

WATER PERMIT NO. 8245-3

Name of Applicant: Gracevale Hutterian Brethren

Address: 28843 446th Ave, Winfred SD 57076 Phone: 605 480-2489

Amount of Water Claimed: no add'l Total Acres: 132 acres

Source of Water Supply: 1 existing well

Water to be used for: irrigation County: Lake

Type of Waste Disposal System:

Location: 12 miles southwest of Madison

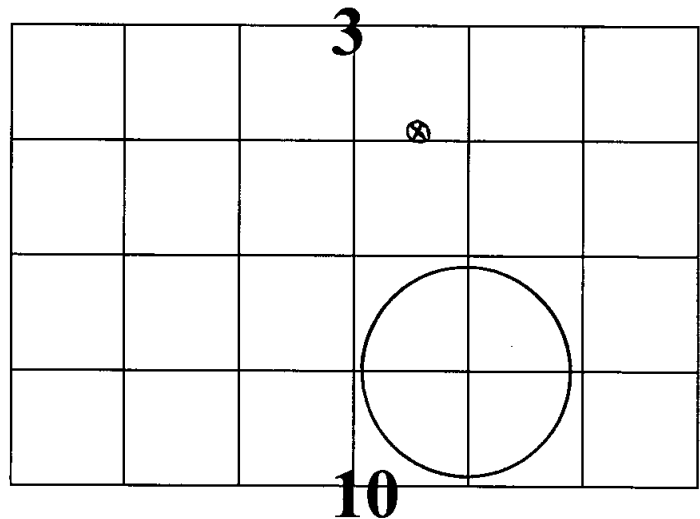
PRIORITY Date Received: 10-31-16 Application/License Fee: \$ 1050

Corrected Application Received: Period of Annual Use: April 1 – October 31

Remarks: Utilizing well and diversion rate authorized by Water Right No. 4680-3

Diversion Point: NW 1/4 SE 1/4 Sec 3-T105N-
R54W

Land to be Irrigated: NE 1/4 Sec 10-T105N-R54W



Depth of Well: 64 feet

Well Driller: Huron Drilling Inc.

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 10-31-16

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>8245-3</u>	(office use only) Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u>	
	Newspaper <u>Daily Leader - Madison</u>	
	<u>605-256-4855</u>	

RECEIVED**OCT 31 2016****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.)

pivot in the NE 1/4 Section 10, T105N, R54W authorized by WR No. 4680-3 has been inoperable for over 10 years. Applying for a permit to again establish irrigation on this quarter section from existing well.

1. Name to Appear on Irrigation Permit Gracevale Hutterian Brethren

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

Mailing Address 28843 446th Avenue Winfred SD 57076
(Address) (City) (State) (Zip Code)

Phone 1 605 236 6948 Mobile 480 2489 Email Wipf. Peter 46 @ gmail.com

2. Amount of water claimed no addl *CFS or ***GPM ***AF Total Acreage 132
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Vermillion East Fork aquifer

4. Location of point of diversion NW 1/4 SE 1/4 Section 3, T105N, R54W (authorized by WR No. 4680-3)
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Lake5. County or counties where water will be used Lake6. 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
NW 1/4 NE 1/4 Section 10, T105N, R54W	33		
NE 1/4 NE 1/4 Section 10, T105N, R54W	33		
SW 1/4 NE 1/4 Section 10, T105N, R54W	33		
SE 1/4 NE 1/4 Section 10, T105N, R54W	33		

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

Pivot in the NE 1/4 Section 10, T105N, R54W was damaged and became inoperable many years ago. The pivot and well located in the S 1/2 of Section 3, T105N, R54W authorized by WR No. 4680-3 are still operable and in use. Filing this application as Gracevale desires to re-establish irrigation in the NE 1/4 Section 10 and upon talking with Eric Gronlund with the Water Rights Program staff learned that the portion of the water right associated with irrigation of the NE 1/4 of Section 10 is likely subject to forfeiture for non-use. Well information is on file and the location of the acreage does not change.

I, Paul Hofer, 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. 8245-3

Date of first receipt of application October 31, 2016.

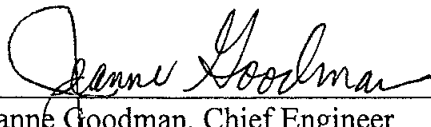
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8245-3 to Gracevale Hutterian Brethren, c/o Paul Hofer Jr., 28843 446th Ave, Winfred SD 57076 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8245-3 authorizes irrigation of 132 acres. Water Right No. 4680-3 appropriates 1.78 cubic feet of water per second (cfs) from one well completed into the Montrose management unit of the Vermillion East Fork Aquifer (64 feet deep) located in the NW 1/4 SE 1/4 Section 3 for irrigation of 264 acres located in the SE 1/4, E 1/2 SW 1/4 Section 3 and NE 1/4 Section 10; all in T105N-R54W. The 132 acres located in the NE 1/4 Section 10 have not been irrigated for several years and this non-irrigated portion of Water Right No. 4680-3 is likely subject to forfeiture for non-use. The permit holder is authorized to re-establish irrigation of the 132 acres located in the NE 1/4 Section 10-T105N-R54W utilizing the existing well. This permit does not authorize any increase in the 1.78 cfs diversion rate authorized by Water Right No. 4680-3.
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 October 31, 2016.
4. The date of approval of Permit No. 8245-3 is January 16, 2017.
5. One-fifth of the construction is to be completed on or before July 16, 2019.
6. All construction is to be completed on or before January 16, 2022.
7. Water is to be put to beneficial use on or before January 16, 2026.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

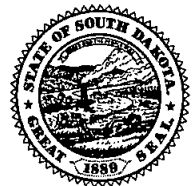
QUALIFICATIONS

1. The well approved under Water Right No. 4680-3 and Water Permit No. 8245-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: 
Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 24 2017
date



Supplemental Information

(type or print)

*existing well to WR No. 4680-3***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 ____ Provide copy of log(s), if available. Drilled by ____

For either Existing or Proposed Wells:

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

d) Distance to nearest domestic well on applicant's property ____ Property owned by others ____

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)

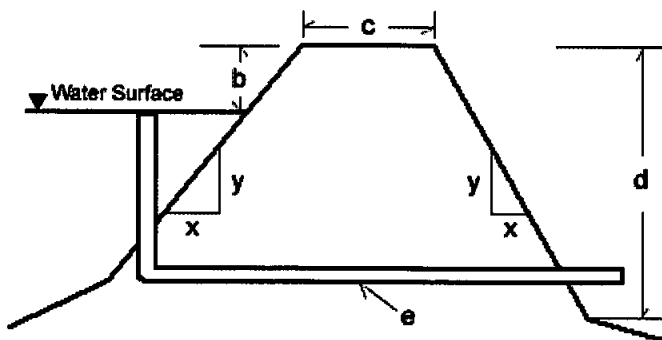
Upstream ____

Downstream ____

h) Surface Area of Impoundment ____

i) Storage ____ Acre Feet

j) Drainage Area Above Dam ____ Acres



NOT TO SCALE

No. 3621-3
All in Section 3-T105N-R54W

SW 1/4 SE 1/4 = 38 acres
NW 1/4 SE 1/4 = 39 acres
NE 1/4 SE 1/4 = 19 acres
SE 1/4 SE 1/4 = 18 acres
NE 1/4 SW 1/4 = 9 1/2 acres
SE 1/4 SW 1/4 = 9 1/2 acres

46. Total = 132 acres

132

1" = 660'

Application No. 3621-3
+ 4680-3

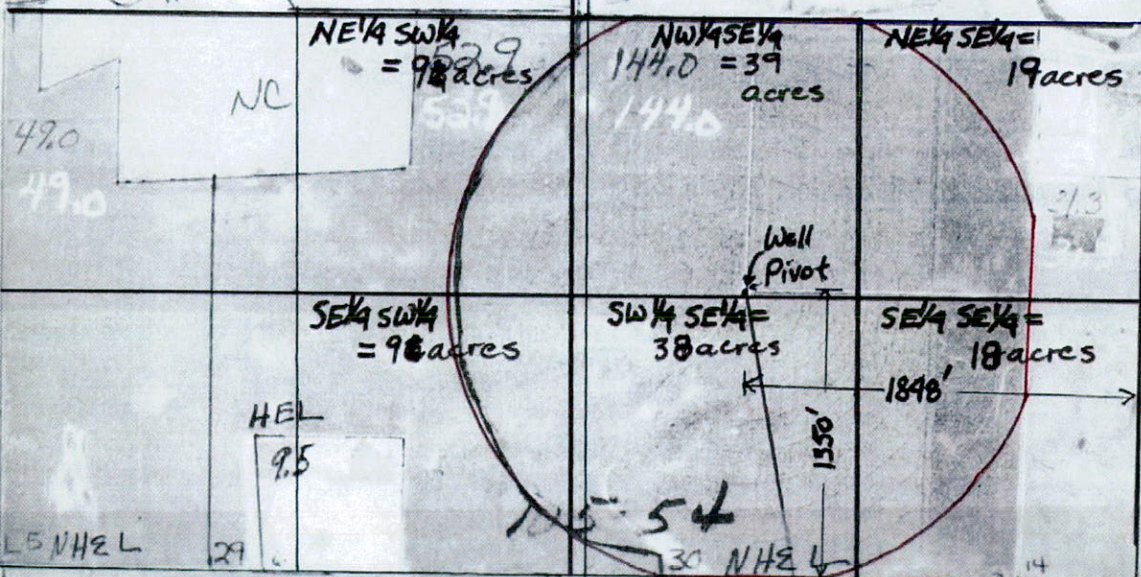
Gracevale Colony

Drawn by: Gregory C. Johnston

Natural Resources Engineer
Water Rights Division, DENR

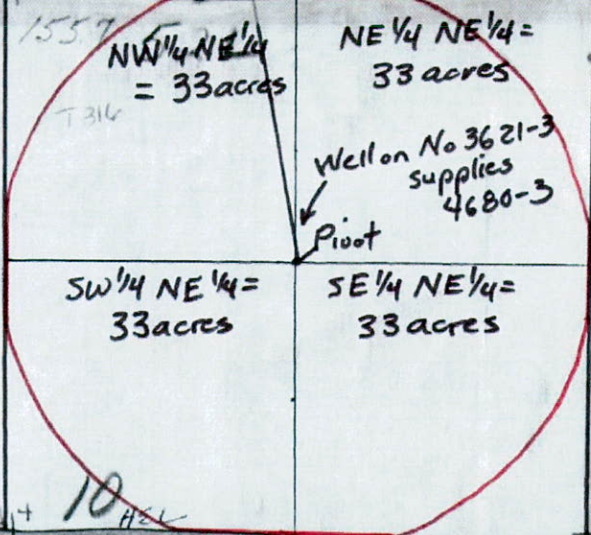
10/31/91

Section 3-T105N-R54W:



No. 4680-3
Section 10-T105N-R54W:

NW 1/4 NE 1/4 = 33 acres
SW 1/4 NE 1/4 = 33 acres
NE 1/4 NE 1/4 = 33 acres
SE 1/4 NE 1/4 = 33 acres
Total = 132 acres



307.5
307.5

4680-3

GRACEY DRILLING INC. DRILLERS LOG

PAGE NO.

WELL NAME		LOCATION	DATE	RIG NO.	FOREMAN
Gracevale Colony		3-105-54, Lake co.	2-4-77	18	Bernard Schlieder
DEPTH	TIME	REMARKS			
0-10	11:30	0-9 Topsoil			
10-20	12:00	9-16 Yellow clay and gravel			
20-30	1:10	16-19 Dark Sand			
30-40	1:30	19-20 Gravel mixed			
40-50	2:30	20-32 Dark sand and gravel			
50-60	7:00	32-40 fine yellow sand			
		40-50 Coal and fine grey sand			
		50-55 Good gravel and sand and coal, water loss			
		55-64 Water loss, rocks and large gravel			
		64-65 blue clay			
		30 Ft. Perf. 16" Stainless Steel Screen 50 Slot			
		1-20 ft. length			
		1-10 ft. length			
		34 Ft. Solid Plastic 15"			
	TD 64'	Buckshot furnished by farmer			

WELL REPORT

HURON
DRILLING CO.
HARRIS, D. J.

149.
Gracevale Colony 3-105-54, Lake Co. February 4, 1977
OWNER DESCRIPTION DATE

CASING LOG

Depth 64 ft.
Flow rpm 34 ft. 16" Plastic pipe to 34 ft.
Pumps rpm 30 ft. 16" Stainless pipe to 64 ft.
Head ft. Steel Screen 50 Slot pipe to ft.
30 Ft. 16" Stainless Steel Screen 50 Slot ft. pipe to ft.

REMARKS

1 Day
Rig No. 18 1-20 Ft. length of 16" Stainless Steel Screen 50 Slot
Bernard Schlieder 1-10 Ft. length of 16" Stainless Steel Screen 50 Slot
Foreman

2016

Enter Filing Year

Secretary of State Office
500 E Capitol Ave
Pierre, SD 57501
(605)773-4845

ANNUAL REPORT

DOMESTIC NONPROFIT CORPORATIONS

SDCL 47-24-6; 59-11-24

Please Type or Print Clearly In Ink

FILING FEE: \$10.00 Make check payable to SECRETARY OF STATE

FILE DATE 10/26/2016

RECEIPT NO 467573

1. Corporate ID and Name:

NS007218

Enter Corporate ID

GRACEVALE HUTTERIAN BRETHREN, INC.

Enter Corporate Name

2. The jurisdiction under whose law it is formed SOUTH DAKOTA

3. The address of the principal executive office (business address).

23843 446TH AVE	WINFRED	SD	57076-7042
Actual Street Address or Rural Route Box Number	City	State	ZIP+4
Mailing Address, if Different from Street Address	City	State	ZIP+4

4. The name of the South Dakota Registered Agent

Agent Name: JEFFREY T. SVEEN

415 SOUTH MAIN STREET	ABERDEEN	SD	57401-4364
Actual Street Address or Rural Route Box Number in This State	City	State	ZIP+4
PO BOX 490	ABERDEEN	SD	57402-0490
Mailing Address in This State, if Different from Street Address	City	State	ZIP+4

5. The names and addresses of its principal officers and directors (governors). South Dakota Law requires at least three directors.

☒	MARK S HOFER	23843 446TH AVE.	WINFRED	SD	57076
	President	Actual Street Address	City	State	ZIP+4
☒	PAUL HOFER	23843 446TH AVE.	WINFRED	SD	57076
	Vice President	Actual Street Address	City	State	ZIP+4
☒	PAUL HOFER	23843 446TH AVE.	WINFRED	SD	57076
	Secretary	Actual Street Address	City	State	ZIP+4
☒	PAUL HOFER	23843 446TH AVE.	WINFRED	SD	57076
	Treasurer	Actual Street Address	City	State	ZIP+4
☒	GORDON P WIPF	23843 446TH AVE.	WINFRED	SD	57076
	Director	Actual Street Address	City	State	ZIP+4



KEVIN S WIPF

23843 446TH AVE.

WINFRED

SD

57076

Director

Actual Street Address

City

State

ZIP+4

6. List only the changes since the last report of the acreage and location by section, township and county of each lot or parcel of land in this state owned or leased by the corporation.

7. Please complete the appropriate section:

Family Farm Corporation	The NUMBER OF SHARES owned by person(s) who are members of a family as defined in SDCL 47-9A-2, one of such shareholders being a family member who is residing on the farm or actively operating the farm, or who has resided on or has actively operated the farm. (See SDCL 47-9A-14)	_____
Authorized Farm Corporation	The PERCENTAGE of gross receipts of the corporation derived from rent, royalties, dividends, interest and annuities.	_____

8. List changes only of names, address and number of membership interests owned by shareholders.

Name	Actual Street Address	City	State	ZIP+4	Shares
------	-----------------------	------	-------	-------	--------

No person may execute this report knowing it is false in any material aspect. Any violation is subject to a civil penalty (SDCL 47-1A-129).

Dated 10/26/2016

Signature Accepted Electronically

(Signature of an Authorized Person)

PAUL HOFER

(Printed Name)

*By signing this form you agree to have both the fee and the form processed electronically.
A fee of up to \$40 will be assessed for returned payments.

10/26/2016 8:10:13 AM

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 10/31, 20 16

RECEIVED OF Gracevale Hutterian Brethren 23843 446th Ave Winfred SD 57076

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

Fee for Application for Permit No. <u>8245-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	00
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>8245-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1050 00

No. **07939**

By *James L. Gorman*
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8245-3, Gracevale Hutterian Brethren**

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. 8245-3, Gracevale Hutterian Brethren, c/o Paul Hofer Jr., 28843 446th Avenue, Winfred SD 57076.

The Chief Engineer is recommending APPROVAL of Application No. 8245-3 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 rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under Water Right No. 4680-3 and Water Permit No. 8245-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

A handwritten signature in black ink, appearing to read "Jeanne Goodman".

Jeanne Goodman, Chief Engineer
December 28, 2016

NOTE: If Application No. 8245-3 is approved, the NE ¼ of Section 10, T105N, R54W will again be authorized for irrigation. This quarter section is also listed under Water Right No. 4680-3 but is subject to forfeiture for nonuse due to the extended period of time since irrigation last occurred. Upon approval of Application No. 8245-3, the Water Rights Program will proceed to cancel the portion of Water Right No. 4680-3 involving the NE ¼ Section 10, T105N, R54W. Gracevale will receive notification of hearing to consider cancellation of this portion of the water right. Once cancelled, Water Right No. 4680-3 will be reissued for the well and remaining irrigated acres that are located in Section 3, T105N, R54W.

**REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8245-3
GRACEVALE HUTTERIAN BRETHERN
DECEMBER 19, 2016**

Water Right No. 4680-3 which was approved May 1, 1981, was licensed November 24, 1992. The Water Right authorizes the irrigation of 264 acres located in the SE¼, E½SW¼ Sec. 3 and the NE¼ Sec.10; all in T105N-R54W. The water right authorizes diversions from one well completed into the Vermillion East Fork: Montrose aquifer, located in the NW¼SE¼ Sec. 3, T105N-R54W, at a maximum rate of 1.78 cubic feet of water per second (cfs). The 132 acres located in the NE¼ Sec.10, T105N-R54W have not been irrigated for several years and likely subject to forfeiture for non-use. Water Permit Application No. 8245-3 is proposing to re-establish irrigation of the 132 acres located in the NE¼ Sec.10, T105N-R54W, utilizing the existing well. This application, if approved, does not authorize any increase in the 1.78 cfs authorized diversion rate.

AQUIFER: Montrose Management Unit of the Vermillion East Fork (VEF:M)

GENERAL:

The report submitted with this application, for the existing well this application plans to use, identifies aquifer materials, primarily sand and gravel, from 9-64 feet below grade. This occurrence of aquifer materials corresponds to the Vermillion East Fork aquifer. The Vermillion East Fork aquifer was identified by Hedges and others (1982) as a surficial aquifer associated with the Vermillion East Fork River valley. The Vermillion East Fork aquifer is a glacial meltwater deposit consisting of medium to very coarse sand and fine gravel. The aquifer extends from Clark County to Turner County where it blends into the Parker Centerville outwash (Hedges and others, 1982). The Vermillion East Fork aquifer has been subdivided into a number of management units as shown in Figure 1. The Montrose management unit is discussed by Hedges and others (1985); however, the boundaries of the management unit are not preserved in literature. Consistent with the criteria for establishing management units developed by Hedges and others (1982), the Montrose management unit is considered to extend from the border between the Vermillion East Fork aquifer and the Parker-Centerville aquifer at the south end to the Kingsbury/Miner County line which is the southern border of an unnamed management unit identified by Stonesifer (2014).

The Vermillion East Fork: Montrose aquifer is estimated to underlie approximately nine square miles of Lake County along a northwest trending 1-2 mile wide band (Hansen, 1986). The maximum thickness of the aquifer in Lake County is reported to be 65 feet and the average thickness is estimated to be 15 feet (Hansen, 1986). There is an estimated 15,000 acre-feet of water in storage in the aquifer in Lake County. The aquifer is generally under unconfined conditions and is expected to be unconfined at this well site.

Groundwater movement in the Vermillion East Fork: Montrose aquifer is toward the Vermillion East Fork River and to the southeast at a gradient of approximately eight feet per mile based on

2016 observation well data (Water Rights, 2016a). Hansen (1986) estimates that groundwater outflow from Lake County to McCook County is about 1.5 acre-feet/day.

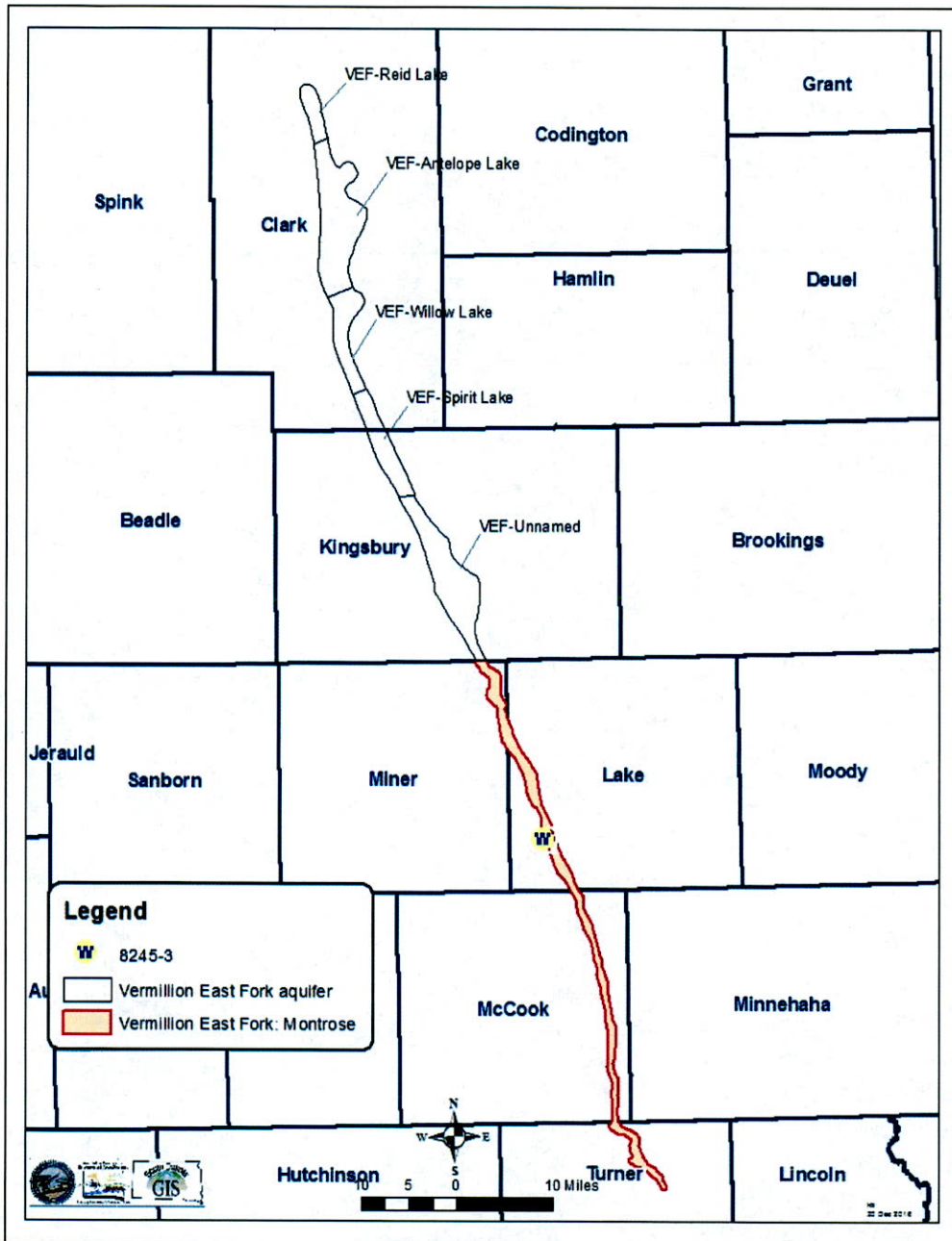


Figure 1. The well location proposed by Application No. 8245-3 and the management units of the Vermillion East Fork aquifer in South Dakota (Modified from Hedges and others (1982).

WATER RIGHT NO. 4680-3

Water Permit Application No. 8245-3 proposes to irrigate acreage that was originally authorized for irrigation under Water Right No. 4680-3. Water Permit No. 4680-3 was approved May 1, 1981, authorizing the irrigation of 264 acres, using one well, at a maximum diversion rate of 1.78

cfs. Based on a 1991 examination of works, Water Right No. 4680-3 was licensed, authorizing a diversion rate of 1.78 cfs and the irrigation of 264 acres. A summary of the irrigation history of this water right, based on annual irrigation questionnaires is shown in Table 1.

Table 1. Irrigation history of Water Right No. 4680-3 (Water Rights, 1982-2016).

Year	Acres	Comment	ac-ft/yr	in/ac
2015	136		192.3	17.0
2014	132		212.1	19.3
2013	133		17.7	1.6
2012	128		7.1	0.7
2011	0		0.0	0.0
2010	0	"sufficient Moisture"	0.0	0.0
2009	0	"sufficient Moisture"	0.0	0.0
2008	0	"use abandoned"	0.0	0.0
2007	133		10.6	1.0
2006	133		49.5	4.5
2005	133		14.1	1.3
2004	0		0.0	0.0
2003	133		77.8	7.0
2002	133		176.8	15.9
2001	133		130.8	11.8
2000	133		99.0	8.9
1999	133		24.7	2.2
1998	133		77.8	7.0
1997	266		212.1	9.6
1996	133		70.7	6.4
1995	133		14.1	1.3
1994	133		123.7	11.2
1993	0	"to[sic] much rain"	0.0	0.0
1992	266		3.5	0.2
1991	133		106.1	9.6
1990	133		21.2	1.9
1989	133		106.1	9.6
1988	133		88.4	8.0
1987	133		53.0	4.8
1986	133		44.2	4.0
1985	133		88.4	8.0
1984	133		106.1	9.6
1983	133		70.7	6.4
1982	133		66.5	6.0
1981	133		127.3	11.5
<i>Maximum</i>			<i>212.1</i>	<i>19.3</i>
<i>Average</i>			<i>68.4</i>	<i>5.9</i>

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address water availability and existing rights issues only.

WATER AVAILABILITY:

Water Permit Application No. 8245-3 proposes to appropriate water from the Montrose Management Unit of the Vermillion East Fork aquifer. Approval of this application is likely to result in an additional average annual water use of less than 65 acre-feet annually (ac-ft/yr) based on historic withdrawals reported under Water Right No. 4680-3. The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.” If the source of the water is older or lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a water distribution system is not involved and the aquifer is not older or lower than the Greenhorn Formation, therefore the withdrawal/recharge issue must be considered.

Hydrologic Budget:*Recharge:*

Recharge to the Vermillion East Fork: Montrose aquifer occurs through infiltration of precipitation and snowmelt (Hansen, 1986). The average annual recharge for the Montrose management unit of the Vermillion East Fork aquifer was estimated to be 3.4 inches per year through observation well analysis (Hedges and others, 1985). The Montrose Management unit as shown in Figure 1 has an areal extent of approximately 34,814 acres. Therefore, the average annual recharge to the Montrose Management unit is estimated to be approximately 9,864 acre-feet per year.

Discharge:

Discharge from the Montrose Management unit of the Vermillion East Fork aquifer is through evapotranspiration, discharge to the Vermillion East Fork River when water levels of the aquifer are higher than the stage of the river, groundwater outflow to the Parker Centerville aquifer, and well withdrawals for domestic, commercial, municipal, and irrigation use (Water Rights, 2016b and Water Rights 2016c). The water rights/permits appropriating water from the Montrose Management Unit of the Vermillion East Fork aquifer are shown in Table 2 and Figure 2.

Table 2. Water Rights/Permits appropriating water from the Montrose Management Unit of the Vermillion East Fork aquifer

PERMIT NO	NAME	PRIORITY DATE	STATUS	USE	CFS	ACRES
1009-3	CITY OF MONTROSE	01/01/1904	LC	MUN	0.44	0
2989A-3	PALMER REINICKE	08/26/1976	LC	IRR	0.3	21
4039-3	CITY OF MONTROSE	06/24/1977	FU	MUN	0	0
4680-3	GRACEVALE HTRN BRTH	02/26/1981	LC	IRR	1.78	264
5389-3	KEN PLUCKER JR	03/26/1976	LC	IRR	2	160
5914-3	BERENS FARMS	02/29/1996	LC	IRR	1.71	120
6075-3	WEEG FAMILY FARMS	04/23/1998	LC	IRR	1.56	132
6401-3	MICHAEL J JOHNSON	03/10/2003	LC	COM	5.56	0
6434-3	JOEL OR MARIA BERENS	07/07/2003	LC	IRR	1.23	83
6491-3	JOSEPH PLUCKER	03/31/2004	LC	IRR	1.11	92
7594-3	JOSEPH PLUCKER	12/27/2012	PE	IRR	0.67	50
7596-3	JOSEPH PLUCKER	12/27/2012	PE	IRR	0.44	20
7597-3	JOSEPH PLUCKER	12/27/2012	PE	IRR	0.44	0
LC= Water Right, FU= Future Use, PE= Water Permit, MUN= Municipal, IRR= Irrigation , COM= Commercial						

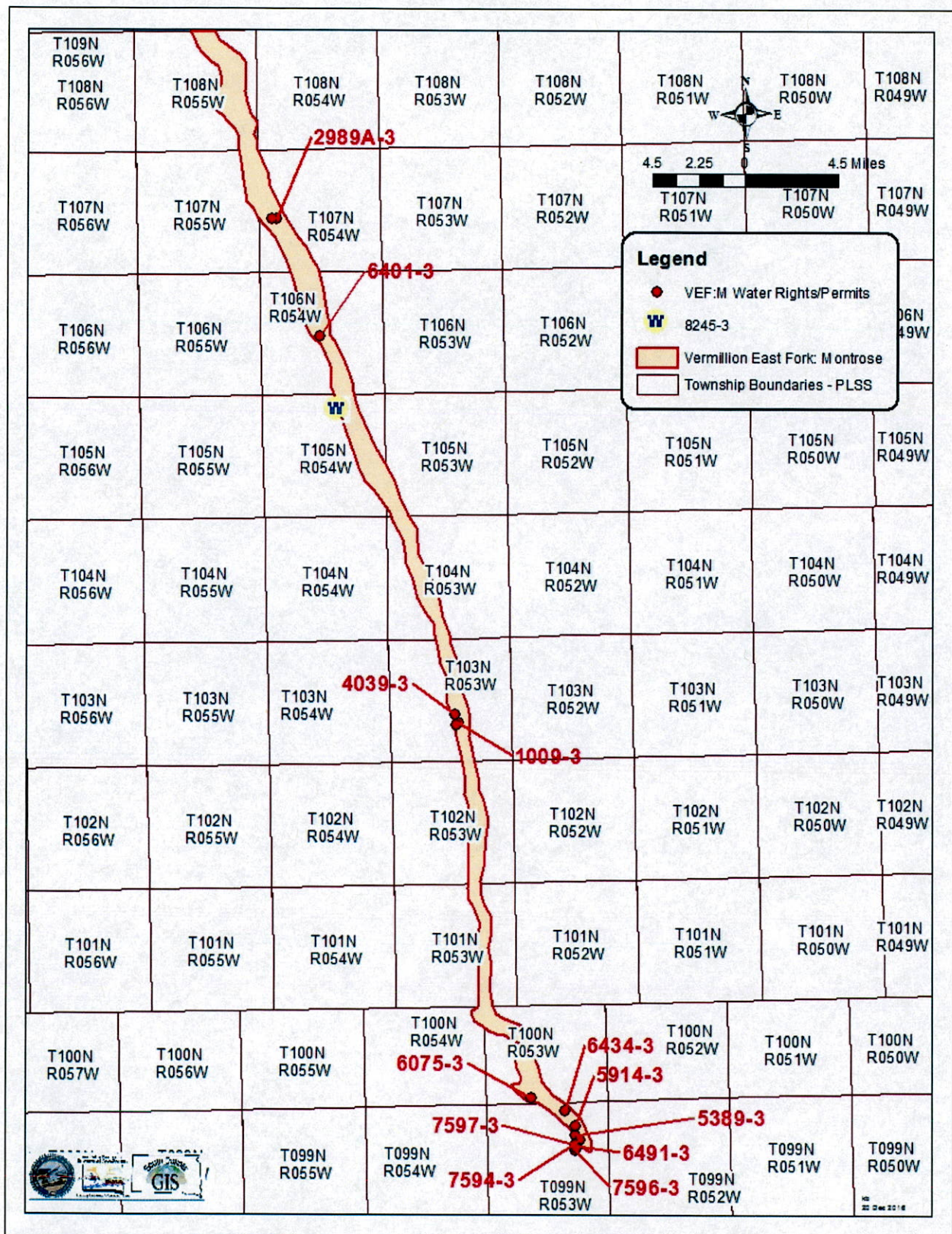


Figure 2. Water Rights/Permits appropriating water from the Montrose Management Unit of the Vermillion East Fork aquifer

The City of Montrose is supplied by Kingbrook Rural Water System and the water rights are maintained only as a back-up source for uses such as fire protection. Consequently, withdrawals under water rights held by the City of Montrose are assumed to be negligible. The City of Montrose also holds Future Use Permit No. 4039-3. The Water Management Board last reviewed the permit in 2006 and allowed the permit to remain in effect reserving 42 acre-feet of water annually for future development. Water Right No. 6401-3 is for a non-consumptive use in a commercial gravel washing operation. Therefore, annual withdrawals made through this appropriation are assumed to be negligible.

Water Balance:

The annual average withdrawal from the Montrose Management Unit of the Vermillion East Fork aquifer through current appropriations is expected to be approximately 511 ac-ft/yr. Expected average annual usage includes: (1) full development of Future Use Permit No. 4039-3 (42 ac-ft/yr); and (2) average irrigation withdrawals from table 3 (404.22 ac-ft/yr); and (3) development of Water Permit 8245-3, with an average application rate of 6 inches per acre per year (65 ac-ft/yr). The average annual recharge is estimated to be 9,864 ac-ft/yr. Therefore, there is a reasonable probability that unappropriated water is available to support the proposed appropriation.

Table 3. Historic irrigation pumping reported from the Montrose Management Unit of the Vermillion East Fork Aquifer (Water Rights, 1980-2016)

YEAR	REPORTED PUMPED Ac-ft/Yr
1979	189.84
1980	299.72
1981	345.93
1982	244.05
1983	257.26
1984	195.06
1985	243.38
1986	162.20
1987	187.03
1988	461.78
1989	400.06
1990	220.21
1991	366.06
1992	17.30
1993	16.00
1994	212.61
1995	189.80
1996	185.06
1997	192.00
1998	180.52
1999	321.12
2000	346.03
2001	410.88
2002	634.60
2003	621.09
2004	753.46
2005	978.19
2006	818.29
2007	804.95
2008	558.65
2009	213.59
2010	0.00
2011	487.30
2012	686.94
2013	615.55
2014	542.93
2015	542.50
<i>Maximum</i>	<i>978.19</i>
<i>Minimum</i>	<i>0.00</i>
<i>Average</i>	<i>404.22</i>

Observation Well Data:

Administrative Rule of South Dakota Section 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 DENR-Water Rights Program monitors three observation wells completed into the Montrose Management Unit of the Vermillion East Fork aquifer. Hydrographs for the observation wells are shown in Figures 3-5.

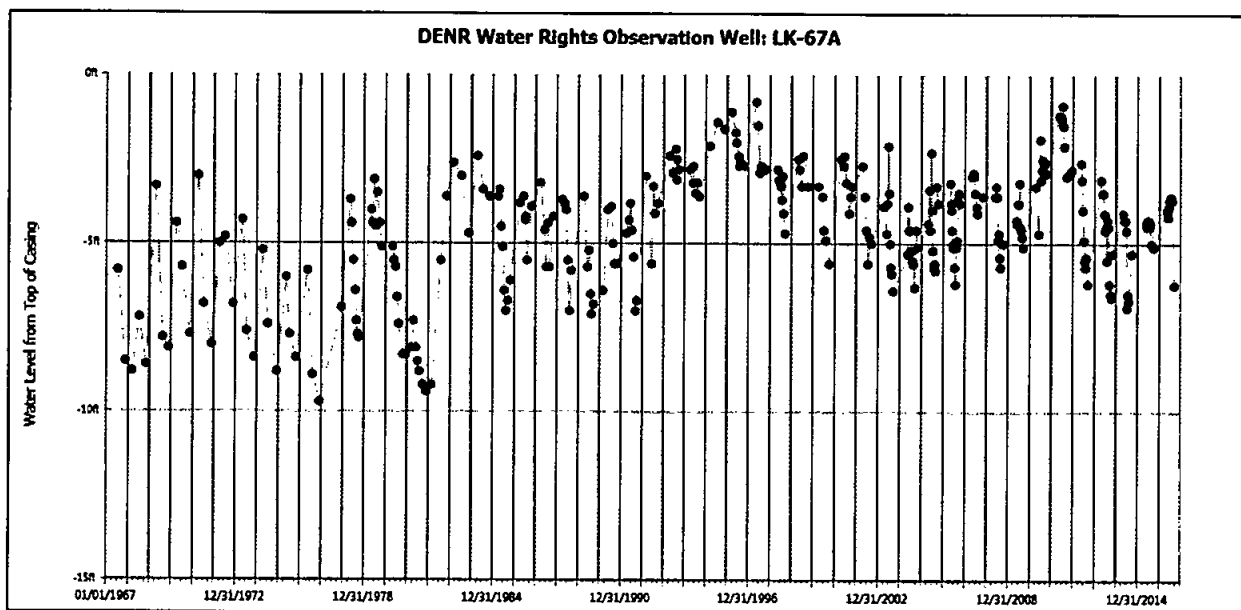


Figure 3. Hydrograph of DENR-Water Rights Observation Well LK-67A which is completed into the Vermillion East Fork: Montrose aquifer and located approximately five miles southeast of 8245-3.

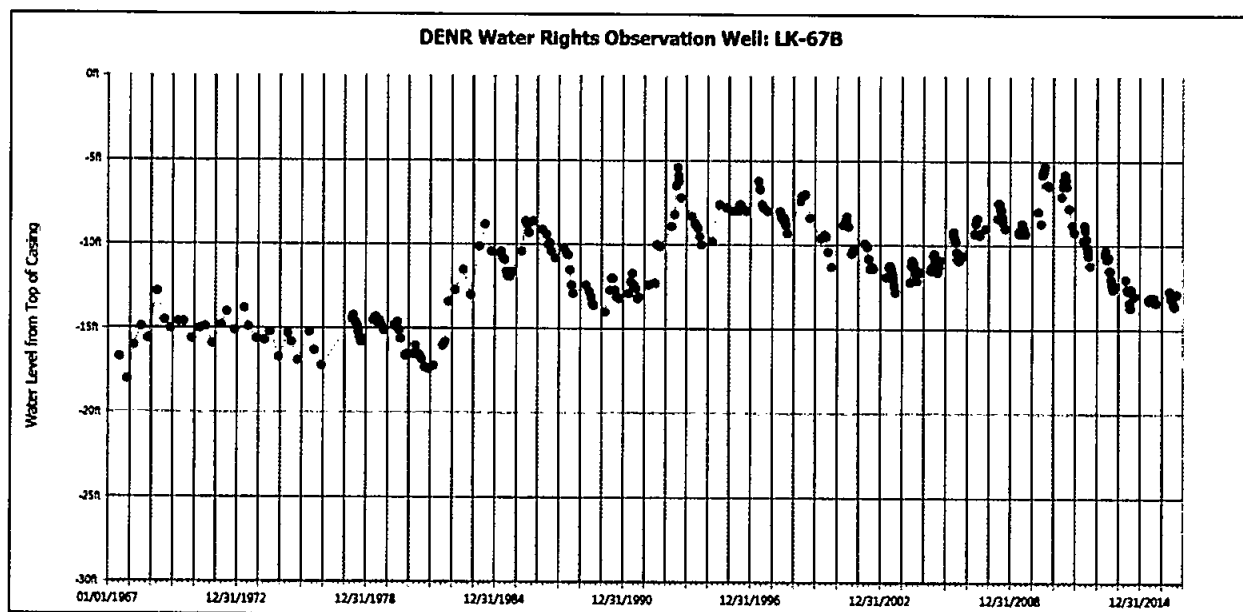


Figure 4. Hydrograph of DENR-Water Rights Observation Well LK-67B which is completed into the Vermillion East Fork: Montrose aquifer and located approximately five miles northwest of 8245-3.

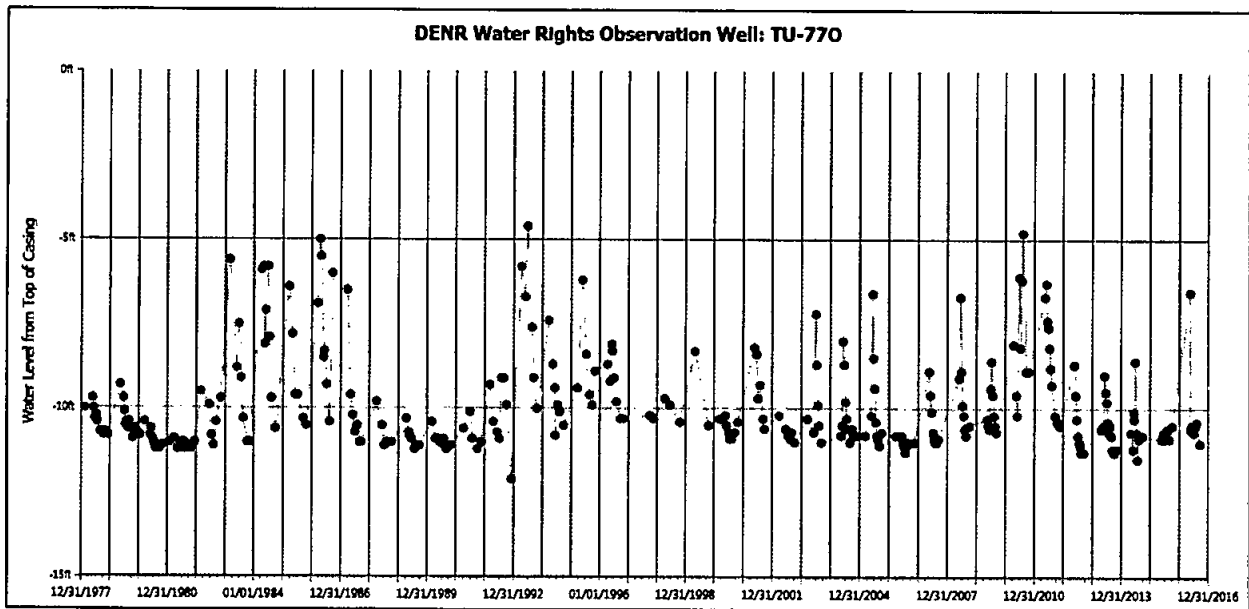


Figure 5. Hydrograph of DENR-Water Rights Observation Well TU-770 which is completed into the Vermillion East Fork: Montrose aquifer and located approximately 35 miles southeast of 8245-3.

In general, the hydrographs show stable or upward trending water levels over the period of record. The hydrographs document that the aquifer responds well to climatic conditions with rising water levels during wet years and declining water levels during dry years. The data documents that at the current level of development temporal well withdrawal is masked by climatic conditions. Therefore, recharge to and natural discharge from the aquifer greatly exceeds well withdrawal, so water is available for capture from natural discharge. Therefore, unappropriated water is available from the Vermillion East Fork aquifer to support the proposed appropriation.

EXISTING WATER RIGHTS:

Although Water Permit Application No. 8245-3 does not propose an increase to the 1.78 cfs diversion rate authorized from this existing well, the irrigation of an additional 133 acres from the well, at the applicant's historic average application rate (5.9 inches per acre per year) will result in an increase of the average 183 day irrigation season diversion rate of approximately 0.18 cfs.

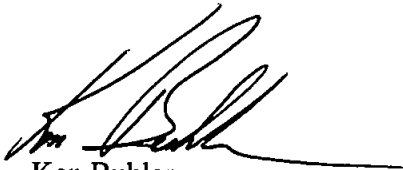
The nearest water right/permit appropriating water from the Vermillion East Fork: Montrose aquifer is Water Right No. 6401-3, Michael J. Johnson. The diversion point for Water Right No. 6401-3 is located approximately three and one-half miles northeast of the well this application proposes as a source. There are no other appropriations within approximately nine miles of the well that Application No. 8245-3 proposes to use. With the exception of a domestic well for Gracevale Hutterian Brethren, there are no domestic wells on file with the DENR-Water Rights Program within approximately two and one-half miles of the well that is to be used to supply Water Permit No. 8245-3.

Since the Vermillion East Fork: Montrose aquifer is under unconfined conditions in this area, drawdown will not extend very far from an individual production well. The increased average irrigation season diversion rate that will result from the approval of this application (.18 cfs (81

gpm)) should not have a measureable effect on existing water rights/permits or domestic wells considering the distances involved. Adequate wells defined by ARSD 74:02:20(7) are not expected to be adversely impaired due to the additional diversion from the well.

CONCLUSIONS:

1. The Vermillion East Fork: Montrose aquifer is a viable aquifer in this area.
2. There is a reasonable probability that unappropriated water is available from the Vermillion East Fork: Montrose aquifer for this proposed appropriation.
3. There is a reasonable probability that this appropriation can be developed without an adverse impact on existing users.



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hansen, D.S., 1986, Water Resources of Lake and Moody Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 84-4209, 51p.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Hedges, L.S., Allen, J., and 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, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Stonesifer, J.R., 2014, Report to the Chief Engineer, Water Permit Application No. 7981-3, Farron Pratt, April 28, 2014: South Dakota DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Water Rights, 1980-2016, "Irrigation Questionnaire Summaries", SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 1982-2016, "Irrigation Questionnaire Reports for Water Right No. 4680-3", SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2016a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2016b, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2016c, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

AFFIDAVIT OF PUBLICATION RECEIVED

STATE OF SOUTH DAKOTA

County of Lake

}
} ss.
}

JAN 12 2017

**WATER RIGHTS
PROGRAM**

Judy Dahl

..... of the City of Madison, County of Lake,
State of South Dakota, being first duly sworn on oath, deposes and says:

The Madison Daily Leader is a daily legal newspaper of general circulation, printed and published in the City of Madison, in said County of Lake, by Hunter Publishing, Inc., Jon M. Hunter, publisher, and has been such legal newspaper during the times hereinafter mentioned; that the said Madison Daily Leader has been in existence as such legal newspaper for more than one year prior to the publication of the notice hereunto attached, and has during all of said time had, and how has, more than 200 bona fide subscribers; that the undersigned, the affiant, is the Secretary of the said newspaper, in charge of the advertising department thereof and has personal knowledge of all the facts stated in this affidavit and the advertisement headed

Department of Environment & Natural Resources

Water Rights Program / Notice of application #8245-3 Appropria

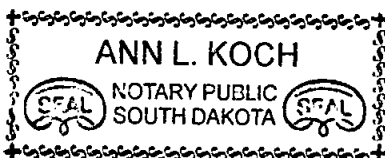
printed copy of which hereunto attached, was printed and published in the said newspaper for One successive weeks, once each week and on the same day of the week, on the following dates, to-wit:

On Thursday, the 5th day of January, 2017;
On day of 20.....;
On day of 20.....;
On day of 20.....;
On day of 20.....;
On day of 20.....;
On day of 20.....;
On day of 20.....;
On day of 20.....;

That \$ 33.53 being the full amount of the fees for publication of the attached notice inures solely for the benefit of the publisher of the said newspaper; that no arrangement or understanding for a division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Judy Dahl

Subscribed and sworn to before me this 6th day of
January, 2017



Ann L. Koch
Notary Public, Lake County, South Dakota

Publication Fees \$

Notary Fees \$

Total \$

Received Payment,

In Court

County of

AFFIDAVIT OF PUBLICATION

Filed in the office of

on the

day of

20

Attorneys for

Thursday, Jan. 5

**NOTICE OF APPLICATION
NO. 8245-3**

TO APPROPRIATE WATER

Notice is given that Gracevale Hutterian Brethren, c/o Paul Hofer Jr., 28843 446th Ave, Winfred SD 57076 has filed an application for a water permit to irrigate 132 acres. Water Right No. 4680-3 appropriates 1.78 cubic feet of water per second (cfs) from one well completed into the Montrose management unit of the Vermillion East Fork Aquifer (64 feet deep) located in the NW 1/4 SE 1/4 Section 3 for irrigation of 264 acres located in the SE 1/4, E 1/2 SW 1/4 Section 3 and NE 1/4 Section 10; all in T105N-R54W. The 132 acres located in the NE 1/4 Section 10 have not been irrigated for several years and this non-irrigated portion of Water Right No. 4680-3 is likely subject to forfeiture for non-use. The applicant is proposing to re-establish irrigation of the 132 acres located in the NE 1/4 Section 10-T105N-R54W utilizing the existing well. This application, if approved, does not authorize any increase in the 1.78 cfs diversion rate authorized by Water Right No. 4680-3.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8245-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352) and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by January 16, 2017.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

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.

STEVEN M. PIRNER,
Secretary
Department of
Environment and Natural
Resources

Published once at the total
approximate cost of \$33.53

Schlaak, Karen

From: Schlaak, Karen
Sent: Wednesday, December 28, 2016 4:31 PM
To: ads@madisondailyleader.com
Subject: 8245-3, Gracevale Httm Brethren
Attachments: 8245-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on January 5, 2017.

Gracevale Httm Brethren, c/o Paul Hofer Jr., 28843 446th Ave, Winfred SD 57076 (605 256-6948 or cell 605 480-2489) 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.

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

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

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

December 29, 2016

Paul Hofer Jr
Gracevale Hutterian Brethren
28843 446th Avenue
Winfred SD 57076

Dear Mr. Hofer:

Water Permit Application No. 8245-3 for use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Madison Daily Leader printed at Madison SD (Ph # 605-256-4555). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(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. 8245-3 to Appropriate Water

Notice is given that Gracevale Hutterian Brethren, c/o Paul Hofer Jr., 28843 446th Ave, Winfred SD 57076 has filed an application for a water permit to irrigate 132 acres. Water Right No. 4680-3 appropriates 1.78 cubic feet of water per second (cfs) from one well completed into the Montrose management unit of the Vermillion East Fork Aquifer (64 feet deep) located in the NW 1/4 SE 1/4 Section 3 for irrigation of 264 acres located in the SE 1/4, E 1/2 SW 1/4 Section 3 and NE 1/4 Section 10; all in T105N-R54W. The 132 acres located in the NE 1/4 Section 10 have not been irrigated for several years and this non-irrigated portion of Water Right No. 4680-3 is likely subject to forfeiture for non-use. The applicant is proposing to re-establish irrigation of the 132 acres located in the NE 1/4 Section 10-T105N-R54W utilizing the existing well. This application, if approved, does not authorize any increase in the 1.78 cfs diversion rate authorized by Water Right No. 4680-3.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8245-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by January 16, 2017.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

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.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of_____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

JAN 24 2017

Gracevale Hutterian Brethren
Paul Hofer Jr
28843 446th Ave
Winfred SD 57076

Dear Mr. Hofer:

Enclosed is Water Permit No. 8245-3 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,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures