

WATER PERMIT NO. 7680-3

Name of Applicant: Wendell Falk

Address: 45384 154th St, South Shore SD 57263 Phone: 605 880-6624

Amount of Water Claimed: 2.0 cfs Total Acres: 140 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Grant

Type of Waste Disposal System:

Location: 25 miles west of Milbank

PRIORITY Date Received: 2-4-13 Application/License Fee: \$ 1050

Corrected Application Received: Period of Annual Use: May 1 – Sept 30

Remarks: within the former boundaries of the Sisseton Wahpeton Indian Reservation

Diversion Point: center SW 1/4 Sec 24-T120N-R52W

Land to be Irrigated: SW 1/4 Sec 24-T120N-R52W

Depth of Well: 176 feet deep

Well Driller: Bullis Bros

Remarks:

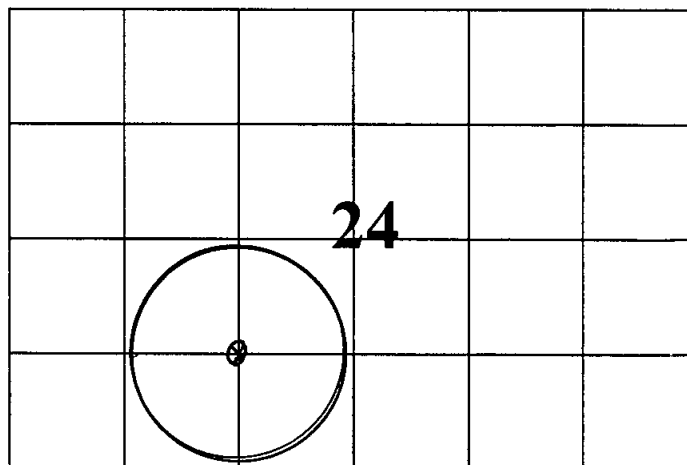
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 2-5-13

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7680-3</u> (office use only)	Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>	<u>605-432-4516</u>
	Newspaper <u>Grant Co. Review Box 390 Millbank</u>	<u>605-886-6901</u> <u>57252</u>
	<u>Public Opinion Box 10 Watertown 57201</u>	

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FEB - 4 2013

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 Wendell Falk
(check one) ☐ Owner ☒ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 45384 154th St South Shore SD 57263
(Address) (City) (State) (Zip Code)Home Phone 605-818-0365 Cell 605-880-6624 Email FalkFarms@yahoo.com2. Amount of water claimed 2 *CFS or **GPM ***AF Total Acreage 140
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply Well4. Location of point of diversion 1350' East & 1350' North of the SW corner of Section
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
24-120-S2R (Center of SW 1/4) County Grant5. County or counties where water will be used Grant6. Annual period during which water is to be used May 1 thru Sept 307. 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
NE 1/4 SW 1/4 Sec 24	35	All in Sec 24-T120N-R52W	
SE 1/4 SW 1/4 Sec 24	35		
NW 1/4 of SW 1/4 Sec 24	35		
SW 1/4 of SW 1/4 Sec 24	35		

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

Installation of a new Center Pivot using a well at the center of the quarter section which was previously permitted #5670-3.

I, Wendell Falk, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7680-3 FOR IRRIGATION

Date of first receipt of application February 4, 2013.

The Water Management Board approved Water Permit No. 7680-3 on December 5, 2013 for Wendell Falk, 45384 154th St, South Shore SD 57263 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. 7680-3 appropriates 2.0 cubic feet of water per second from one well to be completed into the Prairie Coteau Aquifer (176 feet deep) located in the center of the SW 1/4 Section 24 for irrigation of 140 acres located in the SW 1/4 Section 24; all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation.
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: May 1 – September 30.
3. The date from which applicant may claim right is February 4, 2013.
4. One-fifth of the construction is to be completed on or before June 5, 2016.
5. All construction is to be completed on or before December 5, 2018.
6. Water is to be put to beneficial use on or before December 5, 2022.
7. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit 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. The well authorized by Permit No. 7680-3 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.

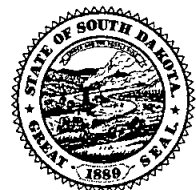
WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

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

JAN 29 2014

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many 1 Have test holes been drilled ☒ Yes ☐ No Drilled by Bull's Bros perm. # 5670-3
(if yes, please provide copies of logs)
- b) If existing wells, how many 1 Provide copy of log(s), if available. Drilled by Bull's Bros perm. # 5670-3
- c) Well Depth 176'6" Depth to Top of Water Bearing Material 163' Depth to Water from Surface 9'
- d) Distance to nearest existing domestic well:

On applicant's property 2400'

On property owned by others 3200'

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)

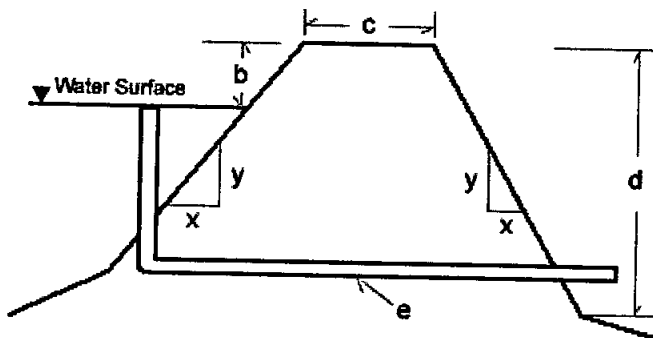
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

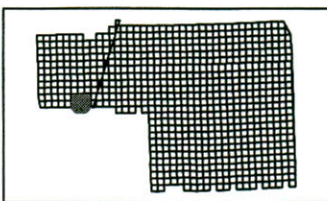
i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





USDA U.S. Dept. of Agriculture
Farm Service Agency



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South Dakota
Grant
24-120R-52R

Falk Farms Inc.

Legend

- Wetlands
- ▭ Tract Boundaries
- ▭ Section-Township-Range
- ▭ Easements
- ▭ CRP
- Common Land Units
- /// Rangeland

USDA FSA maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or the 2004 ortho rectified imagery for South Dakota. The producer accepts the data 'as is' and assumes all risks associated with its use. The USDA Farm Service Agency assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside of FSA Programs.

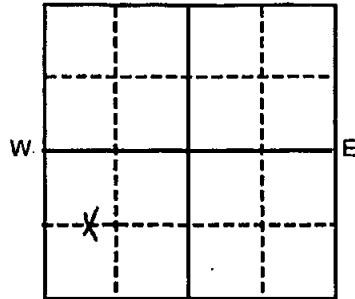
September 06, 2006

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location 1/4 SW 1/4 Sec 24 Twp 120N Rg 52WCounty Codington Grant North

Please mark well location with an "X"



Well Completion Date

6-20-13

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:
ROTARY DRILL

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
 If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.0 LB/FT	3.00 IN	0.0 FT	165.0 FT	6.00 IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Grt Well DF	7	54.0 Lb/gal	0.0 Ft	165.0 Ft
		_____ Lb/gal	_____ Ft	_____ Ft

Describe grouting procedure
pressure pull method

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 3.00 Inches Length 15.0 Feet
 Material _____
 Slot Size _____ Set From 1165 Feet to 180 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
Well Owner: W. FalkBusiness Name: Falk Farm IncAddress: 45268 155th StCity, State, Zip: South Shore SD 57263

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	1
Yellow Clay	1	25
Blue Clay	25	60
Yellow Clay	60	123
Blue Clay	123	157
Yellow Clay	157	165
Yellow Gravel	165	180

STATIC WATER LEVEL 40.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: AIR LIFT 75-100GPM
☐ Bailed
☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

JUL 23 2013

WATER RIGHTS
PROGRAMThis 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: 7-14-13

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

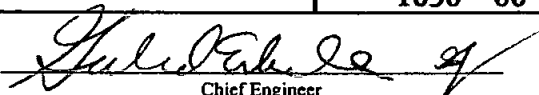
Date 2/5, 20 13

RECEIVED OF Wendell Falk Farms 45384 ±54th St S Shore SD 57263

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

Fee for Application for Permit No. <u>7680-3</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>7680-3</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. 06092

By 
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7680-3, Wendell Falk**

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. 7680-3, Wendell Falk, 45384 154th Street, South Shore SD 57263.

The Chief Engineer is recommending APPROVAL of Application No. 7680-3 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 this Permit 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. The well authorized by Permit No. 7680-3 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.

Jeanne Goodman, Chief Engineer
April 8, 2013

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7680-3

Wendell Falk

March 22, 2013

Water Permit Application No. 7680-3 proposes to withdraw groundwater at a maximum diversion rate of 2.0 cubic feet of water per second (cfs) from one well. The well is expected to be 176 feet deep and is to be located in the center of the SW¼ of Section 24, T120N-R52W. Water will be used to irrigate 140 acres located in the SW¼ of Section 24, T120N-R52W, in Grant County. The well and acreage proposed by this application are located within the former boundaries of the Sisseton Wahpeton Indian Reservation. This water permit application is associated with Water Permit No. 5670-3, Wendell Falk, which was cancelled due to nonconstruction (Water Rights, 2013b).

AQUIFER: Prairie Coteau aquifer (PCO)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Prairie Coteau is a surficial aquifer composed of brown to gray, coarse to very coarse sand and fine gravel (Hansen, 1990). Hansen (1990) delineated the Prairie Coteau aquifer in Grant and Codington Counties, and Thompson (2001) studied the aquifer in Roberts County and the Lake Traverse Reservation. Thompson (2001) concluded that the Prairie Coteau defined in these areas is not a continuous aquifer, and instead is a group of discontinuous outwash deposits generally found in the 1,600 to 1,800 foot altitude interval. The depth and thickness of these deposits can vary widely. These outwash deposits have been collectively known as an aquifer due to their similarities.

In the area of the proposed well site, the North management unit of the Big Sioux aquifer is generally located above the Prairie Coteau aquifer. The Lonesome Lake and Altamont aquifers are generally located below the Prairie Coteau aquifer. Also, other small outwash deposits lie above, below, and adjacent to this Prairie Coteau aquifer (Hansen, 1990). The Prairie Coteau is probably in hydraulic connection with these aquifers and outwashes, among others.

Historically, the Water Management Board has approved water permit applications to appropriate water from the Prairie Coteau aquifer system. However, in interpreting 46-6-3.1, the First Judicial Circuit Court ruled in *Hanson County Dairy v. Bender* that evidence needs to show that water is available for proposed appropriations. In other words, data must be presented to show that the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (Memorandum Decision, April 11, 2012). This could be interpreted as necessitating the identification and quantification of recharge and discharge of an individual outwash deposit of the Prairie Coteau aquifer from which the applicant proposes to withdraw water.

The areal extent and altitude interval of the individual outwash deposit of the Prairie Coteau aquifer was identified by examining area lithologic logs. This portion of the aquifer is generally found in the 1,600 to 1,720 foot above mean seal level (msl) altitude interval and is often 10 to 40 feet thick (Geological Survey, 2013). This portion of the aquifer underlies approximately 184,500 acres, mostly in Roberts, Grant, and Codington Counties (Stonesifer, 2013). This portion of the aquifer appears to be under artesian conditions throughout, and the potentiometric

surface in the aquifer generally ranges from flowing to 90 feet below ground surface, at an elevation generally ranging from 1,725 to 1,875 feet msl. The potentiometric surface elevation is highest in the northern portion and lowest in the southern portion of the aquifer, and water in this portion of the aquifer moves from north to south (Hansen, 1990; Water Rights, 2013a).

The test hole log submitted with this application documents sand and gravel from 163 to 176.5 feet below ground surface, which translates to 1,692 to 1,678.5 feet msl. The recorded static water level was nine feet below ground surface in April 1992.

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 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 the availability of unappropriated water from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

If this application is approved, the actual water use will likely be less than 280 acre-feet per year (ac-ft/yr). 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 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."

Hydrologic Budget:

Recharge:

Recharge to this portion of the Prairie Coteau aquifer occurs through leakage from till, the overlying Big Sioux aquifer, and the Coteau Lakes aquifer immediately north (Hansen, 1990). Recharge for this portion of the aquifer has not been quantified. However, for management and development programs, Hedges and others (1985) suggests a recharge rate range of 0.15 to 0.60 inches per year (in/yr) for confined aquifers. From the determined area of the aquifer, this recharge rate range equates to 2,306 to 9,224 ac-ft/yr.

Discharge:

Discharge from this portion of the Prairie Coteau aquifer occurs primarily by well withdrawals (Hansen, 1990). Based on the location and depths of wells, there are currently 23 water rights/permits withdrawing from this portion of the aquifer, which are described in Table 1 and whose diversion points are shown in Figure 1 (Water Rights, 2013b). There is also one pending water permit application.

In addition, there are many well completion reports on file with the SD DENR-Water Rights Program for domestic wells that appear to be completed into the Prairie Coteau aquifer (Water Rights, 2013c). The annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

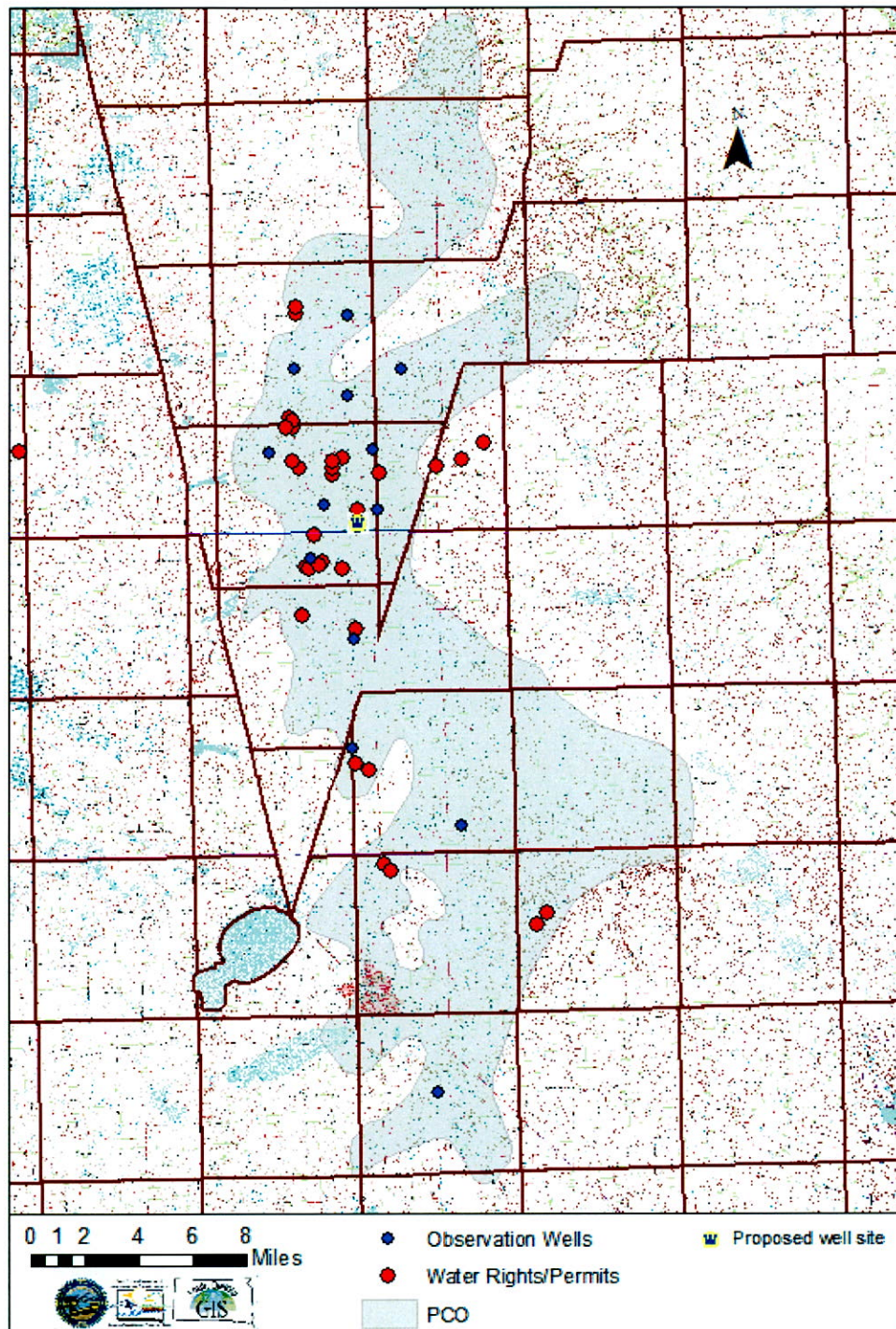


Figure 1: Location of water rights/permits and observation wells completed into this portion of the Prairie Coteau aquifer (Water Rights, 2013b)

Table 1: Water rights/permit withdrawing from this portion of the Prairie Coteau aquifer (Water Rights, 2013b)

Permit No.	Name	Priority Date	Status	Type	Max CFS	Acres
3229-3	Don Endres	08/20/1976	LC	IRR	2.66	224
4184-3	Ina C Kahnke	10/27/1977	LC	IRR	2.67	243
4417-3	Falk Farms Inc	04/29/1975	LC	IRR	6	770
4588-3A	Don Endres	12/04/1980	LC	IRR	1.77	170
4749-3	Luvern J Miller	05/01/1981	LC	IRR	3.77	264
5165-3	Jeff L & Lynae Grabow	11/18/1987	LC	IRR	1.77	132
5166A-3	John T Nordgaard	03/02/1988	LC	IRR	1.87	131
5166B-3	Northern Con-Agg	03/02/1988	LC	IRR	0.84	59
5174-3	Donald L Endres	03/02/1988	LC	IRR	1.77	130
5376-3	Donald L Endres	12/18/1989	LC	IRR	1.11	83
5378-3	Endres Family Trust	01/06/1990	LC	IRR	1	70
5807-3	Micheal John Meyer	03/04/1994	LC	IRR	1	95
6100-3	Norswiss Dairy	08/20/1998	LC	COM/LCO	0.267	0
3665-3	Florence Davis	02/22/1977	PE	IRR	9	640
6533-3	Redlin Farms	08/12/2004	PE	COM	0.033	0
6906-3	Tim J Grabow	10/11/2007	PE	IRR	0	180
6907-3	Jeff L Grabow	10/11/2007	PE	IRR	4	440
7036-3	James and Johnny Lee Wohlleber	05/30/2008	PE	IRR	2	130
7065-3	James Amdahl	09/11/2008	PE	IRR	3.78	264
7242-3	Rollin J Morehouse	06/27/2011	PE	IRR	4.29	300
7305-3	Tim Grabow	01/05/2012	PE	IRR	1.57	110
7328-3	Marvin Amdahl	02/27/2012	PE	IRR	1.78	162
7351-3	Micheal John Meyer	04/23/2012	PE	IRR	0.68	0
LC = Water right, PE = Water permit, IRR = Irrigation, COM = Commercial, LCO = Livestock Confinement Operation						

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits can be estimated by assuming these water rights/permits, which are limited only by diversion rate, will pump at the maximum permitted diversion rate 60 percent of the time. Therefore, the total annual withdrawal from this portion of the Prairie Coteau aquifer by non-irrigation use is expected to be less than 131 ac-ft/yr (Water Rights, 2013b).

The irrigation development of this portion of the Prairie Coteau aquifer has steadily increased over the period of record, 1979 to 2011. The annual withdrawal from the aquifer fluctuates, which is probably mostly dependent on annual growing season climatic conditions. Figure 2 shows the total annual pumpage reported from this portion of the aquifer over the period of record. The average pumpage reported equals 889 ac-ft/yr. Figure 3 shows the average annual application rate over the period of record. The average application rate equals 5.56 inches per acre (in/ac) (Stonesifer, 2013). Since 2011, four water permits have been authorized and one water permit application is pending for irrigation use (Water Rights, 2013b). When applying the average annual application rate, withdrawals due to these permits and permit application is expected to total on average 287 ac-ft/yr.

Water Balance:

The average annual withdrawal from this portion of the Prairie Coteau aquifer is estimated to be less than 1,307 ac-ft/yr. To balance the hydrologic budget, recharge must equal withdrawal. And so, assuming average annual use plus the maximum use proposed by this application, recharge to this aquifer must equal 0.11 in/yr. This required recharge rate is lower than the suggested recharge rate range provided by Hedges and others (1985). Therefore, there is a reasonable probability that unappropriated water is available from this portion of the Prairie Coteau aquifer for the proposed appropriation.

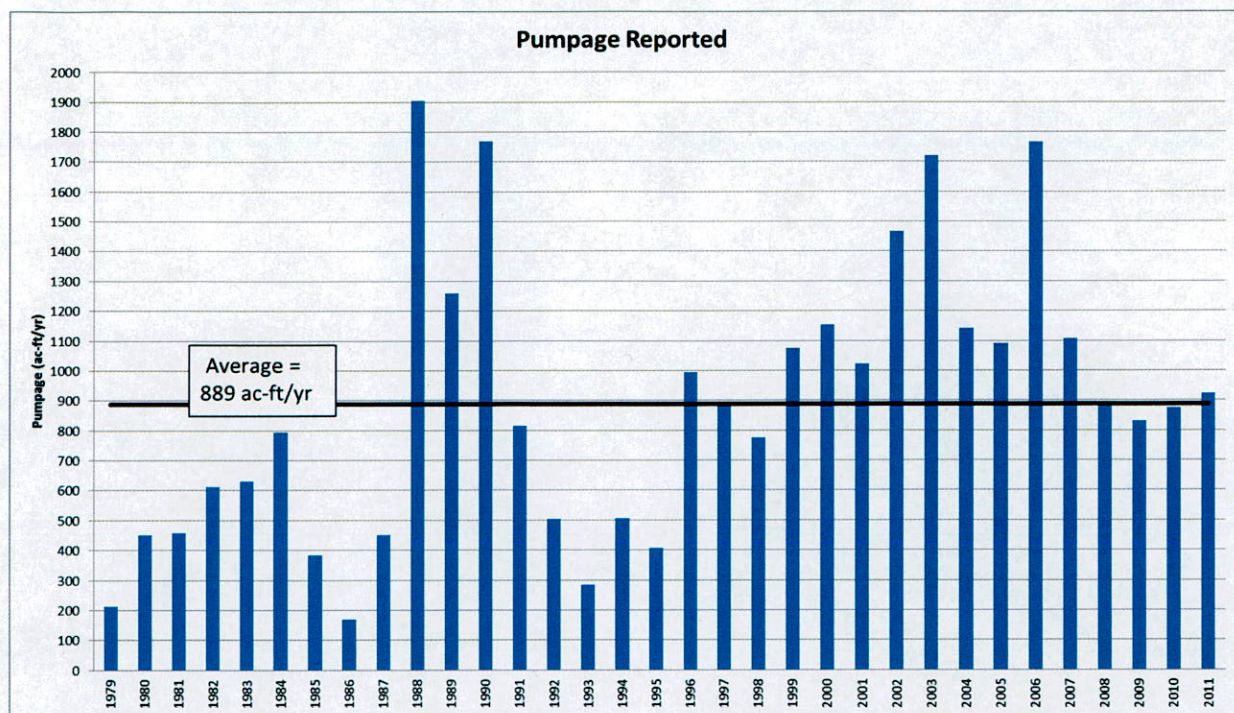


Figure 2: Historic irrigation water use from this portion of the Prairie Coteau aquifer (Water Rights, 1980-2012)

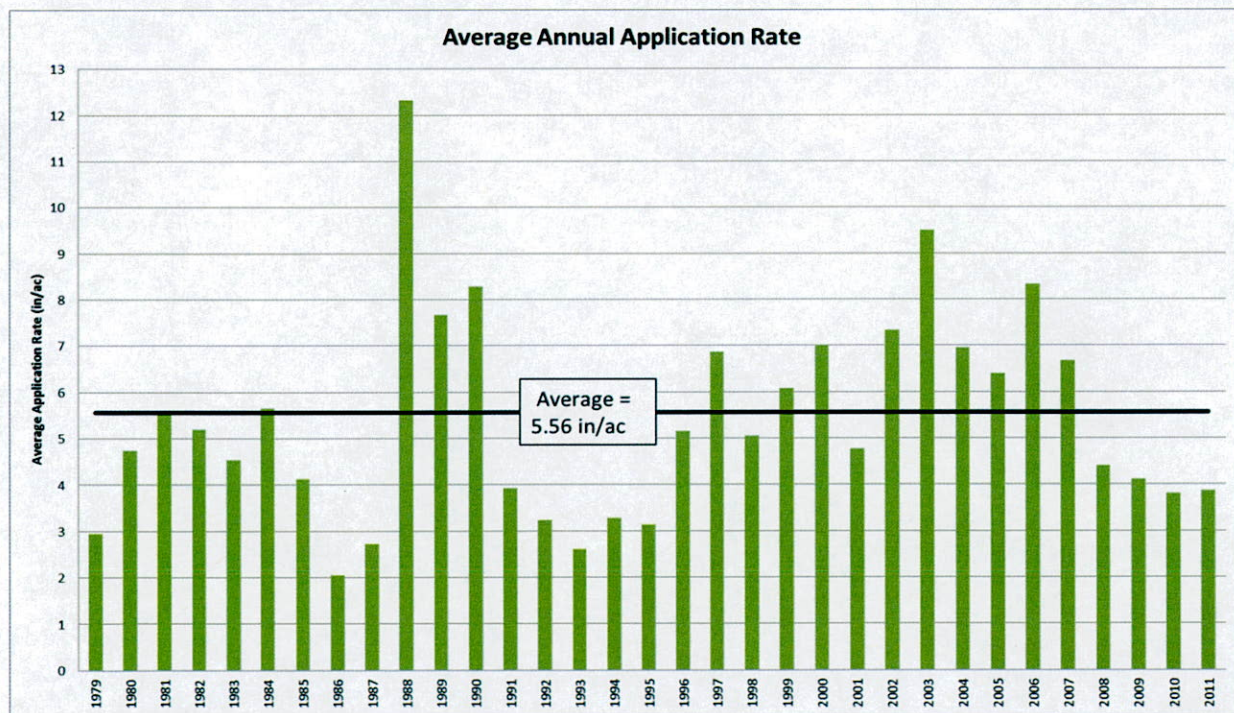


Figure 3: Historic average annual application rate from this portion of the Prairie Coteau aquifer (Water Rights, 1980-2012)

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 to determine that the quantity

of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The SD DENR-Water Rights Program monitors 55 observation wells completed into the Prairie Coteau aquifer, with 13 of these completed into this portion of the aquifer (Water Rights, 2013a). The locations of these wells are shown in Figure 1. The hydrographs for these 13 observation wells are all shown together in Figure 4. The nearest observation well, GT-77A, is located approximately one mile northeast of the proposed well site.

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. The effects of pumping in the aquifer are obvious, which is due to the artesian conditions of this portion of the aquifer. Temporal effects of well withdrawal from the aquifer are masked by climatic conditions, indicating that recharge to and natural discharge from the aquifer greatly exceeds well withdrawal. Over the period of record, water levels in this portion of the aquifer have remained fairly steady. Therefore, unappropriated water is available from this portion of the Prairie Coteau aquifer to support the proposed appropriation.

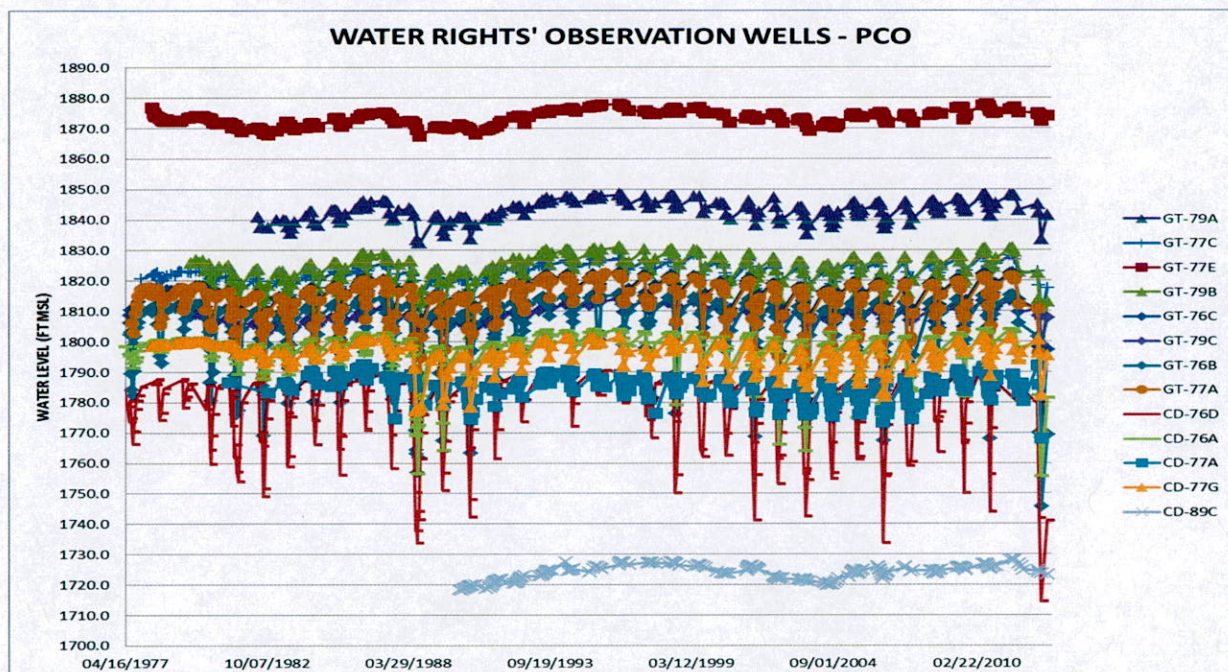


Figure 4: Hydrographs of observation wells completed into this portion of the Prairie Coteau aquifer (Water Rights, 2013a)

EXISTING WATER RIGHTS:

This portion of the Prairie Coteau aquifer is under artesian conditions at the proposed well site; therefore, significant drawdown due to pumping is likely. However, precise drawdown cannot be quantified without aquifer testing. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. However, reasonable domestic use must be assured before irrigation use is allowed. Therefore, when considering irrigation projects, the Water Management Board must give consideration to maintaining artesian head pressure as a method of delivery for domestic wells.

To balance interests between irrigation use and delivery of groundwater by artesian pressure, ARSD 74:02:04:20(7) defines an adversely impacted domestic well as:

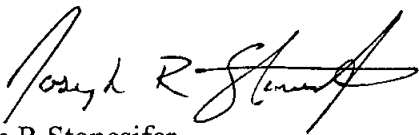
“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs”

If approved, the well will be located near other wells that obtain water from the same aquifer. There are five water rights/permits within two miles of the proposed well site (Water Rights, 2013b). The nearest, Water Permit No. 3665-3, is located approximately one half mile north of the proposed well site. There is one domestic well on record with the SD DENR-Water Rights Program that appears to be completed into the Prairie Coteau aquifer within two miles of the proposed well site (Water Rights, 2013c). Historically, there have been a number of controversies regarding water rights/permits appropriating water from this area of the proposed well sites. Some wells cease to flow during irrigation season. Some wells have been replaced or have lowered pumps (Water Rights, 2013b).

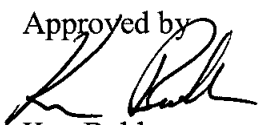
In general, the hydrographs document the obvious effects of pumping; however, these effects have been relatively minimal over the period of record, and water levels have always recovered once irrigation has ceased (Water Rights, 2013a). Therefore, at the distances involved there is a reasonable probability that any well interference from the proposed appropriation will not adversely or unlawfully impair existing nearby wells. However, if approved, the water permit should include the qualification that the well owner should 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.

CONCLUSIONS:

1. The water permit application proposes to withdraw groundwater at a maximum diversion rate of 2.0 cfs from one well to be completed into a portion of the Prairie Coteau aquifer in Grant County for the irrigation of 140 acres.
2. There is a reasonable probability that unappropriated water is available from this portion of the Prairie Coteau aquifer to supply the proposed appropriation.
3. There is a reasonable probability that any possible well inference due to the proposed appropriation will not adversely or unlawfully impair existing users.



Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by 

Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Geological Survey. 2013. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.
- Hansen, D.S. 1990. Water Resources of Codington and Grant Counties, South Dakota: U.S. Geological Survey Water-supply Paper 2254, 263 p.
- In the Matter of Water Permit Application No. 7239-3, by Hanson County Dairy v. Robert Bender and Stace Nelson, South Dakota First Judicial Court Civ. No. 11-54 (Memorandum Decision, April 11, 2012)
- Stonesifer, J.R. 2013. Report on Water Permit Application no. 7629-3, William Bucklin. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- Thompson, R.F. 2001. Water Resources of the Lake Traverse Reservation, South and North Dakota, and Roberts County, South Dakota: U.S. Geological Survey Water-Resource Investigation Report 01-4219
- Water Rights, 1980-2012. "Irrigation Report Summaries." SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Printer's Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF GRANT

} ss.

Ann Tuchscherer

of said County and State, being first duly sworn, on oath says that the Grant County Review is a legal weekly newspaper of general circulation, printed and published in Milbank, in said County of Grant and State of South Dakota, by Phyllis Justice, and has been such newspaper during the times hereinafter mentioned; that said newspaper is a legal newspaper; and that it has a bona fide circulation of more than two hundred copies weekly, and has been published within said County of Grant in the English language and has been admitted to the United States mail under second class mailing privilege, for at least one year next prior to the publication of the Notice herein mentioned, and has been printed wholly in an office maintained at the said place of publication, that I, the undersigned, Bookkeeper of said newspaper, in charge of the advertising department thereof, have personal knowledge of all the facts stated in this affidavit; that the advertisement headed Notice of

Application No. 7680-3 to Appropriate
Water

a printed copy of which, taken from the paper in which the same was published, is attached to this sheet and is made a part of this Affidavit, was published in said newspaper at least once each week for one ~~successive~~ weeks, on the day of each week on which the said newspaper was regularly published, to-wit:

<u>April 17</u> 20 <u>13</u>	<u>20</u>
<u>20</u>	<u>20</u>
<u>20</u>	<u>20</u>

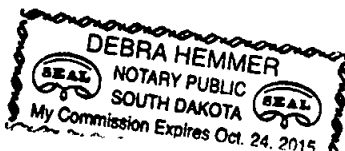
That \$ 23.89, being the full amount of the fee charged for the publication of said Notice, inures to the benefit of the publisher of the Grant County Review; that no agreement or understanding for the division thereof has been made with any person, and that no part has been agreed to be paid to any person whomsoever.

Ann Tuchscherer

Subscribed and sworn to before me this 17th day of April 2013

Debra Hemmer

Notary Public, Grant County, South Dakota



RECEIVED

APR 19 2013

WATER RIGHTS
PROGRAM

NOTICE OF APPLICATION NO. 7680-3 to Appropriate Water

Notice is given that Wendell Falk, 45384 154th St., South Shore, SD, 57263, has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Prairie Coteau Aquifer (176 feet deep) located in the center of the SW 1/4 Section 24 for irrigation of 140 acres located in the SW 1/4 Section 24; all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7680-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 April 29, 2013.

The petition may be informal, but must include a statement describing the petitioner's interest in the applicant, 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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

Steven M. Pirner, Secretary,
Department of Environment and
Natural Resources

Published once at an approximate
cost of \$23.89.

Publication Fee \$ 23.89
Notarial Fee \$
Total \$ 23.89

RECEIVED

APR 19 2013

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
County of Codington)

I, Monica K. Saathoff

certify that the attached printed Notice was
taken

from the Watertown Public Opinion

printed and published in Watertown

County of Codington and

state of South Dakota. The notice was
published

in the newspaper on the following date:

April 17th, 2013

Cost of Printing \$57.29

Monica K. Saathoff
(Signature)

Bookkeeper
(Title)

April 17th, 2013
(Date Signed)

DEPARTMENT
OF ENVIRON-
MENT AND
NATURAL
RESOURCES

NOTICE OF APPLICATION
NO. 7680-3 to Appropriate
Water

Notice is given that Wendell
Falk, 45384 154th St. South

Shore SD 57263 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Prairie Coteau Aquifer (176 feet deep) located in the center of the SW 1/4 Section 24 for irrigation of 140 acres located in the SW 1/4 Section 24; all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7680-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 April 29, 2013.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the approximate cost of \$52.25. (April 17, 2013)

All legal notices in the Public Opinion and other South Dakota newspapers can be found at
www.sdpublicnotices.com



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

April 9, 2013

Grant County Review
PO Box 390
Milbank SD 57252

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7680-3 to Appropriate Water. Please publish the notice once on April 17, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Wendell Falk, 45384 154th St, South Shore SD 57263 (Ph # 605-818-0365).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

April 9, 2013

Public Opinion
PO Box 10
Watertown SD 57201

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7680-3 to Appropriate Water. Please publish the notice once on April 17, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Wendell Falk, 45384 154th St, South Shore SD 57263 (Ph # 605-818-0365).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

April 9, 2013

Wendell Falk
45384 154th St
South Shore SD 57263

Dear Mr. Falk:

Water Permit Application No. 7680-3 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 Grant County Review printed at Milbank SD (Ph # 605-432-4516) and the Public Opinion printed at Watertown SD (Ph # 605-886-6901). You will need to contact the newspaper(s) 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(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) 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.

Instruction to Newspaper - Publish the Notice on April 17, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7680-3 to Appropriate Water

Notice is given that Wendell Falk, 45384 154th St, South Shore SD 57263 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Prairie Coteau Aquifer (176 feet deep) located in the center of the SW 1/4 Section 24 for irrigation of 140 acres located in the SW 1/4 Section 24; all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7680-3 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

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 April 29, 2013.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

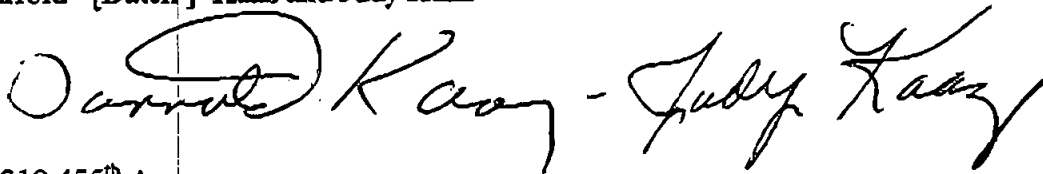
Published once at the total approximate cost of _____.

Attention Steven M. Pirner, Secretary

We are writing in protest of the permit # 7680-3 for Wendall Falk 45384 154th St. South Shore, SD 57263 in SW Quarter of Section of 24 all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. For many reasons:

1. We live in the NE Quarter of the same section NE Quarter of Section 24, all in the T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. We believe that the addition of this irrigation system will jeopardize our domestic wells, used for private use, and for our cattle.
2. We have two pastures with stock dam's that the cattle are dependant on for water in this quarter. We feel that this would jeopardize these drastically
3. Our ranch is between a 1,000 feedlot to the NE a 1/4 mile and another 1,000 feedlot 3/4 of a mile NW, in addition to all of the other irrigation systems in place.
4. Due to the fact that the aquifer does not recharge quickly in this area, We are opposing this permit. Our main income is Livestock so water is very important to us

Darrold [Butch] Kaaz and Judy Kaaz

A handwritten signature in black ink that reads "Darrold Kaaz - Judy Kaaz". The signature is written in a cursive, flowing style. The word "Darrold" is circled with a large, loopy flourish.

15319 455th Av
Summit, S.Dak. 57266

605-886-8342

bjkaaz@mics.com



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

May 1, 2013

NOTICE OF HEARING

TO: Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Notice of Hearing on Water Permit Application No. 7680-3, Wendell Falk

A petition opposing approval of Water Permit Application No. 7680-3 has been filed in response to the Notice of Application published in the Watertown Public Opinion and Grant County Review. This notice schedules a hearing on the application before the South Dakota Water Management Board.

Application No. 7680-3 proposes to appropriate 2.0 cubic feet of water per second from one well to be completed into the Prairie Coteau Aquifer (176 feet deep) located in the center of the SW 1/4 Section 24 for irrigation of 140 acres located in the SW 1/4 Section 24; all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7680-3 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 Water Management Board will consider Application No. 7680-3 at 10:30 AM on July 11, 2013, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave. Pierre SD. Parties will be provided written notice if there is a change to the hearing time or date. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based on the facts presented at the public hearing.

The July 11, 2013, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support the application. The request for an automatic delay must be filed by June 28, 2013. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to all petitioners regarding the time, date and location.

The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not

exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

Contact Eric Gronlund at the above Chief Engineer's address to request copies of the staff report, recommendation, application or any other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Enclosed is a copy of the report, recommendation, affidavit of publication and petition in the matter of Water Permit Application No. 7680-3. State law directs the Chief Engineer to provide Water Management Board members with a copy of all pleadings including petitions for each proceeding. This same information will be sent to the Board members in advance of the hearing. In addition, enclosed are two documents intended to acquaint parties with the hearing process entitled "Procedure for Hearings before the Water Management Board" and "Summary of South Dakota Water Laws and Rules". You are encouraged to review these documents prior to the hearing.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is May 13, 2013. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; Board Rules ARSD 74:02:01:01 thru 74:02:01:24.02 and ARSD Chapter 74:02:04.

Questions regarding the hearing process may be directed to Eric Gronlund, Water Rights Program at (605) 773-3352 or eric.gronlund@state.sd.us.

c: Diane Best, Assistant Attorney General

enclosures

CERTIFICATION

I hereby certify that on May 1, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice of Hearing dated May 1, 2013, regarding scheduling the hearing for Water Right Permit Application No. 7680-3, as addressed below:

Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104

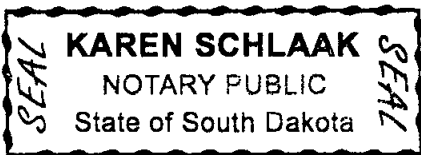

Gail Jacobson

Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 6th day of May, 2013


Karen Schlaak
Notary Public
My Commission expires April 1, 2013





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

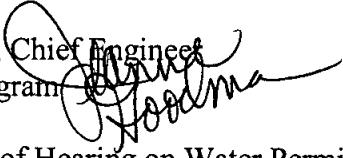
denr.sd.gov

June 24, 2013

NOTICE

TO: Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program 

SUBJECT: Automatic Delay of Hearing on Water Permit Application No. 7680-3,
Wendell Falk

A petition was received in response to the public notice for Water Permit Application No. 7680-3 filed by Wendell Falk for irrigation in Grant County. Notice of hearing was sent to parties on May 1, 2013, scheduling a July 11, 2013, hearing before the Water Management Board. Petitioner Kaaz has made formal request (copy enclosed) for postponement of the July 11, 2013, hearing date before the Water Management Board. Therefore, the hearing on Application No. 7680-3 is automatically delayed pursuant to SDCL 46-2A-4 and 46-2A-5 and will not be held on July 11, 2013.

The hearing to consider Application No. 7680-3 will now be scheduled for the October 2 - 3, 2013, Board meeting tentatively to be held in Pierre. Future notice of the time and place of the hearing for Application No. 7680-3 will be provided to all parties of record.

Questions regarding the hearing process may be directed to Eric Gronlund, Water Rights Program at (605) 773-3352 or eric.gronlund@state.sd.us.

c: Diane Best, Assistant Attorney General

enclosure

CERTIFICATION

I hereby certify that on June 24, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice regarding automatic delay dated June 24, 2013, regarding scheduling the hearing for Water Right Permit Application No. 7680-3, as addressed below:

Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104



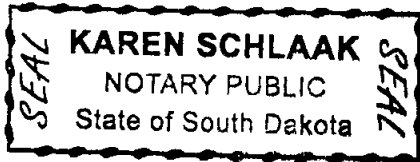
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 24th day of June, 2013



Karen Schlaak
Notary Public
My Commission expires April 1, 2013



June 22, 2013

RECEIVED

JUN 24 2013

WATER RIGHTS
PROGRAM

Department of Environment
And Natural Resources

To : Jeanne Goodman, Chief Engineer
Water Rights Program

Subject : Hearing on Water Permit Application No. 7680-3, Wendell Falk.

We request the the hearing on this Application No. 7680-3 for Wendell Falk
on July 11, 2013 at 10:30 AM be delayed, and rescheduled for a later date.
We have a conflict on this date.

Thank You

Darrold and Judy Kaaz
15319 455th Av.
Summit, S.D



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

September 3, 2013

NOTICE

TO: Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program 

SUBJECT: Scheduling of Hearing on Water Permit Application No. 7680-3,
Wendell Falk

Application No. 7680-3 filed by Wendell Falk proposes to appropriate 2.0 cubic feet of water per second from one well to be completed into the Prairie Coteau Aquifer (176 feet deep) located in the center of the SW 1/4 Section 24 for irrigation of 140 acres located in the SW 1/4 Section 24; all in T120N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation.

A petition in opposition was submitted to Water Permit Application No. 7680-3 in response to the Notice of Application published April 17, 2013, in the Grant County Review and Watertown Public Opinion. Subsequently, a notice of hearing was sent to parties on May 1, 2013, scheduling a July 11, 2013, hearing before the Water Management Board. The July 11th hearing was then postponed pursuant to SDCL 46-2A-5 based on the request by Petitioner Kaaz. This notice schedules the hearing before the Water Management Board to consider Application No. 7680-3.

The Water Management Board will conduct a hearing to consider Application No. 7680-3 at 10:30 AM (Central Time) on Thursday, October 3, 2013, at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. Applicable provisions of the Notice of Hearing dated May 1, 2013, will apply at the time of hearing. Future notice will be provided to all parties if there are changes to the hearing date or time.

Questions regarding the hearing process may be directed to Eric Gronlund, Water Rights Program at (605) 773-3352 or eric.gronlund@state.sd.us.

c: Diane Best, Assistant Attorney General

CERTIFICATION

I hereby certify that on September 3, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice, dated September 3, 2013, regarding scheduling the hearing for Water Right Permit Application No. 7680-3, as addressed below:

Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104



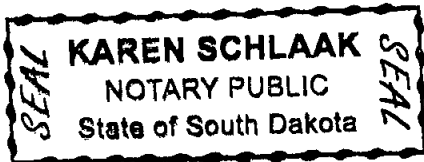
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 3rd day of September, 2013



Karen Schlaak
Notary Public
My Commission expires April 1, 2013





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

October 4, 2013

NOTICE

TO: Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Preparation of Findings of Fact, Conclusions of Law and Final Decision

The Water Management Board directed Diane Best, Assistant Attorney General to prepare proposed Findings of Fact, Conclusions of Law and a Final Decision in the matter of the approval of Water Permit Application No. 7680-3. The Board will consider adoption of Findings, Conclusions and Final Decision at 10:30 AM, on Thursday, December 5, 2013, in the Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol Avenue, Pierre SD. Notice will be provided if there is a change in the hearing date or time.

The Board requested that a copy of the proposed Findings, Conclusions and Final Decision be mailed to each Board member and parties by November 8, 2013. Written objections or comments in support of the proposed Findings, Conclusions and Final Decision, or alternative Findings, Conclusions and Final Decision are to be mailed to each Board member, the Board attorney (mailing list enclosed) and parties of record by November 25, 2013. Board counsel requests that the draft findings or alternative findings be provided in a WORD format file via email to jeff.hallem@state.sd.us.

At the Board's discretion, oral arguments by parties who timely filed written comments in opposition or support of the proposed Findings, Conclusions and Final Decision, or alternative Findings, Conclusions and Final Decision may be made on December 5, 2013. The public hearing was completed on October 3, 2013. No additional testimony will be received.

If you have questions about the findings process, please contact Eric Gronlund at (605) 773-3352.

Enclosure

c: Jeff Hallem, Assistant Attorney General
Diane Best, Assistant Attorney General

CERTIFICATION

I hereby certify that on October 4, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated October 4, 2013, regarding preparation of finding of fact, conclusions of law and final decision in the matter of the approval of Water Permit Application No. 7680-3., as addressed below:

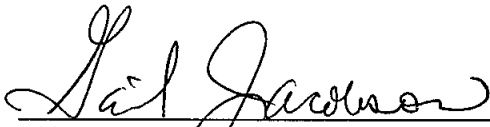
Wendell Falk
45384 154th Street
South Shore SD 57266

Darrold and Judy Kaaz
15319 455th Avenue
Summit SD 57266

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104

Sent inter-office mail to:

Jeff Hallem, Assistant Attorney General,
1302 East Highway 14, Suite 1
Pierre SD 57501-8501



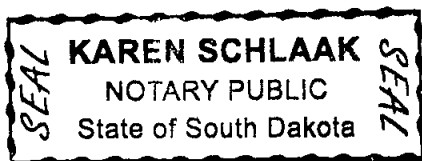
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 4th day of October, 2013



Karen Schlaak
Notary Public
My Commission expires April 1, 2019





OFFICE OF ATTORNEY GENERAL

317 N. Main Avenue
Sioux Falls, South Dakota 57104
Phone (605) 367-5880
FAX (605) 367-5886
www.state.sd.us/atg

MARTY J. JACKLEY
ATTORNEY GENERAL

CHARLES D. McGUIGAN
CHIEF DEPUTY

RECEIVED

OCT 23 2013

WATER RIGHTS
PROGRAM

October 21, 2013

Leo Holzbauer
PO Box 877
Wagner, SD 57380

Chad Comes
PO Box 308
Madison, SD 57042

Jeff Hallem
Water Mgmt. Board Atty.
1302 E. Hwy 14, Ste.1
Pierre, SD 57501

Rodney Freeman, Jr.
PO Box 176
Huron, SD 57350

Peggy Dixon
3311 Hogan Court
Rapid City, SD 57702

Everett Hoyt
4422 Carriage Hills Dr.
Rapid City, SD 57702

Tim Bjork
112 W. Oak Street
Pierre, SD 57501

Jim Hutmacher
802 East 7th Street
Oacoma, SD 57365

Re: *In the Matter of Water Permit Application No. 7680-3, Wendell Falk*

Dear Board Members and Board Counsel,

As directed by the Board at the October 3 hearing, I am enclosing proposed Findings of Fact, Conclusions of Law, and a Final Decision. Consistent with the Board's practice, I am providing the Board's attorney with an electronic copy in Word format. This is for the Board's consideration at its meeting on December 5.

I am also providing a copy to all parties.

Sincerely,

A handwritten signature in cursive script that reads "Diane Best".

Diane Best
Assistant Attorney General
Counsel for Water Rights Program

cc: Judy & Darrold Kaaz
Wendell Falk

RECEIVED
OCT 23 2013
WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF WATER	)	FINDINGS OF FACT,
PERMIT APPLICATION No. 7680-3,	)	CONCLUSIONS OF LAW
WENDELL FALK	)	AND FINAL DECISION

Hearing was held on October 3, 2013, before Board members Chad Comes (Chairman), Tim Bjork, Peggy Dixon, Rodney Freeman, Everett Hoyt, Jim Hutmacher, and Leo Holzbauer. Both the applicant, Wendell Falk, and the intervenors, Darrold and Judy Kaaz, appeared in person and without counsel. The Department of Environment and Natural Resources, Water Rights Program and its Chief Engineer (jointly "DENR") was represented by Diane Best.

The Board, having considered the testimony and exhibits presented and all records and documents on file, and having entered its oral decision and rulings on the parties' submissions, now enters the following:

FINDINGS OF FACT

1. Water Permit Application No. 7680-3 proposes to withdraw groundwater at a maximum diversion rate of 2.0 cubic feet of water per second (cfs) from one well. The well is expected to be 176 feet deep and is to be located in the center of the SW¼ of Section 24, T120N-R52W. The water will be used to irrigate 140 acres located in the SW¼ of Section 24, T120N-R52W, in Grant County (former Sisseton Wahpeton Indian Reservation).

2. The reference to the Sisseton Wahpeton Indian Reservation in the legal description is due to similar legal descriptions. There is another area in northeast South Dakota using the same township and range description that is

not within the former Sisseton Wahpeton Indian Reservation. The property involved here is not currently in an Indian reservation and is not owned by a tribal member or any tribe.

3. The Chief Engineer recommends approval.

4. Notice of the application was published in the Grant County Review and the Watertown Public Opinion on the same date, April 17, 2013. The notice provided that any petitions to intervene were to be filed by April 29, 2013. Darrold and Judy Kaaz filed a timely petition to intervene.

5. DENR issued a Notice of Hearing to all parties on May 1, 2013. The notice scheduled hearing for July 11, 2013. It further provided that if any party requested delay, the matter would automatically be delayed for at least 20 days. Intervenors Darrold and Judy Kaaz requested the delay and hearing was rescheduled for October 3, 2013.

6. DENR engineer Joe Stonesifer testified regarding the hydrology and lithology of this area. He relied on lithologic logs filed with the South Dakota Geological Survey, previous United States Geological Survey Studies, information obtained from observation wells installed and maintained by DENR, information that DENR has received from other irrigators in this aquifer, well completion reports filed with DENR for wells drilled in the area, and his own previous analysis from prior water permit applications in the area. He was the only expert to testify and the Board credits his testimony concerning the hydrology and lithology of this area.

7. The well to be used will be completed into the Prairie Coteau Aquifer. The aquifer is a surficial aquifer composed of discontinuous sand and gravel outwash deposits. These outwash deposits are collectively known as a single aquifer due to their similar characteristics. This portion of the aquifer underlies about 184,500 acres, mostly in Roberts, Grant, and Codington Counties.

8. In the area of the proposed well site, the Big Sioux Aquifer may be located above the Prairie Coteau aquifer.

9. This portion of the aquifer appears to be under artesian conditions throughout, and the potentiometric surface in the aquifer generally ranges from flowing to 90 feet below ground surface, at an elevation generally ranging from 1,725 to 1,875 feet mean sea level (fmsl).

10. A 1992 test hole log was submitted with the application and it shows sand and gravel from 163 to 176.5 feet below ground surface, which translates to 1,692 to 1,678.5 fmsl. The recorded static water level was nine feet below ground surface.

11. In examining water availability, this Board must consider whether the average annual withdrawal of water would exceed the average annual recharge to the aquifer if the permit was granted.

12. Recharge to this portion of the Prairie Coteau aquifer occurs through leakage from till, the overlying Big Sioux aquifer, and the Coteau Lakes aquifer which occur immediately north of the Prairie Coteau aquifer. Recharge for this portion of the aquifer has not been quantified. However,

based on his analysis of other confined aquifers and review of governmental reports on recharge rates for aquifers, Stonesifer's opinion is that a suggested recharge rate range of 0.15 to 0.60 inches per year (in/yr) should be used. Based on that range of recharge rates and the area of the aquifer, the average annual recharge would range from 2,306 to 9,224 acre feet per year (ac-ft/yr).

13. Discharge from this portion of the Prairie Coteau aquifer occurs primarily by well withdrawals for domestic, commercial, and irrigation use.

14. There are many well completion reports on file with DENR for domestic wells that appear to be completed into the Prairie Coteau aquifer. Based on the Stonesifer report, the annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

15. There are two permits from this aquifer for commercial use (Norswiss Dairy and Redlin Farms). The total annual withdrawal from this portion of the Prairie Coteau aquifer by non-irrigation use is estimated at less than 131 ac-ft/yr.

16. There are 21 irrigation permits from this portion of the Aquifer. The irrigation development of this portion of the Prairie Coteau aquifer has steadily increased over the period of record, 1979 to 2011. The annual withdrawal fluctuates, which is probably mostly dependent on annual growing season climatic conditions. The average irrigation pumpage reported is 889 ac-ft/yr. The average application rate equals 5.56 inches per acre (in/ac). Since 2011, four water permits have been authorized and one is pending. When applying the average annual application rate to the recently granted permits

and the pending permit, an additional 287 ac-ft/yr would be added to the average.

17. Considering both the commercial and irrigation uses (including those recently granted and pending), the average annual withdrawal from this portion of the aquifer is estimated to be less than 1,307 ac-ft/yr.

18. In addition to the foregoing, the maximum water requested for the pending application would be 280 ac-ft/year (2 ac-ft/yr for each acre), although it is expected that the average annual withdrawal for this permit will be less, given the average application rate for irrigation from this aquifer is 5.56 inches per acre annually on an aquifer-wide basis. The actual use for this irrigation is expected to vary based on climate.

19. When the maximum use proposed by this application is added to the annual withdrawal of 1,307 ac-ft/yr, the total withdrawal would be equivalent to recharge to this aquifer of 0.11 in/yr. This is lower than even the most conservative recharge rate of 0.15 in/yr reported by Stonesifer. Under this analysis, it is not expected that the permit, if granted, would cause the withdrawals to exceed the average annual recharge for this aquifer.

20. Stonesifer also examined the recharge/withdrawal question by considering DENR observation well data.

21. DENR monitors 55 observation wells completed into the Prairie Coteau aquifer, with 13 of these completed into the portion of the aquifer at issue. The observation well hydrographs are very similar to one another, including the four observation wells closest to the property involved in this

matter. The nearest observation well, GT-77A, is approximately one mile northeast of the proposed well site.

22. The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. The effects of pumping in the aquifer are obvious, which is due to the artesian conditions of this portion of the aquifer. Temporal effects of well withdrawal from the aquifer are masked by climatic conditions, indicating that recharge to and natural discharge from the aquifer greatly exceeds well withdrawal. Over the period of record, water levels in this portion of the aquifer have remained fairly steady.

23. Either method used by Stonesifer independently demonstrates that granting the water permit at issue would not cause the average annual withdrawals to exceed average annual recharge to the aquifer.

24. Unappropriated water is available from the Prairie Coteau aquifer to support the proposed appropriation.

25. This Board also considers whether there is a reasonable probability that the water diversion requested can be made without adversely impacting existing water rights or domestic wells.

26. The portion of the aquifer at issue is under artesian conditions. This Board has consistently recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur, and the Board does not does not necessarily protect artesian head pressure as a means of groundwater delivery. However, adequate domestic wells (as defined by Board

rule) are not to be adversely affected. The proposed irrigation well will be located near other wells that obtain water from the same aquifer. There are five water rights/permits within two miles of the proposed well site.

27. In general, the hydrographs document the effects of pumping; however, these effects have been relatively minimal over the period of record, and water levels have always recovered once irrigation has ceased. Therefore, at the distances involved, there is a reasonable probability that any well interference from the proposed appropriation will not adversely or unlawfully impair existing nearby wells.

28. Intervenor Darrold Kaaz expressed concern that the applicant's irrigation use would diminish the water supply in the Kaaz domestic well. The Kaaz well is approximately 4,500 feet northeast of the applicant's proposed well. DENR observation GT-77A is about 500 feet further east, being across the road east of the Kaaz farm dwelling.

29. The Kaaz domestic well withdraws water from the same aquifer at issue here. Based on the 1981 well log for the Kaaz well, it appears to be an adequate domestic well. It is, however, unlikely to be impaired by the irrigation system at issue due to the distance involved. This is based on a distance-drawdown analysis using the Theis equation conducted by Stonesifer. It shows that when the applicant's irrigation well is pumped at the maximum rate for the maximum period of time allowed under the permit, the water in the Kaaz well would still be 21 feet above the top of the aquifer. The Kaaz well would be able to pump water. Further, based on the driller's well log filed with the

DENR in 1981 for the Kaaz well, the well casing or borehole is even deeper and the Kaaz pump could be lowered.

30. The Theis equation is a standard engineering method for calculating water drawdown.

31. Water in the Kaaz well is unlikely to be diminished by pumping from the Prairie Coteau aquifer by the applicant.

32. Although interference is unlikely, the Board qualifies this permit out of an abundance of caution so as to protect any domestic users who have nearby adequate wells in the same aquifer. The condition would protect against adverse interference in any nearby adequate domestic wells, including not only the Kaaz well, but also any that are unknown to the DENR (i.e. wells constructed before well drillers were required to file well completion reports for newly drilled wells starting in the 1970's) or any adequate domestic wells drilled in the future that are close to the applicant's well.

33. Darrold Kaaz also testified that he is concerned about the effect of the Applicant's irrigation on his nearby stock dam or dugout. His stock dam or dugout is around 13 feet deep and is located in a waterway on the Kaaz property. DENR witness Joe Stonesifer testified that dugouts/stock dams obtaining water from surface water would not involve the same water source as the groundwater that the Applicant proposes to use under the permit.

34. The Kaaz stock dam or dugout is not an "adequate domestic well."

35. There is a reasonable probability that the diversion rate requested can be made without adversely impacting existing water rights or domestic wells, particularly when considering the domestic use qualification.

36. The Board also considers beneficial use. This involves examining whether the use would be beneficial in the eyes of the appropriator as well as in terms of the interest of the public in the best use of water supplies.

37. The use of water, as requested, would undoubtedly be beneficial to the applicant. The applicant intends to use the water for irrigation and increasing crop yields would be beneficial to the applicant.

38. The Board has repeatedly found that irrigation is in the interest of the public in the utilization of water supplies. So far as beneficial use is involved, this matter is no different than the dozens (or hundreds) of irrigation applications the Board has considered in the past. In particular, the Board is mindful that water use should be put to the maximum beneficial use given the arid climate in South Dakota. The proposed irrigation is a beneficial use.

39. Public interest is another factor. On the whole, the public interest is better served by allowing the aquifer to be used for a beneficial use like irrigation than to allow the water to remain unused.

40. Based on the above Findings of Fact, the Board makes the following:

CONCLUSIONS OF LAW

1. The Board has jurisdiction over this matter. The present application falls within the Board's responsibility over water appropriation and regulation in Title 46, more specifically SDCL 46-2A-9.

2. Publication was properly made in the Grant County Review and the Watertown Public Opinion under SDCL 46-2A-23 and SDCL 46-2A-4.

3. Under ARSD 74:02:01:12.04, the deadline for filing petitions to intervene in this matter was April 29, 2013. This intervention date was published as required by SDCL 46-2A-4. Darrold and Judy Kaaz intervened on a timely basis.

4. Notice of Hearing was sent to the applicant and to the intervenors, Darrold and Judy Kaaz. The Notice of Hearing was proper under SDCL 46-2A-4 and SDCL 1-26-17.

5. The Chief Engineer has recommended approval. Joe Stonesifer, a DENR engineer with expertise in water issues, testified in support of the recommendation. The recommendation is not, however, binding on the Board. SDCL 46-2A-4(8).

6. Each of the elements in SDCL 46-2A-9 must be proven in order for this Board to grant the requested permit. SDCL 46-2A-9 provides that 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.”

7. The first element in SDCL 46-2A-9 is whether there is water available for the appropriation. This analysis requires consideration of SDCL 46-6-3.1. The water permit cannot be granted if, based on the best available information, water diversions under the permit would cause the average annual withdrawals from the aquifer to exceed the average annual recharge.

8. Administrative Rule of South Dakota Section 74:02:05:07 requires that, in addition to any other information, “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

9. Based on the observation well data and the calculations performed by engineer Stonesifer (which is the best available information), the average annual withdrawals would not exceed recharge if the water permit is granted.

10. There is water available for the appropriation at issue.

11. The second element in SDCL 46-2A-9 is whether the proposed water use would impair existing rights.

12. The proposal here would not impair existing water rights as addressed in the Findings of Fact and as set forth in the following Conclusions.

13. Although some drawdown may occur in the artesian aquifer when irrigation occurs, state law does not automatically protect artesian head pressure as a means of delivery to nearby water wells or water diversions. SDCL 46-6-6.1. As such, a certain amount of drawdown may occur in nearby wells or diversions without being considered an impairment of water rights. In such situations, some existing well owners may need to lower their pumps (or install pumps) to accommodate for lower water levels.

14. The Board does protect against adverse impairment to adequate wells. An adequate well is one that is defined as 74:02:04:20(6) as:

[A] well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.

15. In order to balance interests between irrigation use and delivery of water by artesian pressure to domestic wells, this Board has defined an "adversely impacted domestic well" in ARSD 74:02:04:20(7):

[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 need."

16. There is a reasonable probability that the diversion requested by this particular application can be made without adversely affecting existing water rights/permits and domestic users. This includes the Kaaz well. Out of an abundance of caution, this Board imposes a condition on the permit to protect domestic users who have adequate wells.

17. The Kaaz claims of diminishment in their water well do not constitute "impairment of existing rights" that would warrant denying the requested permit under SDCL 46-2A-9, particularly in light of the domestic use condition on the permit.

18. The Kaaz claims of diminishment in stock dams or dug outs in the area do not constitute impairment of existing rights. The Kaaz stock dam is in a waterway. A dam supported by surface water would not be impaired by this groundwater application. Further, even if the structure was actually a groundwater diversion, it would not be considered to be an adequate well or domestic well for which ARSD 74:02:04:20(7) would apply.

19. The application, when conditioned as recommended by the Chief Engineer, would not impair any existing rights or domestic users.

20. The third element in SDCL 46-2A-9 is whether the use of water would be a beneficial use. In this context, a beneficial use of water is one that is reasonable and useful and beneficial to the appropriator

and that is consistent with the interest of the public in the best utilization of water supplies. SDCL 46-1-6(3).

21. The use of water, as requested, would be beneficial to the applicant; the purpose is to increase crop yields.

22. The other part of the beneficial use test is whether the water use is in the interest of the public in terms of the best utilization of water supplies. SDCL 46-1-6(3). This Board considers three factors in this case:

- a. Irrigation is, in general, a beneficial use since enhanced production is an economic benefit to the state and local economy. This benefit is no different here than the dozens (or hundreds) of irrigation applications the Board has previously considered in the past.
- b. The maximum that the applicant could legally use for this permit would be 2 AF per acre and one cfs per 70 acres pursuant to SDCL 46-5-6. This proposed permit does not authorize waste of water.
- c. Water should be put to the maximum beneficial use given the arid climate in South Dakota. SDCL 46-1-4. Reserving water in an aquifer and keeping it from being applied to maximum beneficial use is generally inconsistent with SDCL 46-1-4 and SDCL 46-1-2.

23. This application meets the beneficial use criteria.

24. The fourth element of SDCL 46-2A-9 pertains to public interest. The public interest element requires weighing the general public interest in the local economy associated with farming and irrigation along with any other public interest issues presented. The application is in the public interest.

25. Based on the entirety of the record, the application meets the standard in SDCL 46-2A-9 and should be granted, subject to the recommendations proposed by the Chief Engineer.

26. Based on the foregoing Findings of Fact and Conclusions of Law, the Board enters the following:

FINAL DECISION AND ORDER

Permit Application No. 7680-3 is granted subject to the following permit qualifications:

1. The wells approved under this Permit 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. The well authorized by Permit No. 7680-3 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.

Dated this _____ day of December, 2013.

BY THE BOARD:

Rodney Freeman, Chairman
South Dakota Water Management Board

SOUTH DAKOTA WATER MANAGEMENT BOARD


Diane Best
Assistant Attorney General
317 N. Main Avenue
Sioux Falls, SD 57104-6004



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

November 26, 2013

NOTICE

TO: Wendell Falk Darrold and Judy Kaaz
45384 154th Street 15319 455th Avenue
South Shore SD 57266 Summit SD 57266

FROM: *for* Jeanne Goodman, Chief Engineer *Eric Gronlund*
Water Rights Program

SUBJECT: Consideration of Findings of Fact, Conclusions of Law and Final Decision

The Water Management Board meeting for Thursday, December 5, 2013, has been changed to a telephone conference call. The Board will now consider Findings of Fact, Conclusions of Law and a Final Decision in the matter of the approval of Water Permit Application No. 7680-3 at 10:30 AM (CST) on December 5, 2013 by telephone conference call.

To participate in the meeting connect to the conference as follows.

Meet Me Conference Information:

Date: 5 Dec. 2013 - Thursday
Start Time: 10:30 AM CST
Dial In Phone Number: 605-773-2323
Conference Password: 4450#

If you have a problem connecting to the conference call, please dial the conference operator at 605-773-3011.

At the Board's discretion, oral arguments by parties who timely filed written comments in opposition or support of the proposed Findings, Conclusions and Final Decision, or alternative Findings, Conclusions and Final Decision may be made on December 5, 2013. The public hearing was completed on October 3, 2013. No additional testimony will be received.

If you have questions, please contact Eric Gronlund at (605) 773-3352.

c: Jeff Hallem, Assistant Attorney General
Diane Best, Assistant Attorney General

CERTIFICATION

I hereby certify that on November 26, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated November 26, 2013, regarding the hearing on consideration of finding of fact, conclusions of law and final decision in the matter of the approval of Water Permit Application No. 7680-3 being held by conference call as addressed below:

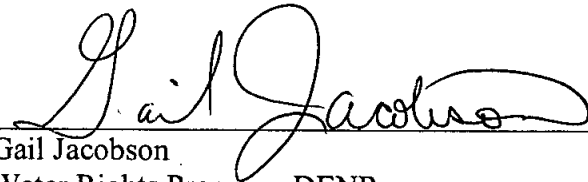
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15319 455th Avenue
Summit SD 57266

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104

Sent inter-office mail to:

Jeff Hallem, Assistant Attorney General,
1302 East Highway 14, Suite 1
Pierre SD 57501-8501



Gail Jacobson

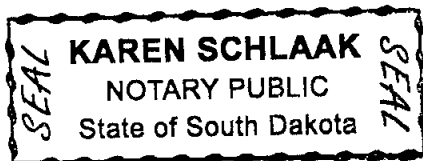
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 26th day of November, 2013



Karen Schlaak
Notary Public
My Commission expires April 1, 2019





OFFICE OF ATTORNEY GENERAL

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Pierre, South Dakota 57501-8501
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MARTY J. JACKLEY
ATTORNEY GENERAL

RECEIVED

DEC - 2 2013

WATER RIGHTS
PROGRAM

CHARLES D. McGUIGAN
CHIEF DEPUTY ATTORNEY GENERAL

November 27, 2013

✓ Chief Engineer Jeanne Goodman
Water Rights Program
DENR
523 East Capitol Avenue
Pierre, SD 57501-3181

Diane Best
Assistant Attorney General
317 N. Main Avenue
Sioux Falls, SD 57104-6004

Wendell Falk
45384 154th Street
South Shore, SD 57263

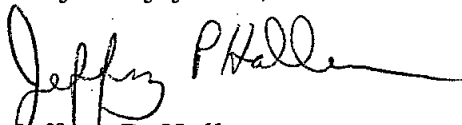
Darrold & Judy Kaaz
15319 455th Avenue
Summit, SD 57266

Re: In the Matter of Water Permit Application No. 7680-3, Wendell Falk

Dear Ms. Best and Parties:

Enclosed please find the proposed Water Management Board Rulings on Parties' Submissions and proposed Findings of Fact, Conclusions of Law, and Final Decision and Order I have prepared in the above matter. The documents were prepared consistent with the statements made at the October 3, 2013, meeting of the South Dakota Water Management Board. The Board will consider case proposals at its December 5, 2013, meeting. It is within the Board's discretion whether oral arguments by the parties will be afforded prior to consideration of the matter.

Very truly yours,


Jeffrey P. Hallem
Assistant Attorney General

JPH:jkp
Enclosures
cc w/encs.: Water Management Board

STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF WATER	)	WATER MANAGEMENT BOARD'S
PERMIT APPLICATION No. 7680-3,	)	RULINGS ON
WENDELL FALK	)	PARTIES' SUBMISSIONS

Pursuant to the direction of the Water Management Board, counsel for DENR, Water Rights Program (DENR) submitted Findings of Fact, Conclusions of Law and Final Decision in the above-entitled matter. Neither Applicant nor Intervenor, Darrold and Judy Kaaz, submitted additional proposed Findings of Fact, Conclusions of Law, or objections to DENR's proposed Findings of Fact, Conclusions of Law and Final Decision. The Board, upon review of the submission received, the administrative record, and having orally entered its decision, enters the following rulings:

A. DENR's proposed Findings of Fact Numbers 1 – 39 are accepted by the Board as consistent with and supported by the administrative record and the Board's oral decision.

B. DENR's proposed Finding of Fact No. 40 is not a Finding of Fact.

C. DENR's proposed Conclusions of Law Numbers 1 – 25 are accepted by the Board as consistent with and supported by the administrative record, the Board's oral decision, and the Findings of Fact adopted by the Board in Ruling A.

D. DENR's proposed Conclusion of Law No. 26 is not a Conclusion of Law.

E. DENR's proposed Final Decision and Order is accepted by the Board as consistent with and supported by the administrative record, the Board's oral decision, and the Findings of Fact and Conclusions of Law adopted by the Board in the above rulings.

The Board's attorney is directed to prepare Findings of Fact, Conclusions of Law, and Final Decision consistent with the above Rulings to be executed by the Chair of the Board or the Board's designee without further notice or hearing.

Dated this _____ day of December, 2013.

BY THE BOARD:

Chad Comes, Chair
SD Water Management Board

SOUTH DAKOTA WATER MANAGEMENT BOARD

The undersigned hereby certifies that true and correct copies of the Water Management Board's Rulings on Parties' Submissions, and proposed Findings of Fact, Conclusions of Law, and Final Decision in the above entitled matter were served on the following by enclosing the same in envelopes with first class postage, prepaid and affixed thereto, and depositing said envelopes in the United States mail, at Pierre, South Dakota on November 27, 2013:

Rodney Freeman, Jr.
P.O. Box 176
Huron, SD 57350

Leo Holzbauer
P.O. Box 877
Wagner, SD 57380

Tim Bjork
112 W. Oak Street
Pierre, SD 57501

Darrold and Judy Kaaz
15319 455th Avenue
Summit, SD 57266

Wendell Falk
45384 154th Street
South Shore, SD 57263


Jeffrey P. Hallem
Assistant Attorney General
1302 E. Highway 14, Suite 1
Pierre, SD 57501-8501

STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF WATER	)	WATER MANAGEMENT BOARD'S
PERMIT APPLICATION No. 7680-3,	)	FINDINGS OF FACT,
WENDELL FALK	)	CONCLUSIONS OF LAW,
	)	AND FINAL DECISION

Hearing was held on October 3, 2013, before Board members Chad Comes (Chairman), Tim Bjork, Peggy Dixon, Rodney Freeman, Everett Hoyt, Jim Hutmacher, and Leo Holzbauer. Both the applicant, Wendell Falk, and the intervenors, Darrold and Judy Kaaz, appeared in person and without counsel. The Department of Environment and Natural Resources, Water Rights Program and its Chief Engineer (jointly "DENR") were represented by Diane Best.

The Board, having considered the testimony and exhibits presented and all records and documents on file, and having entered its oral decision and rulings on the parties' submissions, now enters the following:

FINDINGS OF FACT

1. Water Permit Application No. 7680-3 proposes to withdraw groundwater at a maximum diversion rate of 2.0 cubic feet of water per second (cfs) from one well. The well is expected to be 176 feet deep and is to be located in the center of the SW¼ of Section 24, T120N-R52W. The water will be used to irrigate 140 acres located in the SW¼ of Section 24, T120N-R52W, in Grant County (former Sisseton Wahpeton Indian Reservation).

2. The reference to the Sisseton Wahpeton Indian Reservation in the legal description is due to similar legal descriptions. There is another area in northeast South Dakota using the same township and range description that is

involved here is not currently in an Indian reservation and is not owned by a tribal member or any tribe.

3. The Chief Engineer recommends approval.

4. Notice of the application was published in the Grant County Review and the Watertown Public Opinion on the same date, April 17, 2013. The notice provided that any petitions to intervene were to be filed by April 29, 2013.

Darrold and Judy Kaaz filed a timely petition to intervene.

5. DENR issued a Notice of Hearing to all parties on May 1, 2013. The notice scheduled hearing for July 11, 2013. It further provided that if any party requested delay, the matter would automatically be delayed for at least 20 days. Intervenors Darrold and Judy Kaaz requested the delay and hearing was rescheduled for October 3, 2013.

6. DENR engineer Joe Stonesifer testified regarding the hydrology and lithology of this area. He relied on lithologic logs filed with the South Dakota Geological Survey, previous United States Geological Survey Studies, information obtained from observation wells installed and maintained by DENR, information that DENR has received from other irrigators in this aquifer, well completion reports filed with DENR for wells drilled in the area, and his own previous analysis from prior water permit applications in the area. He was the only expert to testify and the Board credits his testimony concerning the hydrology and lithology of this area.

7. The well to be used will be completed into the Prairie Coteau Aquifer. The aquifer is a surficial aquifer composed of discontinuous sand and gravel outwash deposits. These outwash deposits are collectively known as a single

aquifer due to their similar characteristics. This portion of the aquifer underlies about 184,500 acres, mostly in Roberts, Grant, and Codington Counties.

8. In the area of the proposed well site, the Big Sioux Aquifer may be located above the Prairie Coteau aquifer.

9. This portion of the aquifer appears to be under artesian conditions throughout, and the potentiometric surface in the aquifer generally ranges from flowing to 90 feet below ground surface, at an elevation generally ranging from 1,725 to 1,875 feet mean sea level (fmsl).

10. A 1992 test hole log was submitted with the application and it shows sand and gravel from 163 to 176.5 feet below ground surface, which translates to 1,692 to 1,678.5 fmsl. The recorded static water level was nine feet below ground surface.

11. In examining water availability, this Board must consider whether the average annual withdrawal of water would exceed the average annual recharge to the aquifer if the permit was granted.

12. Recharge to this portion of the Prairie Coteau aquifer occurs through leakage from till, the overlying Big Sioux aquifer, and the Coteau Lakes aquifer, which occur immediately north of the Prairie Coteau aquifer. Recharge for this portion of the aquifer has not been quantified. However, based on his analysis of other confined aquifers and review of governmental reports on recharge rates for aquifers, Stonesifer's opinion is that a suggested recharge rate range of 0.15 to 0.60 inches per year (in/yr) should be used. Based on that range of recharge rates and the area of the aquifer, the average annual recharge would range from 2,306 to 9,224 acre feet per year (ac-ft/yr).

13. Discharge from this portion of the Prairie Coteau aquifer occurs primarily by well withdrawals for domestic, commercial, and irrigation use.

14. There are many well completion reports on file with DENR for domestic wells that appear to be completed into the Prairie Coteau aquifer. Based on the Stonesifer report, the annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

15. There are two permits from this aquifer for commercial use (Norswiss Dairy and Redlin Farms). The total annual withdrawal from this portion of the Prairie Coteau aquifer by non-irrigation use is estimated at less than 131 ac-ft/yr.

16. There are 21 irrigation permits from this portion of the aquifer. The irrigation development of this portion of the Prairie Coteau aquifer has steadily increased over the period of record, 1979 to 2011. The annual withdrawal fluctuates, which is probably mostly dependent on annual growing season climatic conditions. The average irrigation pumpage reported is 889 ac-ft/yr. The average application rate equals 5.56 inches per acre (in/ac). Since 2011, four water permits have been authorized and one is pending. When applying the average annual application rate to the recently granted permits and the pending permit, an additional 287 ac-ft/yr would be added to the average.

17. Considering both the commercial and irrigation uses (including those recently granted and pending), the average annual withdrawal from this portion of the aquifer is estimated to be less than 1,307 ac-ft/yr.

18. In addition to the foregoing, the maximum water requested for the pending application would be 280 ac-ft/year (2 ac-ft/yr for each acre), although

18. In addition to the foregoing, the maximum water requested for the pending application would be 280 ac-ft/year (2 ac-ft/yr for each acre), although it is expected that the average annual withdrawal for this permit will be less, given the average application rate for irrigation from this aquifer is 5.56 inches per acre annually on an aquifer-wide basis. The actual use for this irrigation is expected to vary based on climate.

19. When the maximum use proposed by this application is added to the annual withdrawal of 1,307 ac-ft/yr, the total withdrawal would be equivalent to recharge to this aquifer of 0.11 in/yr. This is lower than even the most conservative recharge rate of 0.15 in/yr reported by Stonesifer. Under this analysis, it is not expected that the permit, if granted, would cause the withdrawals to exceed the average annual recharge for this aquifer.

20. Stonesifer also examined the recharge/withdrawal question by considering DENR observation well data.

21. DENR monitors 55 observation wells completed into the Prairie Coteau aquifer, with 13 of these completed into the portion of the aquifer at issue. The observation well hydrographs are very similar to one another, including the four observation wells closest to the property involved in this matter. The nearest observation well, GT-77A, is approximately one mile northeast of the proposed well site.

22. The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. The effects of pumping in the aquifer are obvious and due to the artesian conditions of this portion of the aquifer. Temporal effects of well withdrawal from the aquifer are

aquifer greatly exceeds well withdrawal. Over the period of record, water levels in this portion of the aquifer have remained fairly steady.

23. Either method used by Stonesifer independently demonstrates that granting the water permit at issue would not cause the average annual withdrawals to exceed average annual recharge to the aquifer.

24. There is a reasonable probability that unappropriated water is available from the Prairie Coteau aquifer to support the proposed appropriation.

25. This Board also considers whether there is a reasonable probability that the water diversion requested can be made without adversely impacting existing water rights or domestic wells.

26. The portion of the aquifer at issue is under artesian conditions. This Board has consistently recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur, and the Board does not necessarily protect artesian head pressure as a means of groundwater delivery. However, adequate domestic wells (as defined by Board rule) are not to be adversely affected. The proposed irrigation well will be located near other wells that obtain water from the same aquifer. There are five water rights/permits within two miles of the proposed well site.

27. In general, the hydrographs document the effects of pumping; however, these effects have been relatively minimal over the period of record, and water levels have always recovered once irrigation has ceased. Therefore, at the distances involved, there is a reasonable probability that any well interference from the proposed appropriation will not adversely or unlawfully impair existing nearby wells.

28. Intervenor Darrold Kaaz expressed concern that the applicant's irrigation use would diminish the water supply in the Kaaz domestic well. The Kaaz well is approximately 4,500 feet northeast of the applicant's proposed well. DENR observation GT-77A is about 500 feet further east, being across the road east of the Kaaz farm dwelling.

29. The Kaaz domestic well withdraws water from the same aquifer at issue here. Based on the 1981 well log for the Kaaz well, it appears to be an adequate domestic well. It is, however, unlikely to be impaired by the irrigation system at issue due to the distance involved. This is based on a distance-drawdown analysis using the Theis equation conducted by Stonesifer. It shows that when the applicant's irrigation well is pumped at the maximum rate for the maximum period of time allowed under the permit, the water in the Kaaz well would still be 21 feet above the top of the aquifer. The Kaaz well would be able to pump water. Further, based on the driller's well log filed with the DENR in 1981 for the Kaaz well, the well casing or borehole is even deeper and the Kaaz pump could be lowered.

30. The Theis equation is a standard engineering method for calculating water drawdown.

31. Water in the Kaaz well is unlikely to be diminished by pumping from the Prairie Coteau aquifer by the applicant.

32. Although interference is unlikely, the Board qualifies this permit out of an abundance of caution so as to protect any domestic users who have nearby adequate wells in the same aquifer. The condition would protect against adverse interference in any nearby adequate domestic wells, including not only the Kaaz

well, but also any that are unknown to the DENR (i.e. wells constructed before well drillers were required to file well completion reports for newly drilled wells starting in the 1970's) or any adequate domestic wells drilled in the future that are close to the applicant's well.

33. Darrold Kaaz also testified that he is concerned about the effect of the applicant's irrigation on his nearby stock dam or dugout. His stock dam or dugout is around 13 feet deep and is located in a waterway on the Kaaz property. DENR witness Joe Stonesifer testified that dugouts/stock dams obtaining water from surface water would not involve the same water source as the groundwater that the applicant proposes to use under the permit.

34. The Kaaz stock dam or dugout is not an "adequate domestic well."

35. There is a reasonable probability that the diversion rate requested can be made without adversely impacting existing water rights or domestic wells, particularly when considering the domestic use qualification.

36. The Board also considers beneficial use. This involves examining whether the use would be beneficial in the eyes of the appropriator as well as in terms of the interest of the public in the best use of water supplies.

37. The use of water, as requested, would undoubtedly be beneficial to the applicant. The applicant intends to use the water for irrigation and increasing crop yields would be beneficial to the applicant.

38. The Board has repeatedly found that irrigation is in the interest of the public in the utilization of water supplies. So far as beneficial use is involved, this matter is no different than the dozens (or hundreds) of irrigation applications the Board has considered in the past. In particular, the Board is

mindful that water use should be put to the maximum beneficial use given the arid climate in South Dakota. The proposed irrigation is a beneficial use.

39. Public interest is another factor. On the whole, the public interest is better served by allowing the aquifer to be used for a beneficial use like irrigation than to allow the water to remain unused.

Based on the above Findings of Fact, the Board makes the following:

CONCLUSIONS OF LAW

1. The Board has jurisdiction over this matter. The present application falls within the Board's responsibility over water appropriation and regulation in Title 46, more specifically SDCL 46-2A-9.

2. Publication was properly made in the Grant County Review and the Watertown Public Opinion under SDCL 46-2A-23 and SDCL 46-2A-4.

3. Under ARSD 74:02:01:12.04, the deadline for filing petitions to intervene in this matter was April 29, 2013. This intervention date was published as required by SDCL 46-2A-4. Darrold and Judy Kaaz intervened on a timely basis.

4. Notice of Hearing was sent to the applicant and to the intervenors, Darrold and Judy Kaaz. The Notice of Hearing was proper under SDCL 46-2A-4 and SDCL 1-26-17.

5. The Chief Engineer has recommended approval. Joe Stonesifer, a DENR engineer with expertise in water issues, testified in support of the recommendation. The recommendation is not, however, binding on the Board. SDCL 46-2A-4(8).

6. Each of the elements in SDCL 46-2A-9 must be proven in order for this Board to grant the requested permit. SDCL 46-2A-9 provides that 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.”

7. The first element in SDCL 46-2A-9 is whether there is water available for the appropriation. This analysis requires consideration of SDCL 46-6-3.1. The water permit cannot be granted if, based on the best available information, water diversions under the permit would cause the average annual withdrawals from the aquifer to exceed the average annual recharge.

8. Administrative Rule of South Dakota Section 74:02:05:07 requires that, in addition to any other information, “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

9. Based on the observation well data and the calculations performed by engineer Stonesifer (which is the best available information), the average annual withdrawals would not exceed recharge if the water permit is granted.

10. There is water available for the appropriation at issue.

11. The second element in SDCL 46-2A-9 is whether the proposed water use would impair existing rights.

12. The proposal here would not impair existing water rights as addressed in the Findings of Fact and as set forth in the following Conclusions.

13. Although some drawdown may occur in the artesian aquifer when irrigation occurs, state law does not automatically protect artesian head pressure as a means of delivery to nearby water wells or water diversions. SDCL 46-6-6.1. As such, a certain amount of drawdown may occur in nearby wells or diversions without being considered an impairment of water rights. In such situations, some existing well owners may need to lower their pumps (or install pumps) to accommodate for lower water levels.

14. The Board does protect against adverse impairment to adequate wells. An adequate well is one that is defined as 74:02:04:20(6) as:

[A] well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.

15. In order to balance interests between irrigation use and delivery of water by artesian pressure to domestic wells, this Board has defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7):

[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 need."

16. There is a reasonable probability that the diversion requested by this particular application can be made without adversely affecting existing water rights/permits and domestic users. This includes the Kaaz well. Out of an abundance of caution, this Board imposes a condition on the permit to protect domestic users who have adequate wells.

17. The Kaaz claims of diminishment in their water well do not constitute "impairment of existing rights" that would warrant denying the requested permit under SDCL 46-2A-9, particularly in light of the domestic use condition on the permit.

18. The Kaaz claims of diminishment in stock dams or dug outs in the area do not constitute impairment of existing rights. The Kaaz stock dam is in a waterway. A dam supported by surface water would not be impaired by this groundwater application. Further, even if the structure was actually a groundwater diversion, it would not be considered to be an adequate well or domestic well for which ARSD 74:02:04:20(7) would apply.

19. The application, when conditioned as recommended by the Chief Engineer, would not impair any existing rights or domestic users.

20. The third element in SDCL 46-2A-9 is whether the use of water would be a beneficial use. In this context, a beneficial use of water is one that is reasonable and useful and beneficial to the appropriator and that is

consistent with the interest of the public in the best utilization of water supplies. SDCL 46-1-6(3).

21. The use of water, as requested, would be beneficial to the applicant; the purpose is to increase crop yields.

22. The other part of the beneficial use test is whether the water use is in the interest of the public in terms of the best utilization of water supplies. SDCL 46-1-6(3). This Board considers three factors in this case:

- a. Irrigation is, in general, a beneficial use since enhanced production is an economic benefit to the state and local economy. This benefit is no different here than the dozens (or hundreds) of irrigation applications the Board has previously considered in the past.
- b. The maximum that the applicant could legally use for this permit would be 2 AF per acre and one cfs per 70 acres pursuant to SDCL 46-5-6. This proposed permit does not authorize waste of water.
- c. Water should be put to the maximum beneficial use given the arid climate in South Dakota. SDCL 46-1-4. Reserving water in an aquifer and keeping it from being applied to maximum beneficial use is generally inconsistent with SDCL 46-1-4 and SDCL 46-1-2.

23. This application meets the beneficial use criteria.

24. The fourth element of SDCL 46-2A-9 pertains to public interest. The public interest element requires weighing the general public interest in the local economy associated with farming and irrigation along with any other public interest issues presented. The application is in the public interest.

25. Based on the entirety of the record, the application meets the standard in SDCL 46-2A-9 and should be granted, subject to the recommendations proposed by the Chief Engineer.

Based on the foregoing Findings of Fact and Conclusions of Law, the Board enters the following:

FINAL DECISION AND ORDER

Permit Application No. 7680-3 is granted subject to the following permit qualifications:

1. The wells approved under this Permit 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. The well authorized by Permit No. 7680-3 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.

Dated this _____ day of December, 2013.

BY THE BOARD:

Chad Comes, Chair
South Dakota Water Management Board



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

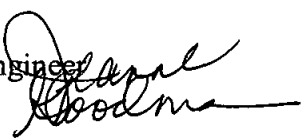
denr.sd.gov

December 10, 2013

NOTICE

TO: Wendell Falk
45384 154th St
South Shore SD 57263

Darold and Judy Kaaz
15319 455th Ave
Summit SD 57266

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program 

SUBJECT: Adoption of Finding of Fact, Conclusion of Law and Final Decision in the matter
of Water Permit No. 7680-3, Wendell Falk

This is to notify you that the Water Management Board's Ruling and the Final Decision, including Findings of Fact and Conclusions of Law, were adopted December 5, 2013, by the Water Management Board in the matter of Water Permit No. 7680-3, Wendell Falk. The Board ruling and signed Findings of Fact, Conclusions of Law and Final Decision are enclosed.

South Dakota statutes provide that decisions of the Board may be appealed to the Courts pursuant to the procedures established in SDCL 1-26-31 and 1-26-32.

enclosures

c: Jeff Hallem, Assistant Attorney General
Diane Best, Assistant Attorney General

CERTIFICATION

I hereby certify that on December 10, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated December 10, 2013, regarding adoption of finding of fact, conclusions of law and final decision for Water Permit No. 7680-3, as addressed below:

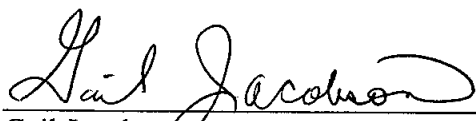
Wendell Falk
45384 154th St
South Shore SD 57263

Darrold and Judy Kaaz
15319 455th Ave
Summit SD 57266

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104

Sent Notice Inter-Office mail to:

Jeff Hallem, Assistant Attorney General,
1302 E. Hwy 14, Suite 1, Pierre SD
57501-8501



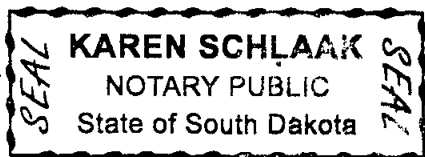
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 10th day of December, 2013



Karen Schlaak
Notary Public
My Commission expires April 1, 2019



STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF WATER	)	WATER MANAGEMENT BOARD'S
PERMIT APPLICATION No. 7680-3,	)	RULINGS ON
WENDELL FALK	)	PARTIES' SUBMISSIONS

Pursuant to the direction of the Water Management Board, counsel for DENR, Water Rights Program (DENR) submitted Findings of Fact, Conclusions of Law and Final Decision in the above-entitled matter. Neither Applicant nor Intervenor, Darrold and Judy Kaaz, submitted additional proposed Findings of Fact, Conclusions of Law, or objections to DENR's proposed Findings of Fact, Conclusions of Law and Final Decision. The Board, upon review of the submission received, the administrative record, and having orally entered its decision, enters the following rulings:

A. DENR's proposed Findings of Fact Numbers 1 – 39 are accepted by the Board as consistent with and supported by the administrative record and the Board's oral decision.

B. DENR's proposed Finding of Fact No. 40 is not a Finding of Fact.

C. DENR's proposed Conclusions of Law Numbers 1 – 25 are accepted by the Board as consistent with and supported by the administrative record, the Board's oral decision, and the Findings of Fact adopted by the Board in Ruling A.

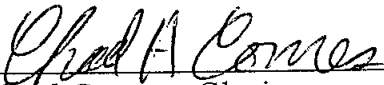
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The Board's attorney is directed to prepare Findings of Fact, Conclusions of Law, and Final Decision consistent with the above Rulings to be executed by the Chair of the Board or the Board's designee without further notice or hearing.

Dated this 5th day of December, 2013.

BY THE BOARD:



Chad Comes, Chair
SD Water Management Board

STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF WATER	)	WATER MANAGEMENT BOARD'S
PERMIT APPLICATION No. 7680-3,	)	FINDINGS OF FACT,
WENDELL FALK	)	CONCLUSIONS OF LAW,
	)	AND FINAL DECISION

Hearing was held on October 3, 2013, before Board members Chad Comes (Chairman), Tim Bjork, Peggy Dixon, Rodney Freeman, Everett Hoyt, Jim Hutmacher, and Leo Holzbauer. Both the applicant, Wendell Falk, and the intervenors, Darrold and Judy Kaaz, appeared in person and without counsel. The Department of Environment and Natural Resources, Water Rights Program and its Chief Engineer (jointly "DENR") were represented by Diane Best.

The Board, having considered the testimony and exhibits presented and all records and documents on file, and having entered its oral decision and rulings on the parties' submissions, now enters the following:

FINDINGS OF FACT

1. Water Permit Application No. 7680-3 proposes to withdraw groundwater at a maximum diversion rate of 2.0 cubic feet of water per second (cfs) from one well. The well is expected to be 176 feet deep and is to be located in the center of the SW¼ of Section 24, T120N-R52W. The water will be used to irrigate 140 acres located in the SW¼ of Section 24, T120N-R52W, in Grant County (former Sisseton Wahpeton Indian Reservation).

2. The reference to the Sisseton Wahpeton Indian Reservation in the legal description is due to similar legal descriptions. There is another area in northeast South Dakota using the same township and range description that is

involved here is not currently in an Indian reservation and is not owned by a tribal member or any tribe.

3. The Chief Engineer recommends approval.

4. Notice of the application was published in the Grant County Review and the Watertown Public Opinion on the same date, April 17, 2013. The notice provided that any petitions to intervene were to be filed by April 29, 2013. Darrold and Judy Kaaz filed a timely petition to intervene.

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aquifer due to their similar characteristics. This portion of the aquifer underlies about 184,500 acres, mostly in Roberts, Grant, and Codington Counties.

8. In the area of the proposed well site, the Big Sioux Aquifer may be located above the Prairie Coteau aquifer.

9. This portion of the aquifer appears to be under artesian conditions throughout, and the potentiometric surface in the aquifer generally ranges from flowing to 90 feet below ground surface, at an elevation generally ranging from 1,725 to 1,875 feet mean sea level (fmsl).

10. A 1992 test hole log was submitted with the application and it shows sand and gravel from 163 to 176.5 feet below ground surface, which translates to 1,692 to 1,678.5 fmsl. The recorded static water level was nine feet below ground surface.

11. In examining water availability, this Board must consider whether the average annual withdrawal of water would exceed the average annual recharge to the aquifer if the permit was granted.

12. Recharge to this portion of the Prairie Coteau aquifer occurs through leakage from till, the overlying Big Sioux aquifer, and the Coteau Lakes aquifer, which occur immediately north of the Prairie Coteau aquifer. Recharge for this portion of the aquifer has not been quantified. However, based on his analysis of other confined aquifers and review of governmental reports on recharge rates for aquifers, Stonesifer's opinion is that a suggested recharge rate range of 0.15 to 0.60 inches per year (in/yr) should be used. Based on that range of recharge rates and the area of the aquifer, the average annual recharge would range from 2,306 to 9,224 acre feet per year (ac-ft/yr).

13. Discharge from this portion of the Prairie Coteau aquifer occurs primarily by well withdrawals for domestic, commercial, and irrigation use.

14. There are many well completion reports on file with DENR for domestic wells that appear to be completed into the Prairie Coteau aquifer. Based on the Stonesifer report, the annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

15. There are two permits from this aquifer for commercial use (Norswiss Dairy and Redlin Farms). The total annual withdrawal from this portion of the Prairie Coteau aquifer by non-irrigation use is estimated at less than 131 ac-ft/yr.

16. There are 21 irrigation permits from this portion of the aquifer. The irrigation development of this portion of the Prairie Coteau aquifer has steadily increased over the period of record, 1979 to 2011. The annual withdrawal fluctuates, which is probably mostly dependent on annual growing season climatic conditions. The average irrigation pumpage reported is 889 ac-ft/yr. The average application rate equals 5.56 inches per acre (in/ac). Since 2011, four water permits have been authorized and one is pending. When applying the average annual application rate to the recently granted permits and the pending permit, an additional 287 ac-ft/yr would be added to the average.

17. Considering both the commercial and irrigation uses (including those recently granted and pending), the average annual withdrawal from this portion of the aquifer is estimated to be less than 1,307 ac-ft/yr.

18. In addition to the foregoing, the maximum water requested for the pending application would be 280 ac-ft/year (2 ac-ft/yr for each acre), although

18. In addition to the foregoing, the maximum water requested for the pending application would be 280 ac-ft/year (2 ac-ft/yr for each acre), although it is expected that the average annual withdrawal for this permit will be less, given the average application rate for irrigation from this aquifer is 5.56 inches per acre annually on an aquifer-wide basis. The actual use for this irrigation is expected to vary based on climate.

19. When the maximum use proposed by this application is added to the annual withdrawal of 1,307 ac-ft/yr, the total withdrawal would be equivalent to recharge to this aquifer of 0.11 in/yr. This is lower than even the most conservative recharge rate of 0.15 in/yr reported by Stonesifer. Under this analysis, it is not expected that the permit, if granted, would cause the withdrawals to exceed the average annual recharge for this aquifer.

20. Stonesifer also examined the recharge/withdrawal question by considering DENR observation well data.

21. DENR monitors 55 observation wells completed into the Prairie Coteau aquifer, with 13 of these completed into the portion of the aquifer at issue. The observation well hydrographs are very similar to one another, including the four observation wells closest to the property involved in this matter. The nearest observation well, GT-77A, is approximately one mile northeast of the proposed well site.

22. The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. The effects of pumping in the aquifer are obvious and due to the artesian conditions of this portion of the aquifer. Temporal effects of well withdrawal from the aquifer are

aquifer greatly exceeds well withdrawal. Over the period of record, water levels in this portion of the aquifer have remained fairly steady.

23. Either method used by Stonesifer independently demonstrates that granting the water permit at issue would not cause the average annual withdrawals to exceed average annual recharge to the aquifer.

24. There is a reasonable probability that unappropriated water is available from the Prairie Coteau aquifer to support the proposed appropriation.

25. This Board also considers whether there is a reasonable probability that the water diversion requested can be made without adversely impacting existing water rights or domestic wells.

26. The portion of the aquifer at issue is under artesian conditions. This Board has consistently recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur, and the Board does not necessarily protect artesian head pressure as a means of groundwater delivery. However, adequate domestic wells (as defined by Board rule) are not to be adversely affected. The proposed irrigation well will be located near other wells that obtain water from the same aquifer. There are five water rights/permits within two miles of the proposed well site.

27. In general, the hydrographs document the effects of pumping; however, these effects have been relatively minimal over the period of record, and water levels have always recovered once irrigation has ceased. Therefore, at the distances involved, there is a reasonable probability that any well interference from the proposed appropriation will not adversely or unlawfully impair existing nearby wells.

28. Intervenor Darrold Kaaz expressed concern that the applicant's irrigation use would diminish the water supply in the Kaaz domestic well. The Kaaz well is approximately 4,500 feet northeast of the applicant's proposed well. DENR observation GT-77A is about 500 feet further east, being across the road east of the Kaaz farm dwelling.

29. The Kaaz domestic well withdraws water from the same aquifer at issue here. Based on the 1981 well log for the Kaaz well, it appears to be an adequate domestic well. It is, however, unlikely to be impaired by the irrigation system at issue due to the distance involved. This is based on a distance-drawdown analysis using the Theis equation conducted by Stonesifer. It shows that when the applicant's irrigation well is pumped at the maximum rate for the maximum period of time allowed under the permit, the water in the Kaaz well would still be 21 feet above the top of the aquifer. The Kaaz well would be able to pump water. Further, based on the driller's well log filed with the DENR in 1981 for the Kaaz well, the well casing or borehole is even deeper and the Kaaz pump could be lowered.

30. The Theis equation is a standard engineering method for calculating water drawdown.

31. Water in the Kaaz well is unlikely to be diminished by pumping from the Prairie Coteau aquifer by the applicant.

32. Although interference is unlikely, the Board qualifies this permit out of an abundance of caution so as to protect any domestic users who have nearby adequate wells in the same aquifer. The condition would protect against adverse interference in any nearby adequate domestic wells, including not only the Kaaz

well, but also any that are unknown to the DENR (i.e. wells constructed before well drillers were required to file well completion reports for newly drilled wells starting in the 1970's) or any adequate domestic wells drilled in the future that are close to the applicant's well.

33. Darrold Kaaz also testified that he is concerned about the effect of the applicant's irrigation on his nearby stock dam or dugout. His stock dam or dugout is around 13 feet deep and is located in a waterway on the Kaaz property. DENR witness Joe Stonesifer testified that dugouts/stock dams obtaining water from surface water would not involve the same water source as the groundwater that the applicant proposes to use under the permit.

34. The Kaaz stock dam or dugout is not an "adequate domestic well."

35. There is a reasonable probability that the diversion rate requested can be made without adversely impacting existing water rights or domestic wells, particularly when considering the domestic use qualification.

36. The Board also considers beneficial use. This involves examining whether the use would be beneficial in the eyes of the appropriator as well as in terms of the interest of the public in the best use of water supplies.

37. The use of water, as requested, would undoubtedly be beneficial to the applicant. The applicant intends to use the water for irrigation and increasing crop yields would be beneficial to the applicant.

38. The Board has repeatedly found that irrigation is in the interest of the public in the utilization of water supplies. So far as beneficial use is involved, this matter is no different than the dozens (or hundreds) of irrigation applications the Board has considered in the past. In particular, the Board is

mindful that water use should be put to the maximum beneficial use given the arid climate in South Dakota. The proposed irrigation is a beneficial use.

39. Public interest is another factor. On the whole, the public interest is better served by allowing the aquifer to be used for a beneficial use like irrigation than to allow the water to remain unused.

Based on the above Findings of Fact, the Board makes the following:

CONCLUSIONS OF LAW

1. The Board has jurisdiction over this matter. The present application falls within the Board's responsibility over water appropriation and regulation in Title 46, more specifically SDCL 46-2A-9.

2. Publication was properly made in the Grant County Review and the Watertown Public Opinion under SDCL 46-2A-23 and SDCL 46-2A-4.

3. Under ARSD 74:02:01:12.04, the deadline for filing petitions to intervene in this matter was April 29, 2013. This intervention date was published as required by SDCL 46-2A-4. Darrold and Judy Kaaz intervened on a timely basis.

4. Notice of Hearing was sent to the applicant and to the intervenors, Darrold and Judy Kaaz. The Notice of Hearing was proper under SDCL 46-2A-4 and SDCL 1-26-17.

5. The Chief Engineer has recommended approval. Joe Stonesifer, a DENR engineer with expertise in water issues, testified in support of the recommendation. The recommendation is not, however, binding on the Board. SDCL 46-2A-4(8).

6. Each of the elements in SDCL 46-2A-9 must be proven in order for this Board to grant the requested permit. SDCL 46-2A-9 provides that 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.”

7. The first element in SDCL 46-2A-9 is whether there is water available for the appropriation. This analysis requires consideration of SDCL 46-6-3.1. The water permit cannot be granted if, based on the best available information, water diversions under the permit would cause the average annual withdrawals from the aquifer to exceed the average annual recharge.

8. Administrative Rule of South Dakota Section 74:02:05:07 requires that, in addition to any other information, “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

9. Based on the observation well data and the calculations performed by engineer Stonesifer (which is the best available information), the average annual withdrawals would not exceed recharge if the water permit is granted.

10. There is water available for the appropriation at issue.

11. The second element in SDCL 46-2A-9 is whether the proposed water use would impair existing rights.

12. The proposal here would not impair existing water rights as addressed in the Findings of Fact and as set forth in the following Conclusions.

13. Although some drawdown may occur in the artesian aquifer when irrigation occurs, state law does not automatically protect artesian head pressure as a means of delivery to nearby water wells or water diversions. SDCL 46-6-6.1. As such, a certain amount of drawdown may occur in nearby wells or diversions without being considered an impairment of water rights. In such situations, some existing well owners may need to lower their pumps (or install pumps) to accommodate for lower water levels.

14. The Board does protect against adverse impairment to adequate wells. An adequate well is one that is defined as 74:02:04:20(6) as:

[A] well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.

15. In order to balance interests between irrigation use and delivery of water by artesian pressure to domestic wells, this Board has defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7):

[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 need."

16. There is a reasonable probability that the diversion requested by this particular application can be made without adversely affecting existing water rights/permits and domestic users. This includes the Kaaz well. Out of an abundance of caution, this Board imposes a condition on the permit to protect domestic users who have adequate wells.

17. The Kaaz claims of diminishment in their water well do not constitute "impairment of existing rights" that would warrant denying the requested permit under SDCL 46-2A-9, particularly in light of the domestic use condition on the permit.

18. The Kaaz claims of diminishment in stock dams or dug outs in the area do not constitute impairment of existing rights. The Kaaz stock dam is in a waterway. A dam supported by surface water would not be impaired by this groundwater application. Further, even if the structure was actually a groundwater diversion, it would not be considered to be an adequate well or domestic well for which ARSD 74:02:04:20(7) would apply.

19. The application, when conditioned as recommended by the Chief Engineer, would not impair any existing rights or domestic users.

20. The third element in SDCL 46-2A-9 is whether the use of water would be a beneficial use. In this context, a beneficial use of water is one that is reasonable and useful and beneficial to the appropriator and that is

consistent with the interest of the public in the best utilization of water supplies. SDCL 46-1-6(3).

21. The use of water, as requested, would be beneficial to the applicant; the purpose is to increase crop yields.

22. The other part of the beneficial use test is whether the water use is in the interest of the public in terms of the best utilization of water supplies. SDCL 46-1-6(3). This Board considers three factors in this case:

- a. Irrigation is, in general, a beneficial use since enhanced production is an economic benefit to the state and local economy. This benefit is no different here than the dozens (or hundreds) of irrigation applications the Board has previously considered in the past.
- b. The maximum that the applicant could legally use for this permit would be 2 AF per acre and one cfs per 70 acres pursuant to SDCL 46-5-6. This proposed permit does not authorize waste of water.
- c. Water should be put to the maximum beneficial use given the arid climate in South Dakota. SDCL 46-1-4. Reserving water in an aquifer and keeping it from being applied to maximum beneficial use is generally inconsistent with SDCL 46-1-4 and SDCL 46-1-2.

23. This application meets the beneficial use criteria.

24. The fourth element of SDCL 46-2A-9 pertains to public interest. The public interest element requires weighing the general public interest in the local economy associated with farming and irrigation along with any other public interest issues presented. The application is in the public interest.

25. Based on the entirety of the record, the application meets the standard in SDCL 46-2A-9 and should be granted, subject to the recommendations proposed by the Chief Engineer.

Based on the foregoing Findings of Fact and Conclusions of Law, the Board enters the following:

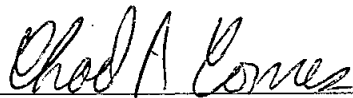
FINAL DECISION AND ORDER

Permit Application No. 7680-3 is granted subject to the following permit qualifications:

1. The wells approved under this Permit 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. The well authorized by Permit No. 7680-3 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.

Dated this 5th day of December, 2013.

BY THE BOARD:



Chad Comes, Chair
South Dakota Water Management Board



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



JAN 29 2014

Wendell Falk
45384 154th St
South Shore SD 57263

Dear Mr. Falk:

Enclosed is Water Permit No. 7680-3 authorizing construction of your 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

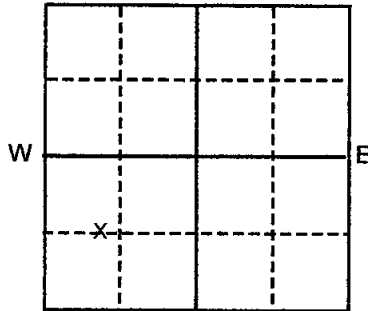
enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location 1/4 SW 1/4 Sec 24 Twp 120N Rg 52WCounty GRANT

North

Please mark well
location with an "X"

Well Completion Date

12-2014

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 DRILL

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
21.0 LB/FT	12.00 IN	0.0 FT	165.0 FT	18.00 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	52	54.0 Lb/gal	0.0 Ft	160.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 12.00 Inches Length 15.0 FeetMaterial PLASTICSlot Size .080 Set From 165.0 Feet to 180.0 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 analysisWell Owner: W. FALKBusiness Name: FALK FARMS INCAddress: 45268City, State, Zip: SOUTH SHORE SD 57263

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	1
YELLOW CLAY	1	25
BLUE CLAY	25	60
YELLOW CLAY	60	123
BLUE CLAY	123	157
YELLOW CLAY	157	165
YELLOW GRAVEL	165	180

STATIC WATER LEVEL 40.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped Describe: SUBMERSIBLE PUMP
☐ Bailed
☐ Other

Pumping Level Below Land Surface

120.0 Ft. After 14.0 Hrs. pumped 800.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

JAN 3 0 2015

WATER RIGHTS
PROGRAMThis 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: _____



7680-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 15, 2016

NOTICE

TO: WENDELL FALK, FALK FARMS, 45384 154TH ST, SOUTH SHORE, SD 57263
FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2015 Irrigation Questionnaire(s)

Our records indicate your 2015 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 4417-3, 5269-3, 5271A-3, 5271B-3 & 7680-3. The request for the Questionnaire was dated October 23, 2015. The Water Management Board has directed that owners of water permits who have not submitted the 2015 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 4417-3, 5269-3, 5271A-3, 5271B-3 & 7680-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **Thursday, March 3, 2016 at 9:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4417-3, 5269-3, 5271A-3, 5271B-3 & 7680-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 3, 2016** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

January 25, 2016

Wendell Falk
Falk Farms
45384 154th St
South Shore SD 57263

RE: Water Right Nos. 4417-3, 5269-3, 5271A-3, 5271B-3 & 7680-3

Dear Mr. Falk:

I am writing to acknowledge receipt of your 2015 irrigation questionnaires.

You may disregard the January 15, 2016, "Notice" concerning reporting requirements for Water Right Nos. 4417-3, 5269-3, 5271A-3, 5271B-3 & 7680-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.denr.sd.gov

June 22, 2017

7680-3

Wendell Falk
45384 154th St
South Shore SD 57263

Dear Mr. Falk:

Thank you for contacting me in regard to the ownership change needed for Water Permit No. 7680-3.

Enclosed is a partially completed Notice of Transfer of Ownership form for filing an ownership change. Please review the form and make any necessary corrections. Upon completion, please sign the form and return it to our office with a required filing fee of \$50.00. The check or money order for the fee can be made payable to the Water Rights Program.

I included a copy of the water permit in the event you need it to go along with other paperwork for the bank. If I can answer any questions for you, please let me know.

Sincerely,

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

enclosures

RECEIVED

JUN 29 2017

WATER RIGHTS
PROGRAM

NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

No. 7680-3

Date: 6-27-17

I/We request that Water Permit No. 7680-3

formerly owned by: Wendell Falk

be transferred to: (name & address) Falk Farms Inc.

45268 155th St

South Shore SD 57263

Telephone No. 605-818-2157

Title to the following described land(s)/property has been transferred as described above:

SW ¼ Section 24, T120N, R52W (RES)

I/We understand that the validity of Water Permit No. 7680-3 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Falk Farms Inc., the new owner, certify that the above information is true and correct.

Falk Farms Inc by Wendell Falk O.P.
(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date June 29, 2017

RECEIVED OF Falk Farms Inc.

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50	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. _____		
Fee for Filing Transfer Form <u>7680-3</u>		
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	50 00

No. **08283**

By Joanne Goodman
Chief Engineer *vm*



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.denr.sd.gov

June 30, 2017

7680-3

Warren Falk
Falk Farms Inc
45268 155th St
South Shore SD 57263

Dear Mr. Falk:

Wendell Falk recently submitted a transfer of ownership for Water Permit No. 7680-3.

The ownership change has been completed. Water Permit No. 7680-3, formerly held by Wendell Falk is now listed in the name of Falk Farms Inc.

Receipt No. 08283 in the amount of \$50 which was paid for filing the ownership change is being forwarded by copy of this letter to Wendell Falk.

If I can answer any questions for you, please let me know.

Sincerely,

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

c: Wendell Falk, 45384 154th St, South Shore SD 57263 w/Receipt

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7680-3

I have this day, July 27, 2021, made a thorough examination of the water use system constructed by Falk Farms Inc, 45268 155th St, South Shore, SD 57263 of Permit No. 7680-3, bearing the priority of February 4, 2013 authorizing the diversion of 2.0 cu. ft. per second of the waters of the Prairie Coteau for irrigation purposes, in Grant County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Kaiser Well Drilling, Inc
- 2) No. of Wells 1
- 3) Depth(s) 180 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 12 inches
- 2) Length 165 feet
- 3) Type Plastic

Screen:

- 1) Type Slotted Plastic
- 2) Length 15 feet
- 3) Static water level 40 feet

Pump:

- 1) Make NA
- 2) Model Submersible
- 3) Size NA
- 4) Capacity 900 GPM

Motor: unknown

B. Works used to transport water to place of use: Well very near the pivot (50 ft away)

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1300 feet
- 3) Number of towers 7
- 4) End gun Y
- 5) Capacity 900 GPM

Chemigation Equipment: Uses commercial system to inject nitrogen into irrigation water

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 good condition with the point(s) of diversion located as follows: From SW corner Sec 24 T120N R52W (R), 1290 ft N & 1320 ft E, Lat 45.15538 long -97.11855 (near center of SW ¼ Sec 24)
2. The works are capable of diverting and conveying to the place of use 2.0 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:

All land in Section 24 T120N R52W (R)

NW ¼ SW ¼ – 34 acres

NE ¼ SW ¼ – 34 acres

SE ¼ SW ¼ – 34 acres

SW ¼ SW ¼ – 34 acres

comprising a total of 136 acres of land. The license should be issued for 1.94 cfs (statutory limit for 136 acres)

3. All structures, wells and lands on map Y

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

The irrigated acreage was determined with the aid of FSA maps and ArcMAP software.

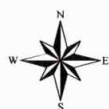
The address and telephone number contained in the review materials are current.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: August 11, 2021

**Note: The diversion point location and the irrigated acres are within the former boundaries of the Sisseton Wahpeton Indian Reservation
Genny**



0 0.075 0.15 0.3 0.45 0.6 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

AUG 17 2021

7680-3

Warren Falk
Falk Farms Inc
45268 155th St
South Shore SD 57263

Dear Mr. Falk:

Enclosed is Water License No. 7680-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures

c: Wendell Falk, 45384 154th St, South Shore SD 57263

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7680-3

(1) Wendell Falk made Application No. 7680-3, February 4, 2013 for a water permit to divert 2.00 cubic feet of water per second from ground water (one well) Veblen Aquifer, Grant County, South Dakota for irrigation purposes. Permit No. 7680-3, with a priority date of February 4, 2013 was approved December 5, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before December 5, 2018 and for the application to beneficial use of said water on or before December 5, 2022.

On June 29, 2017, Water Permit No. 7680-3 was transferred from Wendell Falk to Falk Farms Inc.

(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 1.94 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,290'N and 1,320'E of the SW corner of Section 24, T120N, R52W (approximate center of SW ¼) Latitude 45.15538, Longitude -97.11855 (within the former boundaries of the Sisseton Wahpeton Indian Reservation)

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

Section 24, T120N, R52W	NW ¼ SW ¼	34 acres
	NE ¼ SW ¼	34 acres
	SE ¼ SW ¼	34 acres
	SW ¼ SW ¼	34 acres
	Total	136 acres

- Land is within the former boundaries of the Sisseton Wahpeton Indian Reservation.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Falk Farms Inc., 45268 155th St, South Shore SD 57263 the holder and/or owner of Water Right No. 7680-3 is issued a license to appropriate water, the right to use 1.94 cubic feet of water per second from ground water, one well (Veblen Aquifer) with a priority date of February 4, 2013 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7680-3 and subject to the following qualifications:

- The well approved under this Permit 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.

continued

- The well authorized by Permit No. 7680-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. ***The well was drilled in December 2014 by Kaiser Well Drilling Inc. A copy of the well completion report is on file with the Water Rights Program.***
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

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

AUG 17 2021

date

