 2026.
7. Water is to be put to beneficial use on or before October 18, 2030.
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 wells approved under Water Permit No. 8537-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 8537-3 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.

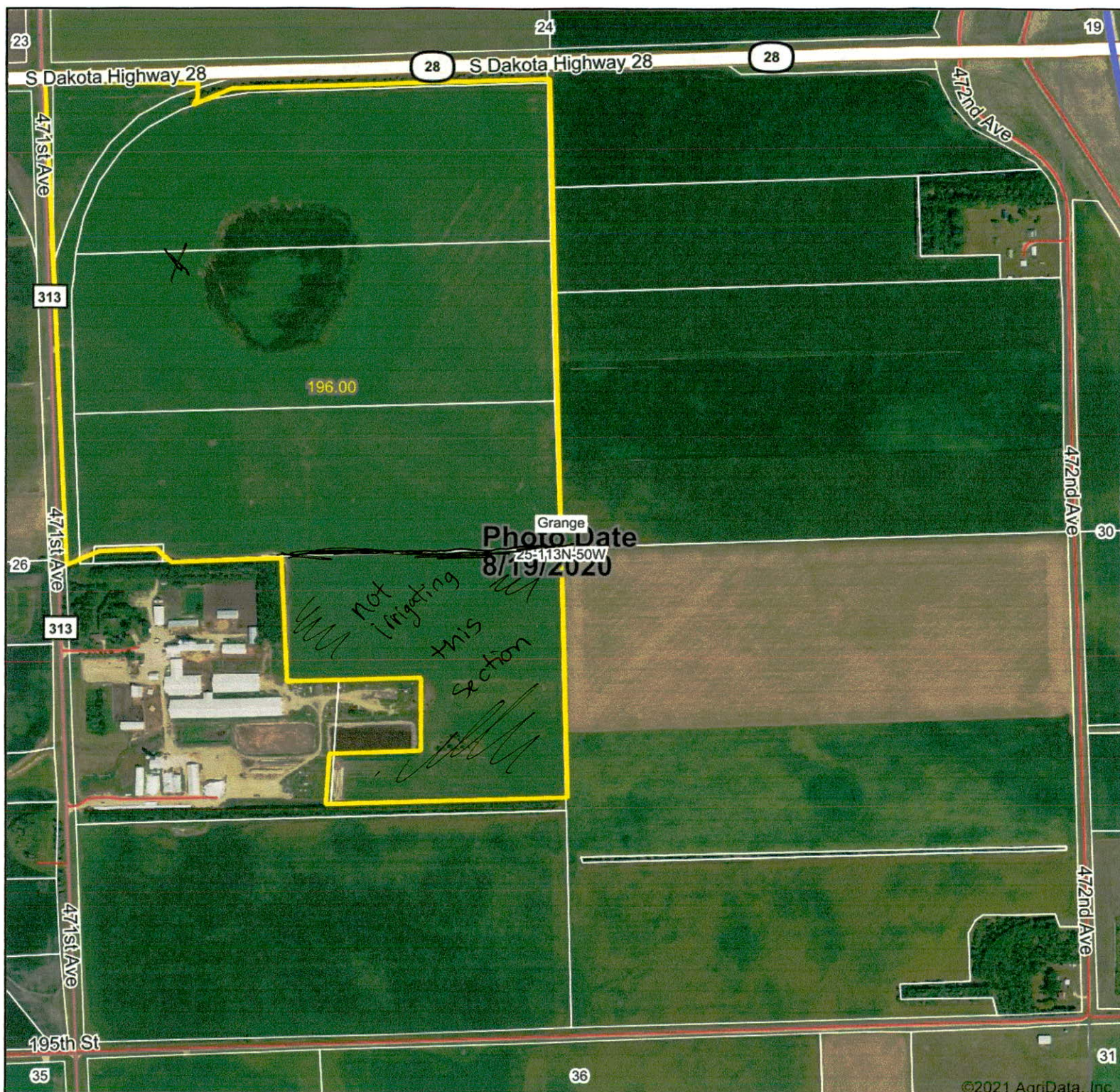
WATER MANAGEMENT BOARD

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

NOV 30 2021
date



North of Farm



Map Center: 44° 33.9264', -96° 46.462'

0ft 846ft 1692ft

25-113N-50W
Deuel County
South Dakota



7/27/2021

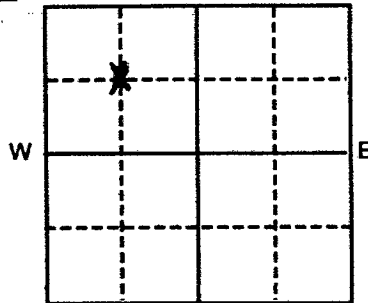
Field borders provided by Farm Service Agency as of 5/21/2008.

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location N 1/4 1/2 1/4 Sec 25 Twp 113N Rg 50WCounty DEUEL

North

Please mark well
location with an "X"

Well Completion Date

7-12-2021

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

DIRECT ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40 LB/FT	10 IN	+2 FT	24 FT	16 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
grtweldf	10	50 Lb/gal	0 Ft	23 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
pressure pull

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 10 Inches Length 10 FeetMaterial STAINLESS STEELSlot Size 80 Set From 23 Feet to 33 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ Yes ☐ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____
☒ No, Why Not? _____

Lab to which water quality sample sent for analysis _____ irrigation test hole

Well Owner: Austin BerwaldBusiness Name: Berwald Family Dairy LLPAddress: 47143 196th StCity, State, Zip: Torono SD 57268

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	3
TAN CLAY	3	5
YELLOW CLAY	5	7
FINE-MED	7	20
MED-COURSE	20	34
BLUE CLAY	34	37

STATIC WATER LEVEL 3 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: AIR 400+++☐ Bailed☐ Other

Pumping Level Below Land Surface

18 Ft. After 5 Hrs. pumped 400w/AIR GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

This well was drilled under license # 689 and this report is true and accurate.Drilling firm: KAISER WELL DRILLING INC

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: 7-26-21



OFFICE OF THE SECRETARY OF STATE

STEVEN J. BARNETT, SECRETARY OF STATE

JASON LUTZ, DEPUTY SECRETARY OF STATE

Filing Information

Name: **Berwald Family RLLP**

General Information

SOS Business ID DR001692
Filing Type: Limited Liability Partnership - Domestic
12/15/2014
Delayed Effective Date: 12/15/2014 12:00 AM
Status: Good Standing
Duration Term: Perpetual

Registered Agent Address

Austin M Berwald
47143 196TH ST
TORONTO, SD 57268

Principal Address

19460 471ST AVENUE
TORONTO, SD 57278-6278

The following document(s) was/were filed in this office on the date(s) indicated below:

Date Filed	Filing Description	Image #
11/16/2020	2020 Annual Report	B0158-4407
11/04/2019	2019 Annual Report	B0118-7919
11/27/2018	2018 Annual Report	B0081-2465
12/04/2017	2017 Annual Report	B0046-6451
11/30/2016	2016 Annual Report	B0015-7807
12/28/2015	2015 Annual Report	
12/15/2014	Initial Filing (Delayed Date 12/15/2014)	DR001692

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date August 3, 2021

RECEIVED OF Berwald Family RLLP 19460 471st Ave Toronto SD 57268

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

Fee for Application for Permit No. <u>8537-3</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>8537-3</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

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. 8537-3, Berwald Family RLLP**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 8537-3, Berwald Family RLLP, 47143 196th St, Toronto SD 57268.

The Chief Engineer is recommending APPROVAL of Application No. 8537-3 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 wells approved under Water Permit No. 8537-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 8537-3 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
September 20, 2021

Report to the Chief Engineer
On Water Permit Application No. 8537-3
Berwald Family RLLP

September 1, 2021

Water Permit Application No. 8537-3 proposes to appropriate water at a maximum instantaneous diversion rate of 2.0 cubic feet per second (cfs) from up to three wells to be completed into the Big Sioux: Brookings aquifer (approximately 33 feet deep). The three wells are to be located in the N $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 25 for the irrigation of 160 acres located in the NW $\frac{1}{4}$ of Section 25; all in T113N-R50W. The site is located in Deuel County approximately 7 miles west of Toronto, South Dakota.

AQUIFER: Big Sioux: Brookings (BS: B)

HYDROGEOLOGY:

The Big Sioux aquifer is composed of meltwater stream deposits and glacial outwash that is composed of coarse sand and fine to medium gravel with certain areas containing thin interbedded clay and till layers (Hamilton, 1989; Kume, 1976; Niehus, 1997). The Big Sioux aquifer is generally overlain by 1 to 4 feet alluvium on average within the Big Sioux River Valley and underlain by till (Kume, 1976 and 1985). The Big Sioux aquifer has a thickness of 30 feet on average but can range from 5 to 123 feet (Kume, 1976). The maximum thickness of the Big Sioux aquifer occurs near the City of Brookings, SD and at areas where narrow meltwater streams were confined between hills (Hamilton, 1988 and 1989). The first occurrence of aquifer materials is mostly at the land surface or just a few feet below the land surface (Kume, 1976). Wells completed into the Big Sioux aquifer have static water levels that generally range from the land surface to 18 feet below the land surface (Kume, 1985). The Big Sioux aquifer is commonly under unconfined conditions near the Big Sioux River and along major tributary valleys but can be locally confined in places where the aquifer is overlain by till (Hamilton, 1989). Confined conditions of the Big Sioux aquifer usually occur along the boundaries of the aquifer, but the artesian pressure is normally not large enough for wells to be flowing (Hamilton, 1989). The Big Sioux aquifer is hydraulically connected with the Shindler and Newton Hills aquifers as well as the Missouri and Big Sioux Rivers (Niehus, 1997). The direction of groundwater movement of the Big Sioux aquifer is generally to the south and towards the Big Sioux River (Hansen, 1988).

The Big Sioux aquifer is comprised of twelve management units. The proposed diversion points for Water Permit Application No. 8537-3 will be completed into the Brookings management unit of the Big Sioux aquifer. The Big Sioux: Brookings aquifer underlies approximately 323,000 acres in Brookings, Deuel, Hamlin, Kingsbury, and Moody Counties and contains approximately 1,453,000 million acre-feet (ac-ft) of recoverable water in storage (Hedges et al., 1982, Stonesifer, 2013). The approximate areal extent of the Big Sioux: Brookings aquifer is displayed in Figure 1 along with the location of the proposed diversion points. The proposed diversion points for Water Permit Application No. 8537-3 are approximately 1.2 miles southeast of the mapped Big Sioux: Brookings aquifer boundary. These proposed diversion points are

incorporated with the Big Sioux: Brookings aquifer as a result of aquifer boundaries being approximate and a review of available geologic data (Jensen, 2001; SDGS, 2021).

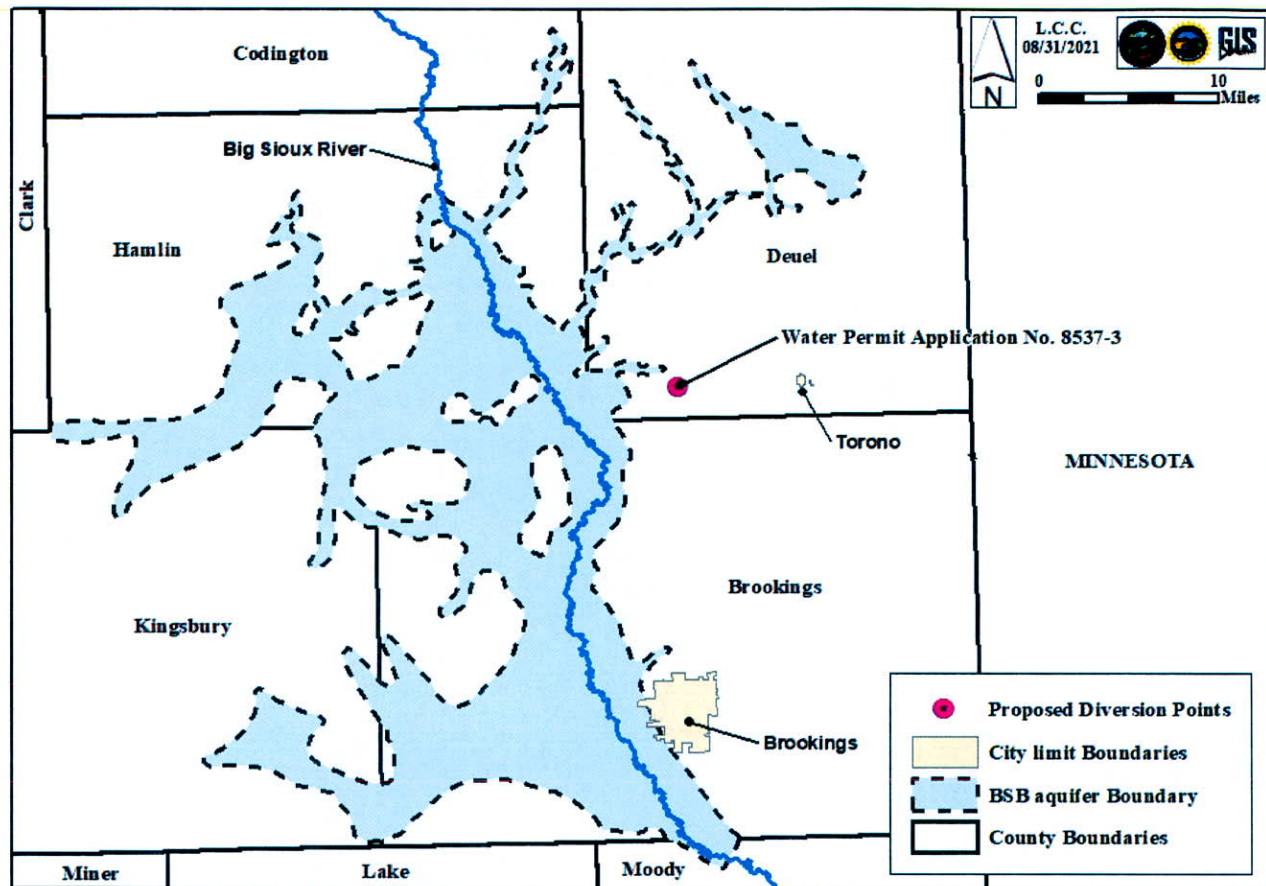


Figure 1: Map of the approximate areal extent of the Big Sioux: Brookings aquifer including the proposed diversion point locations of Water Permit Application No. 8537-3 (Hedges et al., 1982, Water Rights, 2021b and 2021c).

A water well completion report was submitted with Water Permit Application No. 8537-3. The report lists “topsoil” from 0 to 3 feet below the land surface, “tan clay” from 3 to 5 feet, “yellow clay” from 5 to 7 feet, “fine to medium sand” from 7 to 20 feet, “medium to coarse sand” from 20 to 34 feet, and “blue clay” from 34 to 37 feet. The static water level in the well was 3 feet below land surface at the time of well completion (July 2021). This results in a saturated thickness of 31 feet at the proposed diversion points. The Big Sioux: Brookings aquifer is unconfined at the diversion point based on the submitted water well completion report, water levels, and lithologic logs on file for nearby observation wells (SDGS, 2021; Water Rights, 2021b and 2021d).

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

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant’s proposed use, that the diversion point can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public

interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Big Sioux: Brookings aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8537-3 proposes to appropriate water from the Big Sioux: Brookings aquifer for irrigation. 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. However, an application may be approved for a water distribution system 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.” The Big Sioux: Brookings 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 Big Sioux: Brookings aquifer must be considered.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Big Sioux: Brookings aquifer is primarily through the infiltration of precipitation and seepage from the Big Sioux River and its tributaries (Koch, 1980). The recharge rate to the Big Sioux: Brookings aquifer was estimated by utilizing observation well data (Hedges et al., 1985). The average annual recharge rate that was estimated for the Big Sioux: Brookings aquifer was 4.0 inches per year (Hedges et al., 1985). The estimated areal extent of the Big Sioux: Brookings aquifer is 323,000 acres (Stonesifer, 2013). Therefore, the estimated average annual recharge to the Big Sioux: Brookings aquifer is approximately 107,700 acre-feet per year (ac-ft/yr). The location of the proposed diversion points is estimated to be 1.2 miles outside of the mapped approximate boundary of the Big Sioux: Brookings aquifer as shown in Figure 1. The proposed diversion points are in a relatively small finger of the Big Sioux: Brookings aquifer. The direction of groundwater movement will be towards the main body of the aquifer. That means the applicant’s proposed diversion points can only generally withdraw water from the upgradient portions of this finger. Thus, the applicant may have a physical limitation on their ability to withdraw the desired amount of water as a result of their location within the aquifer.

Discharge

Discharge from the Big Sioux: Brookings aquifer is primarily through evapotranspiration, interaction with the Big Sioux River, and well withdrawals (Hamilton, 1989). Currently, there are 257 water rights/permits authorized to appropriate water from the Big Sioux: Brookings

aquifer, plus one pending application – Water Permit Application 8531-3 is estimated to use 222 ac-ft/yr on average from the Big Sioux: Brookings aquifer (Water Rights, 2021c). There are also 11 future use permits reserving water from the Big Sioux: Brookings aquifer presently. For the purpose of estimating the average annual withdrawal rate from the Big Sioux: Brookings aquifer, the 11 future use permits are assumed to be fully developable for a total of 6,686 ac-ft/yr (Water Rights, 2021c).

Table 1 summarizes the 46 non-irrigation water rights/permits authorized to appropriate water from the Big Sioux: Brookings aquifer with the estimated annual use for each water right/permit as determined by their maximum permitted diversion rate or annual volume. The amount of water that can be withdrawn was estimated by assuming the non-irrigation water rights/permits limited by an annual volume will withdraw their entire appropriated volume every year. It is estimated that the non-irrigation water rights/permits limited only by a diversion rate will pump at their maximum permitted diversion rate for 60 percent of the time. Water Right Nos. 534A-3, 617-3, 3117-3, 4950-3, and 5071-3 are held by municipalities that are connected to a rural water system and are maintained for standby purposes (Friedeman, 2020; Water Rights, 2021c); as such, the average annual water use for these water rights has been estimated to be 0 ac-ft/yr in Table 1. Overall, the average annual withdrawal rate for the Big Sioux: Brookings aquifer for non-irrigation water rights/permits is approximately 13,151 ac-ft/yr (Table 1) (Water Rights, 2021c).

Table 1: Estimated annual water use for non-irrigation water rights/permits authorized to appropriate water within the Big Sioux: Brookings aquifer (Water Rights, 2021c).

Use Type	No. of Water Rights/Permits	Diversion rate (cfs)	Permitted Volume (ac-ft)	Estimated Annual Use (ac-ft/yr)
MUN	16	5.19	1,914	4,169
IND	2	0.24	N/A	106
RWS	16	7.56	4,037	7,321
COM	9	3.24	N/A	1,405
SHD	2	0.07	N/A	30
GEO	1	0	120	120
TOTAL:	46	16.3	6,071	13,151
MUN: Municipal; IND: Industrial; RWS: Rural Water System; COM: Commercial; SHD: Suburban Housing Development; GEO: Geothermal				

Currently, there are 211 irrigation water rights/permits appropriating water from the Big Sioux: Brookings aquifer (Water Rights, 2021c). The reported annual irrigation withdrawals from the Big Sioux: Brookings aquifer are shown in Table 2. The average annual withdrawal rate of the Big Sioux: Brookings aquifer for irrigation water rights/permits that have reported over the period of record is approximately 8,685 ac-ft/yr (Table 2) (Water Rights, 2021a). Since the number of irrigation water rights/permits has continued to increase over the period of record, the estimated average annual withdrawal rate for irrigation appropriations for the entire period of record may not accurately reflect the current level of development. The average annual withdrawal rate for irrigation appropriations from 2009 to 2020 was estimated to better reflect the current level of irrigation developments in the Big Sioux: Brookings aquifer. The average

annual withdrawal rate for the Big Sioux: Brookings aquifer from 2009 to 2020 is approximately 9,331 ac-ft/yr (Table 2) (Water Rights, 2021a).

Table 2: Reported historic irrigation use from the Big Sioux: Brookings aquifer (Water Rights, 2021a).

Year	No. of Permits	Reported Pumpage (acre-feet)	Year	No. of Permits	Reported Pumpage (acre-feet)
1979	184	6,144	2002	149	12,410.94
1980	187	9,837	2003	149	11,380.47
1981	197	9,040	2004	156	11,809.91
1982	155	4,551.86	2005	159	11,513.48
1983	161	8,227.46	2006	161	14,325.04
1984	188	8,177.60	2007	164	12,730.13
1985	181	4,951.40	2008	166	12,505.85
1986	179	2,854.70	2009	174	9,172.90
1987	171	10,015	2010	172	2,713.39
1988	167	18,521.40	2011	174	8,527.61
1989	166	13,930.70	2012	177	19,482.51
1990	175	5,862.92	2013	198	15,432.29
1991	165	7,771.74	2014	212	9,947.64
1992	162	2,331.60	2015	209	8,796.02
1993	162	1,042.90	2016	210	10,267.40
1994	160	2,854.62	2017	209	9,572.04
1995	161	3,862.25	2018	211	7,952.80
1996	154	7,220.95	2019	211	106.29
1997	153	5,650	2020	209	10,000.76
1998	157	8,109.71	MIN	149	106
1999	155	7,841.04	MAX	212	19,483
2000	153	8,933.72	AVG	174	8,685
2001	149	8,384.81	AVG 2009-2020	197	9,331

There are domestic wells completed into the Big Sioux: Brookings aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2021d). Withdrawals from domestic wells on an average annual basis are not considered to be a significant portion of the hydrologic budget as a result of their relatively low diversion rates. Additionally, with the development of rural water systems in areas where the Big Sioux: Brookings aquifer is the uppermost aquifer available, it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the Big Sioux: Brookings aquifer.

Hydrologic Budget Summary

The average annual withdrawal rate from the Big Sioux: Brookings aquifer totals approximately 29,550 ac-ft/yr (irrigation: 9,331 ac-ft/yr; non-irrigation: 13,151 ac-ft/yr; future use: 6,686 ac-ft/yr; pending applications: 222 ac-ft/yr; Water Permit Application No. 8537-3 (if approved) (assuming an application rate of 1 ft/ac): 160 ac-ft/yr) (Water Rights 2021a and 2021c). The estimated average annual recharge rate to the Big Sioux: Brookings aquifer is approximately 107,700 ac-ft/yr. Overall, the estimated average annual recharge to the Big Sioux: Brookings aquifer is greater than the estimated average annual withdrawal rate from the aquifer. Therefore, there is a reasonable probability that unappropriated water is available for the appropriation

proposed by this permit application. It should be noted that all the recharge to an aquifer is not available at every location in an aquifer. The applicant's proposed wells are located near the end of a small finger of the aquifer. That means there may be limited water available locally for the applicant.

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.

The DANR-Water Rights Program monitors 77 observation wells completed into the Big Sioux: Brookings aquifer (Water Rights, 2021b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. There are four observation wells within approximately four and a half miles of the proposed diversion points. The closest observation well to the diversion point is observation well DU-77C (approximately 3.2 miles southwest). The hydrographs for these four observation wells are displayed in Figures 2 through 5 (Water Rights, 2021b).

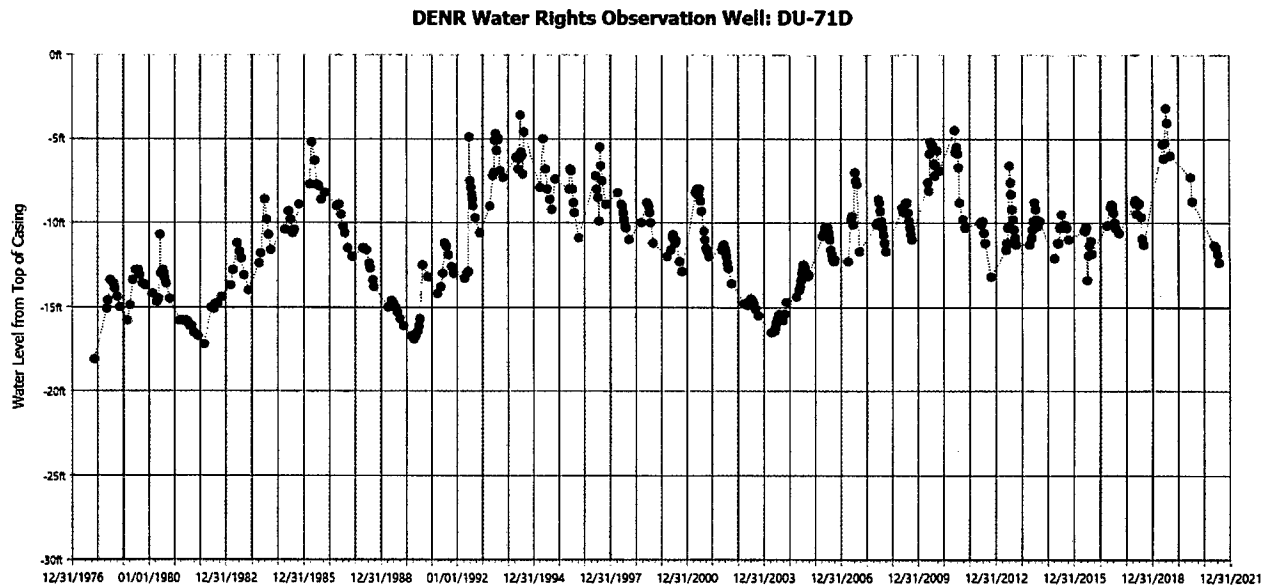


Figure 2: Hydrograph of the Big Sioux: Brookings aquifer observation well DU-71D, located approximately 4.1 miles west of the diversion point (Water Rights, 2021b).

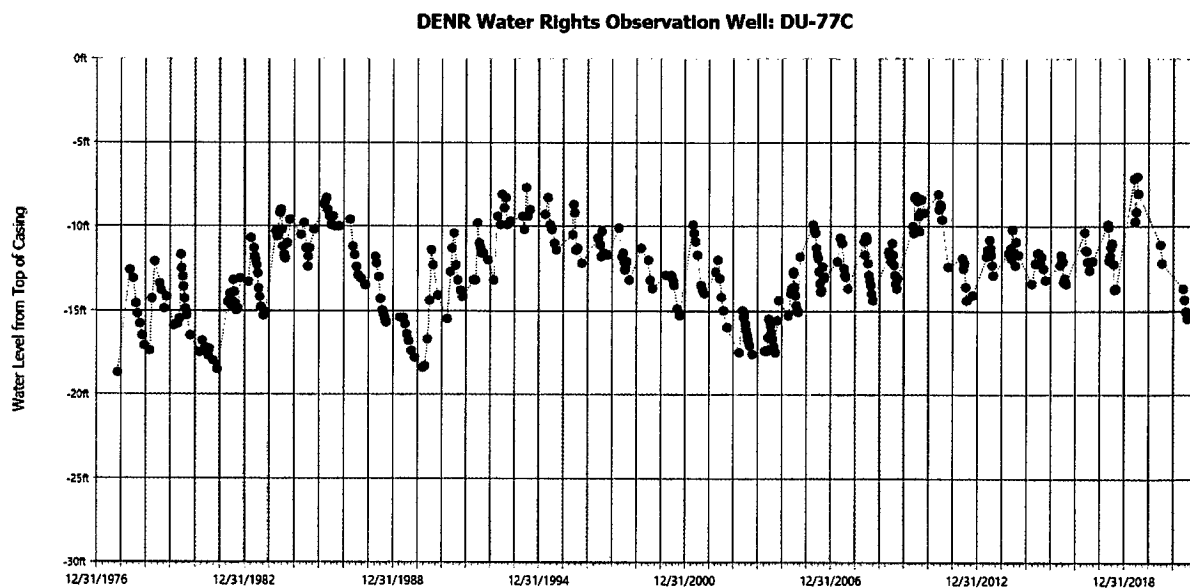


Figure 3: Hydrograph of the Big Sioux: Brookings aquifer observation well DU-77C, located approximately 3.2 miles southwest of the diversion point (Water Rights, 2021b).

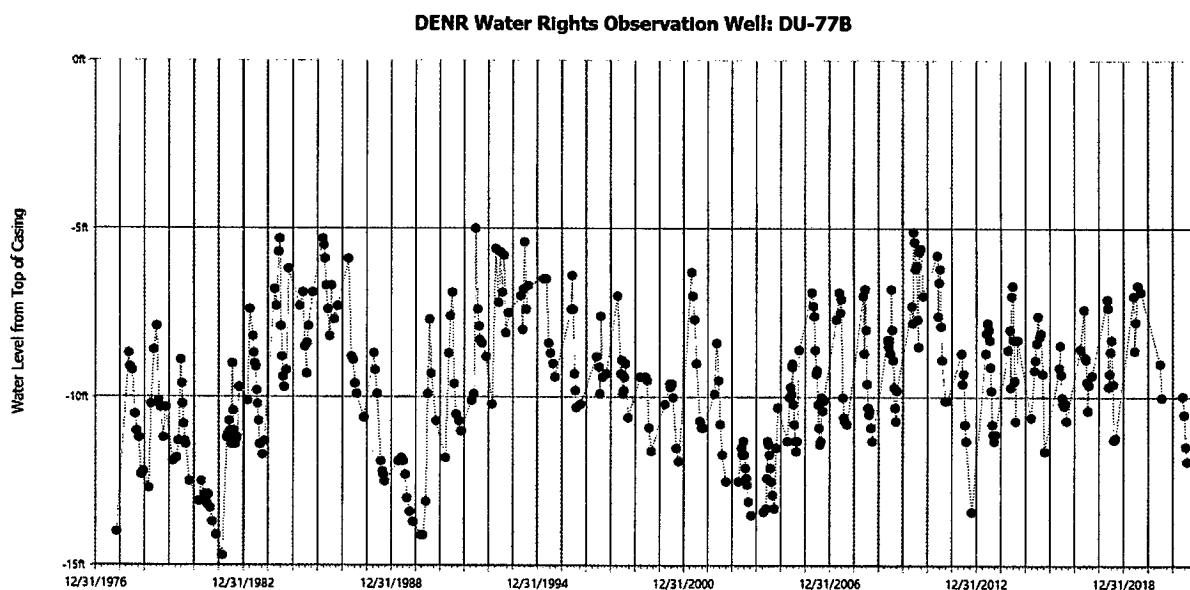


Figure 4: Hydrograph of the Big Sioux: Brookings aquifer observation well DU-77B, located approximately 4.1 miles southwest of the diversion point (Water Rights, 2021b).

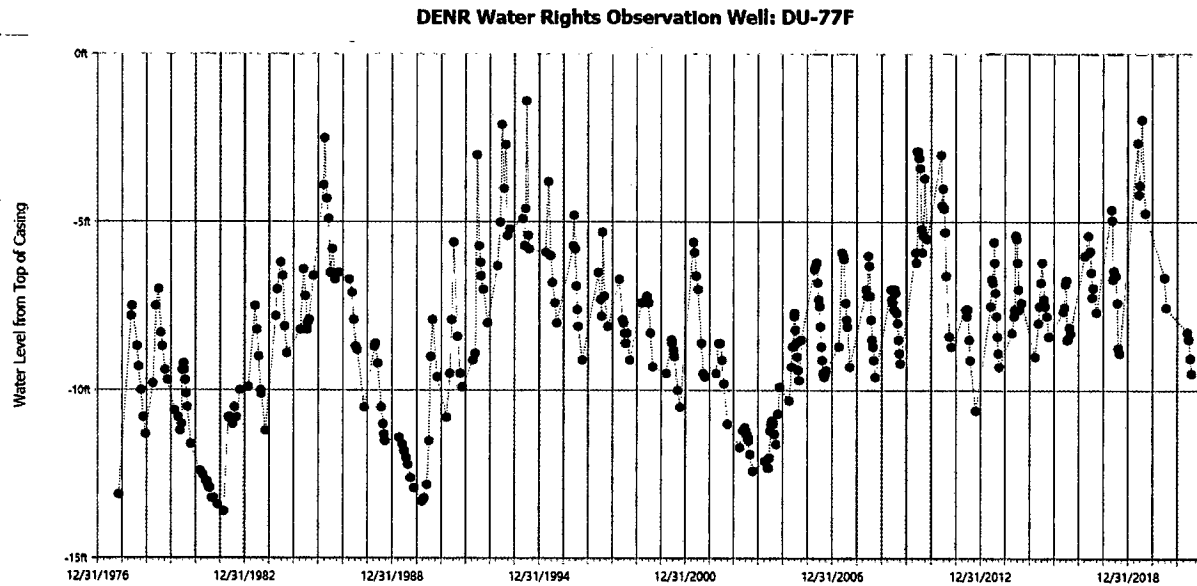


Figure 5: Hydrograph of the Big Sioux: Brookings aquifer observation well DU-77F, located approximately 4.5 miles southwest of the diversion point (Water Rights, 2021b).

The hydrographs for the observation wells display generally stable to increasing water levels over their respective periods of record. The hydrographs for the Big Sioux: Brookings 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. This recovery of the aquifer indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Big Sioux: Brookings aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 257 water rights/permits authorized to appropriate water from the Big Sioux: Brookings aquifer, an additional eleven future use permits and one pending application – Water Permit No. 8531-3 appropriating water from the Big Sioux: Brookings aquifer (Water Rights, 2021c). There are nine water rights/permits authorized to appropriate water from the Big Sioux: Brookings aquifer within five miles of the proposed diversion points (Water Rights, 2021c). The nine water rights/permits are identified in Table 3 and shown in Figure 6. The nearest water right/permit to the diversion point completed into the Big Sioux: Brookings aquifer is Water Right No. 1626-3 located approximately 0.4 miles northwest of the proposed diversion points.

Table 3: Water rights/permits from the Big Sioux: Brookings aquifer within approximately five miles of the diversion point (Water Rights, 2021c).

Permit No.	Name	Use	Status	Rate (cfs)	Acres
1626-3	Roger J Svec	IRR	LC	2.25	215
2157-3	Todd Jongeling	IRR	LC	0.67	64
2911-3	Gerald A Kalsbeck	IRR	LC	1.78	132
4309B-3	Ronald J Gorder	IRR	LC	1.45	128
4342-3	Pine Knoll Inc	IRR	LC	1.71	120
6786-3	David Nystrom	COM	LC	0.17	N/A
4363B-3	H Bar G Farms LLC	IRR	LC	0.55	95
7087-3	Jay A Peterson	IRR	LC	1.56	119.6
7889-3	Todd Jongeling	IRR	PE	1.78	152
LC: Licensed Water Permit; PE: Water Permit					
COM: Commercial; IRR: Irrigation					

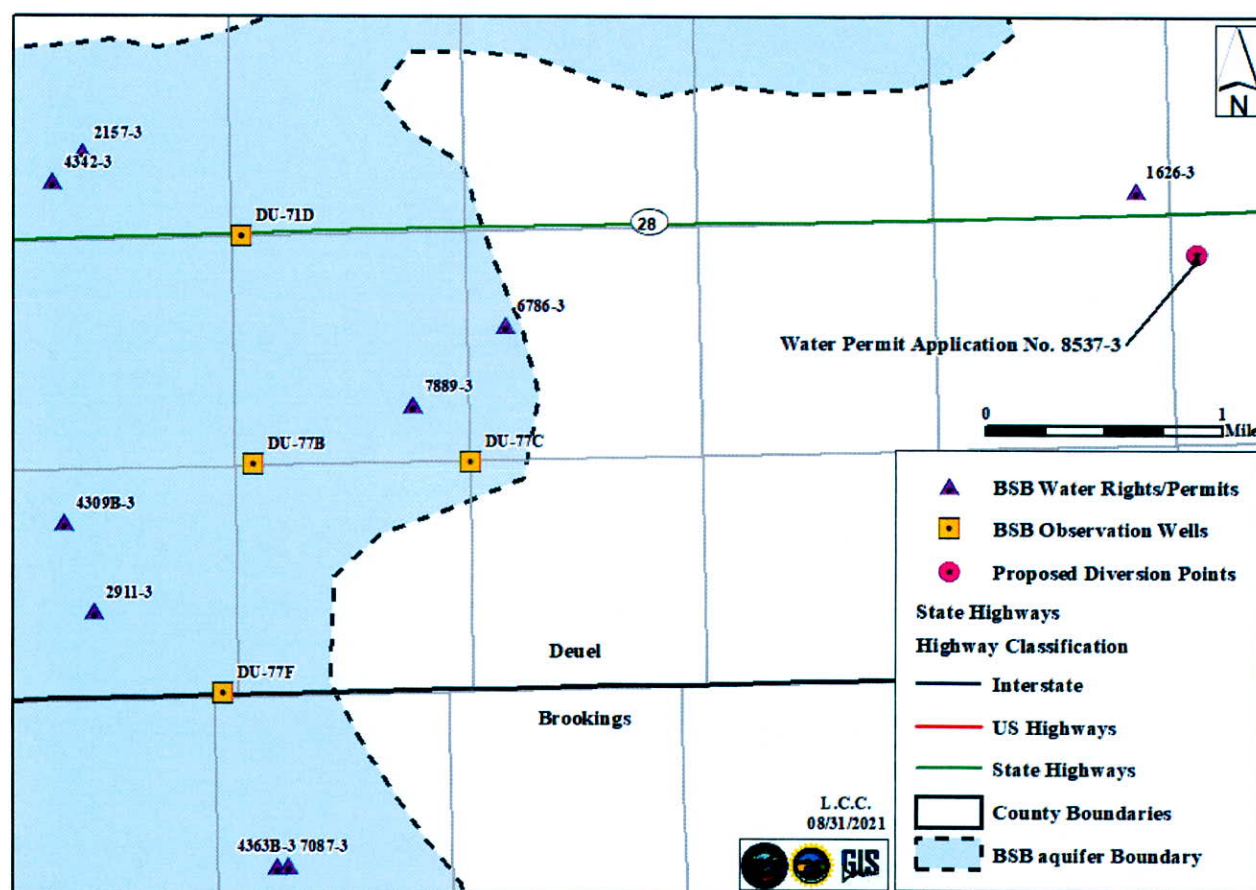


Figure 6: Map of the site location of Water Right Permit Application No. 8537-3, nearby observation wells, and nearby water rights/permits completed into the Big Sioux: Brookings aquifer (Water Rights, 2021b and 2021c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Big Sioux: Brookings aquifer, with the closest domestic well on file (not held by the applicant) approximately 1.9 miles northwest of the proposed diversion point (Water Rights,

2021d). There could potentially be other domestic wells completed into the Big Sioux: Brookings aquifer near the proposed diversion points that are not on file with the DANR-Water Rights Program.

The Big Sioux: Brookings aquifer is generally under unconfined conditions in Deuel County (Kume, 1976). The diversion point is expected to also be under unconfined conditions based on the submitted well completion report, water levels, and lithologic logs on file for the nearby observation wells (Water Rights, 2021d). Observation well data (see Figures 2 through 5) documents minimal drawdown from withdrawals of existing wells near the diversion point. Therefore, pumping from the diversion point is not expected to significantly lower water levels within the aquifer. Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer. The exact drawdown behavior cannot be known without an aquifer performance test. In Deuel County, there have been no complaints submitted to the DANR-Water Rights Program regarding potential well interference for wells completed into the Big Sioux: Brookings aquifer (Water Rights, 2021e).

Within approximately five miles of the diversion point for this application, the Big Sioux: Brookings aquifer has saturated aquifer thickness ranging from approximately 10 to 40 feet, with the depth to the top of aquifer materials ranging from approximately 2 to 15 feet below land surface, and static water levels at well completion varying from flowing to approximately 20 feet below land surface (SDGS, 2021; Water Rights, 2021b and 2021d). This would allow for sufficient saturated 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).

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.”

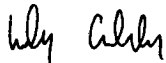
The Big Sioux: Brookings aquifer is a relatively thin aquifer with a limited amount of water in storage. While the average annual withdrawal would not exceed average annual recharge to the aquifer, conditions may occur when withdrawal exceeds recharge. When this occurs, water will be removed from storage reducing the saturated thickness of the aquifer. If the saturated thickness is reduced to the extent that water rights/permits can no longer pump at their developed or “historically established” diversion rates, this may be considered an adverse impact. If approved, the water permit should include a qualification that the well owner should control their withdrawals so there is not a

reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

Any drawdown created from pumping this diversion point is not expected to cause unlawful impairment on existing water right/permit holders or domestic users with adequate wells considering the location of the diversion point, the saturated thickness, and the lack of complaints for adequate wells completed into the Big Sioux: Brookings aquifer. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

CONCLUSIONS:

1. Water Permit Application No. 8537-3 proposes to appropriate water annually at a maximum instantaneous diversion rate of 2.0 cfs from up to three wells (approximately 33 feet deep) to be completed into the Big Sioux: Brookings aquifer for the irrigation of 160 acres. The site is located in Deuel County approximately 7 miles west of Toronto, South Dakota.
2. There is a reasonable probability that unappropriated water is available from the Big Sioux: Brookings aquifer for this proposed appropriation based on the hydrological budget and observation well data.
3. There is a reasonable probability this diversion will not unlawfully impair adequate wells authorized by existing water rights or domestic use wells.


Lindsey Cederberg
Natural Resources Engineer I
SD DANR - Water Rights Program

Reviewed by:

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

References

- Fahrenbach, M.D., Steece, F.V., Sawyer, J.F., McCormick, K.A., McGillivray, G.L., Schulz, L.D., and Redden, J.A. 2010. South Dakota Stratigraphic Correlation Chart. Oil and Gas Investigations 3. SD DENR-Geological Survey, Vermillion, SD.
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- Hedges, L.S., Allen, J., Holly, D.E., 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; United States Army Corps of Engineers Contract DACW 45-80-C-0185.
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- Water Rights, 2021c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2021d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2021e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, September 28, 2021 12:39 PM
To: 'austinmberwald@hotmail.com'
Subject: FW: Water Permit Application No. 8537-3
Attachments: 1924.pdf

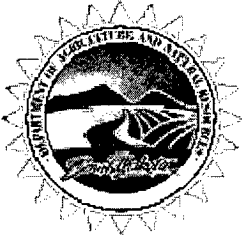
Here is the attachment.

From: Schlaak, Karen
Sent: Tuesday, September 28, 2021 12:38 PM
To: austinmberwald@hotmail.com
Subject: Water Permit Application No. 8537-3

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for one of your water permit applications. 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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OCT 12 2021

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA
COUNTY OF DEUEL

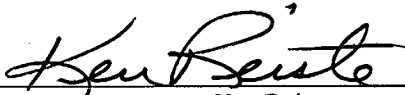
Ken Reiste being first duly sworn, on oath says: That he is publisher of the Clear Lake Courier, a weekly newspaper published in the City of Clear Lake, Deuel County, South Dakota; that he has full and personal knowledge of all facts herein stated; that said newspaper is a legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4 inclusive; that said newspaper has been published within the said County of Deuel and State of South Dakota, for at least one year next prior to the first publication of the attached public notice, and that

**Notice of Application No. 8537-3
Berwald Family Rllp c/o Austin Berwald**

a printed copy of which, taken from the paper in which the same was published, and which is hereto attached and made a part of this affidavit, was published in said newspaper for one successive week(s) to wit:

October 6, 2021

That the full amount of the fee charged for publication of the attached public notice insures to the sole benefit of the publisher; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are \$39.55

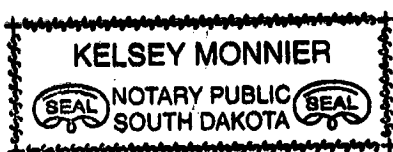

Ken Reiste

Subscribed and sworn to before me

this 12th day of October, 2021



Notary Public, South Dakota
My commission expires: 9-27-2027



NOTICE OF APPLICATION NO.

8537-3 to Appropriate Water

Notice is given that Berwald Family RLLP, c/o Austin Berwald, 47143 196 St, Toronto SD 57268 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from up to three wells to be completed into the Big Sioux-Brookings Aquifer (approximately 33 feet deep) located in the N 1/2 NW 1/4 Section 25 for irrigation of 160 acres located in the NW 1/4 Section 25; all in T113N-R50W. This site is located approximately 7 miles west of Toronto SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8537-3 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 October 18, 2021.

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 October 18, 2021.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of \$39.55. (34-1/117)

Affidavit of Publication

**Legal 15334 1X
10/6**

State of South Dakota

ss

County of Brookings

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

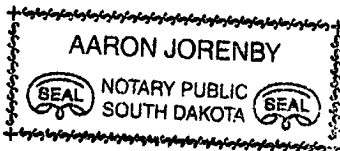
LEG# 15334 Notice of Application 8537-3 to Appropriate Water

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

October 6, 2021

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

Forty-One Dollars and Ninety-Two Cents \$41.92



October _____

2021

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

**NOTICE OF
APPLICATION
NO. 8537-3 TO
APPROPRIATE WATER**

Notice is given that Berwald Family RLLP, c/o Austin Berwald, 47143 196th St, Toronto SD 57268 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from up to three wells to be completed into the Big Sioux-Brookings Aquifer (approximately 33 feet deep) located in the N 1/2 NW 1/4 Section 25 for irrigation of 160 acres located in the NW 1/4 Section 25; all in T113N-R50W. This site is located approximately 7 miles west of Toronto SD. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8537-3 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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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 October 18, 2021.

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 1X at the total approximate cost of \$41.92.

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OCT 21 2021

**WATER RIGHTS
PROGRAM**

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, September 28, 2021 12:35 PM
To: Clear Lake Courier (clprint1@itctel.com)
Subject: 8537-3, Berwald Family RLLP
Attachments: 8537-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on October 6, 2021.

Berwald Family RLLP, c/o Austin Berwald, 47143 196th St, Toronto SD 57268 (605 690-3319) has been notified to contact you to authorize publication and arrange for payment.

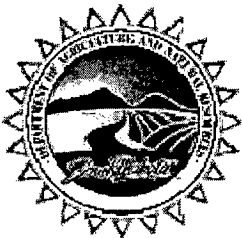
Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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>



Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, September 28, 2021 12:36 PM
To: 'registerclassifieds@brookingsregister.com'
Subject: 8537-3, Berwald Family RLLP
Attachments: 8537-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on October 6, 2021.

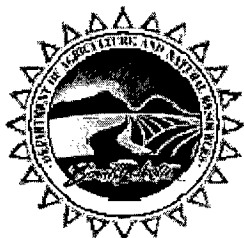
Berwald Family RLLP, c/o Austin Berwald, 47143 196th St, Toronto SD 57268 (605 690-3319) has been notified to contact you to authorize publication and arrange for payment.

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.**

September 28, 2021

Berwald Family RLLP
c/o Austin Berwald
47143 196th St
Toronto SD 57268

Dear Mr. Berwald

Water Permit Application No. 8537-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Clear Lake Courier printed at Clear Lake SD (Ph # 605 874-2499) and the Brookings Register printed at Brookings SD (Ph # 605 692-6271). 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. 8537-3 to Appropriate Water

Notice is given that Berwald Family RLLP, c/o Austin Berwald, 47143 196th St, Toronto SD 57268 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from up to three wells to be completed into the Big Sioux:Brookings Aquifer (approximately 33 feet deep) located in the N 1/2 NW 1/4 Section 25 for irrigation of 160 acres located in the NW 1/4 Section 25; all in T113N-R50W. This site is located approximately 7 miles west of Toronto SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8537-3 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 October 18, 2021.

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 October 18, 2021.

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 _



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

NOV 3 0 2021

Berwald Family RLLP
c/o Austin Berwald
47143 196th St
Toronto SD 57268

Dear Mr. Berwald:

Enclosed is Water Permit No. 8537-3 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

Mathiowetz, Adam (DENR)

From: Mathiowetz, Adam (DENR)
Sent: Monday, August 14, 2023 9:59 AM
To: Duvall, Ron; Gronlund, Eric
Subject: RE: Well Interference Complaint

I spoke with both Austin Berwald and Roger Svec this morning. Mr. Berwald said he made two rotations with his pivot and then turned it off because they got rain. Mr. Berwald stated Mr. Svec had spoken with him and they had discussed the issue. I also informed Mr. Berwald that if his system was the cause of the issue for Mr. Svec that we may need to take action whether that is helping the two of them plan a rotating irrigation schedule or possibly even shutting down the Berwald permit because it is junior. Mr. Berwald stated in his discussion with Mr. Svec that Svec had said he wasn't ruling out that his well from 1972 might be having issues with the screen plugging up and needing to be developed.

Mr. Svec stated after Berwald was done, he got 50 pounds of pressure in his system and was able to use it. He also stated he had discussed the issue with Mr. Berwald and they talked about the Berwald system possibly being the cause of the issue or the screen the in much older Svec well. I told Mr. Svec that we would like to stay informed on the issue. I informed him to pay attention the next time both pivots are attempting to run. If he loses pressure in his system, it is likely that the Berwald well is impacting him. Svec stated his well was around the same depth as the Berwald well, 125 feet based on the well log in the file, but that his surface elevation was around 20 feet higher. Mr. Svec estimated that the two wells are less than 300 feet apart. I said this works out if they are both good neighbors. It may end up they need to go on alternating irrigation schedule or that we may need to take action and shut down the Berwald well anytime there is an issue since Mr. Svec has the senior water right. I provided my name and number to Mr. Svec.



Adam Mathiowetz, PE
Engineer, Water Rights Program
Department of Agriculture and Natural Resources
523 E. Capitol Ave. Pierre SD, 57501
605.773.3352
danr.sd.gov

From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Monday, July 31, 2023 4:48 PM
To: Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us>; Gronlund, Eric <Eric.Gronlund@state.sd.us>
Subject: Well Interference Complaint

I spoke to Mrs. Roger Svec (is how she referred to herself) concerning a well interference issue. Svec's have Water Right No. 1626-3 and Permit No. 8536-3 was issued to Berwald Family RLLP in January 2022. The new system installed by Berwald is up and running and now the Svec well is experiencing pressure loss. According to Mrs. Svec, they never had a problem when they had high pressure irrigation systems which have since been replaced with low pressure systems and now a pressure problem is occurring which they believe is due to the Berwald system operating in the adjoining section. I asked Mrs. Berwald how far apart the wells are and she indicated 150 feet. The report for No. 8536-3 indicates 0.2 miles apart but perhaps Berwald drilled his well closer to the property line. I told Mrs. Svec we would need to investigate and get back to her – landline is 605.873.2651 and mobile is 605.237.5547 (Roger). A real easy test is to tell Berwald to stop pumping and see if the Svec well gets pressure back.

Mrs. Svec said her husband was going to wait for the Berwald system to complete its rotation and then Roger Svec is going to talk to Berwald.

Ron

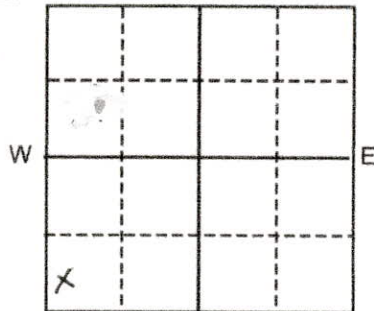
8537-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location S00 1/4 S00 2 Sec 24 Twp 113N Rg 50WCounty DeuelNorth 2/6/23 NW

Please mark well location with an "X"



Well Completion Date

7-22

1 Mile

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

ft. from

(identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Direct Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>Sub 40</u> LB/FT	<u>10</u> IN	<u>+2</u> FT	<u>24</u> FT	<u>11</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>grt wel</u>	<u>10</u>	<u>50</u> Lb/gal	<u>0</u> Ft	<u>23</u> Ft
<u>DF</u>		Lb/gal	Ft	Ft

Describe grouting procedure

Pressure Pull

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 10 Inches Length 10 Feet
 Material Stainless
 Slot Size 85 Set From 24 Feet to 34 Feet
 Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?
☒ No, Why Not?
 Lab to which water quality sample sent for analysis
irrigation no pumpWell Owner: Austin BerwaldBusiness Name: Berwald DairyAddress: 47143 196th StCity, State, Zip: Toronto SD 57268

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>3</u>
<u>Tan Clay</u>	<u>3</u>	<u>5</u>
<u>Yellow Clay</u>	<u>5</u>	<u>7</u>
<u>Gravel Fine-med</u>	<u>7</u>	<u>20</u>
<u>Gravel Med-coarse</u>	<u>20</u>	<u>34</u>
<u>Blue Clay</u>	<u>34</u>	<u>37</u>

STATIC WATER LEVEL

4

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: air compressor
☐ Bailed
☐ Other test pump 400 GPM

Pumping Level Below Land Surface

28 Ft. After 6 Hrs. pumped 400 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: 475520 GPM

REMARKS

This well was drilled under license # 1689 and this report is true and accurate.Drilling firm: Kaiser Well Drilling Inc

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

FEB 01 2023

Date:

OFFICE OF
WATER



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

June 17, 2024

8536-3

8537-3

Berwald Family RLLP
c/o Austin Berwald
47143 196th St
Toronto SD 57268

Dear Mr. Berwald:

I am writing in regard to Water Permit Nos. 8536-3 & 8537-3 authorizing the irrigation of 154 acres located within the SW ¼ Section 24-T113N-R50W, and 160 acres located within the NW ¼ Section 25-T113N-R50W, respectively.

On June 12, 2024, a staff engineer from the Water Rights Program made a site visit to conduct an inspection of the water use systems authorized under Permit Nos. 8536-3 & 8537-3, for the purpose of licensing the irrigation systems.

With the inspections having been conducted and the reports completed, we are ready to proceed with the licensing of your water use systems. However, as stated in Permit Nos. 8536-3 & 8537-3, you have until November 22, 2026 & October 18, 2026, to complete the construction of your water use systems and until November 22, 2030 & October 18, 2030, to put that water to beneficial use, respectively.

If you have finished the construction and are satisfied with your water use system, please complete the highlighted portions of the enclosed "Notice of Completion of Works" forms and return them in the postage paid envelope. Once we have these completed forms back from you, we will proceed with the licensing of your systems.

Sincerely,

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

enclosures

8537-3

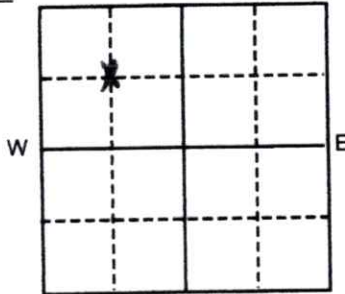
SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location N $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{4}$ Sec 25 Twp 113N Rg 50WCounty DEUEL ☒

North

Please mark well
location with an "X"

Well Completion Date

7-12-2021

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

DIRECT ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40 LB/FT	10 IN	+2 FT	24 FT	16 IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
grtweldf	10	50 Lb/gal	0 Ft	23 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
pressure pull

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 10 Inches Length 10 Feet
Material STAINLESS STEELSlot Size 80 Set From 23 Feet to 33 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ Yes ☐ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____
☒ No, Why Not? _____ irrigation test hole
 Lab to which water quality sample sent for analysis _____
Well Owner: Austin BerwaldBusiness Name: Berwald Family Dairy LLPAddress: 47143 196th StCity, State, Zip: Torono ☒ SD ☒ 57268

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	3
TAN CLAY	3	5
YELLOW CLAY	5	7
FINE-MED	7	20
MED-COURSE	20	34
BLUE CLAY	34	37

STATIC WATER LEVEL _____ 3 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: AIR 400+++☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ 18 Ft. After _____ 5 Hrs. pumped 400w/AIR GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

This well was drilled under license # 689 and this report is true and accurate.Drilling firm: KAISER WELL DRILLING INC

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: 7-26-21

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8537-3

I have this day, June 12, 2024, made a thorough examination of the water use system constructed by Berwald Family RLLP, 47143 196th St, Toronto, SD 57268 of Permit No. 8537-3, bearing the priority of August 3, 2021 authorizing the diversion of 2.0 cu. ft. per second of the waters of the Big Sioux:Brookings Aquifer for irrigation purposes, in Deuel County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Kaiser Well Drilling
- 2) No. of Wells 3
- 3) Depth(s) 33 (all similar) feet
- 4) Well log is available Y

Casing:

- 1) Diameter 10 inches
- 2) Length 23 feet
- 3) Type Plastic

Screen:

- 1) Type Stainless steel
- 2) Length 10 feet
- 3) Static water level 3 feet

Pump:

- 1) Make 3 - Submersibles
- 2) Model Unknown
- 3) Size Unknown
- 4) Capacity 600 (total) GPM

Motor:

- 1) Make Unknown
- 2) Model No. Unknown
- 3) Horsepower rating Unknown hp

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

- 1) Type PVC
- 2) Size 8 inches
- 3) Length 340 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1350 feet
- 3) Number of towers 7 + a corner leg
- 4) End gun Y
- 5) Capacity 600 GPM

Chemigation Equipment:

- 1) Does chemigate N

D. Compliance with Permit Requirements:

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

E. Condition and Location:

1. The system is in excellent condition with the point(s) of diversion located as follows: WELL LOCATIONS From the NW corner Sec 25 T113N R50W; WELL #1: 940 ft S & 1515 ft E, Lat 44.57004 Long -96.77896 (NE 1/4 NW 1/4) WELL #2: 1060 ft S & 1335 ft E, Lat 44.56974 Long -96.77962 (NW 1/4 NW 1/4) WELL #3: 1265 ft N & 1350 ft E Lat 44.56923 Long -96.77954 (NW 1/4 NW 1/4).
2. The works are capable of diverting and conveying to the place of use 1.34 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

<u>legal description/acreage</u>	<u>legal description/acreage</u>
<u>All in Sec 25 T113N R50W</u>	
<u>NW 1/4 NW 1/4 39 acres</u>	
<u>NE 1/4 NW 1/4 36 acres</u>	
<u>SE 1/4 NW 1/4 39 acres</u>	
<u>SW 1/4 NW 1/4 38 acres</u>	
<u>NW 1/4 SW 1/4 2 acres</u>	
<u>NE 1/4 SW 1/4 5 acres</u>	

comprising a total of 159 acres of land. The license should be issued for 1.34 cfs.

3. All structures, wells and lands on map Y

F. Comments or other permit(s) associated with the project:

I contacted Mr. Austin Berwald (605/690-3319) regarding this Permit. The mailing address in the permit materials is current.

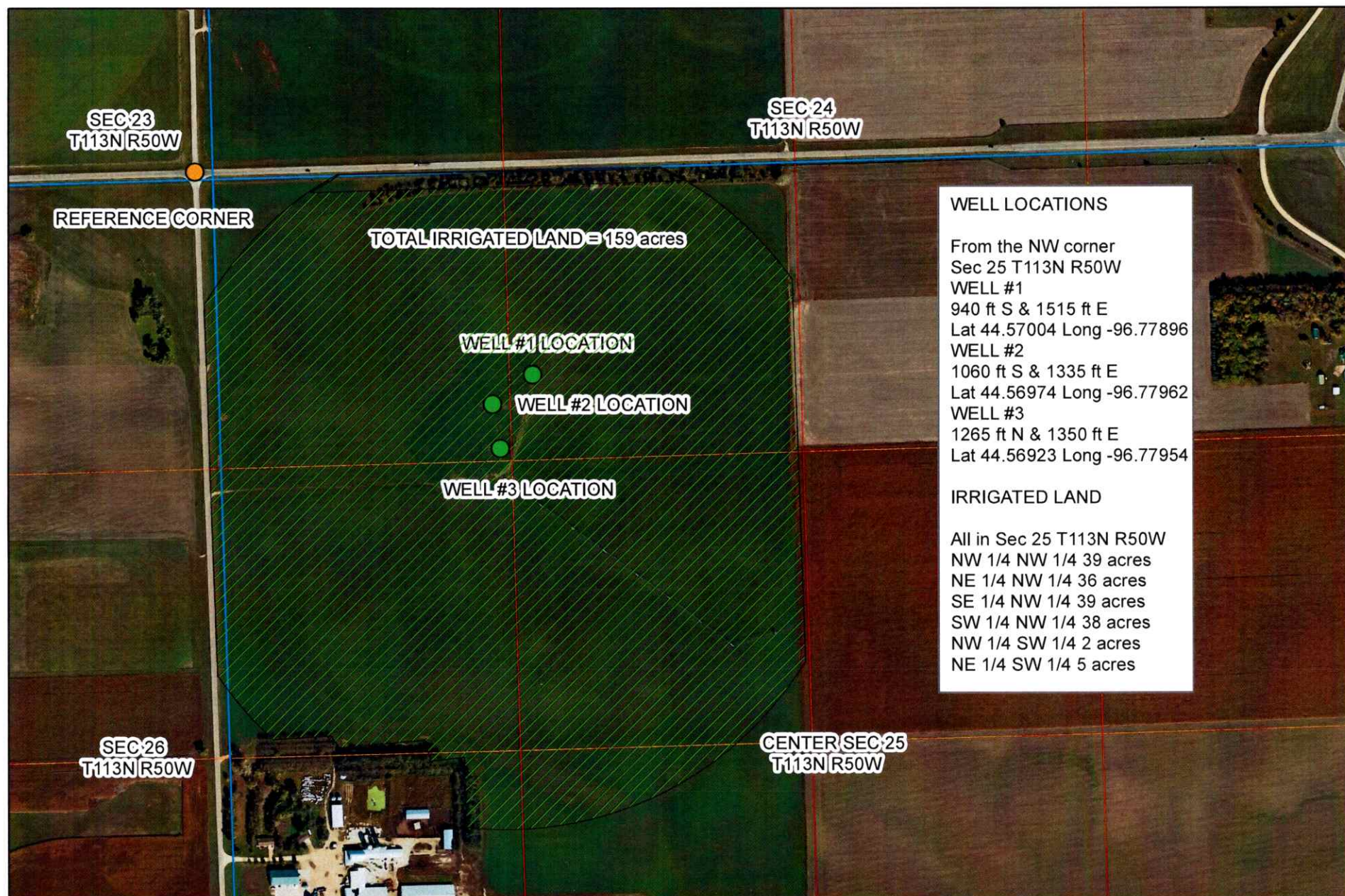
FSA maps and the ArcGIS program were used to construct the attached well location and irrigated land map.

The 2022 Irrigation Questionnaire report was used to establish the pump flow rate.



Darrell DeBoer
Water Rights Inspector
DENR, Water Rights Program

Date report completed: **June 15, 2024**



0 500 1,000 2,000 3,000 4,000 Feet

Licensing of Acreage Outside of Permitted Area

NAME: Berwald Family RLLP – Austin Berwald

ADDRESS: 47143 196th St, Toronto SD 57268

DATE: July 17, 2024 COUNTY: Deuel

AUTHORITY

Pursuant to SDCL 46-5-30.5, acreage developed for irrigation outside of the area described on the permit may be licensed provided the following conditions are met:

NO INCREASE IN PERMITTED ACREAGE OR WATER APPROPRIATED:

The acreage developed for irrigation is 159 acres as compared to 160 acres authorized by the permit.

UNPERMITTED ACREAGE:

- **Contiguous to Permitted Acreage**

The permit holder relocated 7 acres into the N ½ SW ¼ Section 25, immediately adjacent to permitted acres in the S ½ NW ¼ Section 25; all in T113N-R50W

- **Owned by Same Property Owner**

All the property involved is listed under Michael Berwald, according to the Deuel County plat book.

- **Developed Prior to Expiration of Construction Period**

The construction completion date was to be completed by October 18, 2026. A “Form 10” was submitted July 5, 2024.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the 7 acre area be included in the water license.



Amanda M Dewell, Permitting Administrator
Water Rights Program

The Chief Engineer makes a finding pursuant to SDCL 46-5-30.5 that:

This acreage change does not impair existing water rights and the overall project, as developed, is consistent with the original application. Licensing of the unpermitted acreage may occur without application or publication pursuant to SDCL 46-2A-4.



Eric Gronlund, Chief Engineer
Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

TO: Water Rights Program, DANR
523 E. Capitol Ave.
Pierre, SD 57501-3182
or via email to DANRmail@state.sd.us

Date 7-5-24

FROM: Austin Berwald (name) (605) (690-3319) (phone)
47143 196th St (address) austinberwald@hotmail.com (email)
Toronto, SD 57268 (city, state, zip)

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. 8537-3 states that the water use system is to be constructed by

October 18, 2026 (date), and water is to be put to beneficial use by October 18, 2030 (date).

The water use system was completed on August 2023 (date)

Applying the water to beneficial use was completed on August 2023 (date)

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

RECEIVED

JUL 10 2024

OFFICE OF
WATER



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUL 23 2024

8536-3
8537-3

Berwald Family RLLP
c/o Austin Berwald
47143 196th St
Toronto SD 57268

Dear Mr. Berwald:

Enclosed are licenses for Water Right Nos. 8536-3 & 8537-3. These are the final water right documents completing the process of obtaining Water Rights. Included with your licenses are maps prepared by the staff engineer who conducted the field investigations.

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 Licenses, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

NOTE: In the case of Water Right No. 8536-3, the well was drilled in closer proximity to the well authorized by Water Right No. 1626-3, held by your neighbors in the SE ¼ Section 23, T113N, R50W, than was represented on your application. Water Right No. 1626-3 is senior to Water Right No. 8536-3. In the event unlawful impairment occurs, your water right may be curtailed in order to satisfy the senior water right.

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8537-3

(1) Berwald Family RLLP, 47143 196th St, Toronto SD 57268, made Application No. 8537-3, August 3, 2021, for a water permit to divert 2.0 cubic feet of water per second from groundwater, up to three wells (Big Sioux: Brookings Aquifer), Deuel County, South Dakota for irrigation purposes. Permit No. 8537-3, with a priority date of August 3, 2021, was approved October 18, 2021, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 18, 2026, and for the application to beneficial use of water on or before October 18, 2030.

The permit holder submitted a Notice of Completion of Works and Application of Water to Beneficial Use form in July 2024. The Notice stated the diversion system was completed and the water was placed to beneficial use in August 2023.

An investigation conducted for licensing purposes found acreage developed outside of the permitted area. Pursuant to SDCL 46-5-30.5 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in acreage did not impair existing water rights and the overall project, as developed, is consistent with the original application.

(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 1.34 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- Well #1: 940 ft S & 1,515 ft E of the NW corner Section 25, T113N, R50W (NE $\frac{1}{4}$ NW $\frac{1}{4}$) (Latitude 44.57004 & Longitude -96.77896)
- Well #2: 1,060 ft S & 1,335 ft E of the NW corner Section 25, T113N, R50W (NW $\frac{1}{4}$ NW $\frac{1}{4}$) (Latitude 44.56974 & Longitude -96.77962)
- Well #3: 1,265 ft N & 1,350 ft E of the NW corner Section 25, T113N, R50W (NW $\frac{1}{4}$ NW $\frac{1}{4}$) (Latitude 44.56923 & Longitude -96.77954)

(3) The amount of 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: June 1 – September 30.

(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 to following land:

Section 25, T113N, R50W			
NE $\frac{1}{4}$ NW $\frac{1}{4}$	36 acres	NE $\frac{1}{4}$ SW $\frac{1}{4}$	5 acres
NW $\frac{1}{4}$ NW $\frac{1}{4}$	39 acres	NW $\frac{1}{4}$ SW $\frac{1}{4}$	2 acres
SW $\frac{1}{4}$ NW $\frac{1}{4}$	38 acres		
SE $\frac{1}{4}$ NW $\frac{1}{4}$	39 acres		
			TOTAL: 159 acres

(5) Pursuant to South Dakota Water Law 46-5-30.1 Berwald Family RLLP, the holder and/or owner of Water Right No. 8537-3 is issued a license to appropriate water, the right to use 1.34 cubic feet of water per second from groundwater, three wells (Big Sioux: Brookings Aquifer), with a priority date of August 3, 2021, from the location specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8537-3 and subject to the following qualifications:

1. The wells approved under Water Permit No. 8537-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 8537-3 shall be constructed by a licensed well drilled 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.


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

JUL 22 2016

date

