

WATER PERMIT NO. 8015-3

Name of Applicant: Victory Farms LLC

Address: 48176 153rd St, Milbank SD 57252 Phone: 605 237-8391

Amount of Water Claimed: 0.33 cfs Total Acres: NA

Source of Water Supply: groundwater (two wells)

Water to be used for: commercial County: Grant

Type of Waste Disposal System:

Location: 12 miles southwest of Milbank

PRIORITY Date Received: 5-13-14 Application/License Fee: \$ 950

Corrected Application Received: Period of Annual Use: January 1 – December 31

Remarks: dairy operation

Diversion Point: SE 1/4 SE 1/4 Sec 32-T119N-
R48W

Land to be Irrigated: NA

Depth of Well: 132

Well Driller: Kranz Well & Excavating

Remarks:

Type of Map: plat

Prepared by:

Reviewed and the Number Assigned on: 5-13-14

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

			32		
				88	

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MAY 13 2014

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Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	(office use only) No. <u>8015-3</u> Hydrologic Unit <u>07020001</u>	
	Basin <u>Minnesota - Whetstone</u> <u>605-432-4516</u>	
	Newspaper <u>Grant Co. Review Box 392 Millbrook SD 57252</u>	

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☒ Commercial	☐ Fish & Wildlife	☐ Geothermal Heat
☐ Domestic (over 18 gpm)	☐ Industrial	☐ Other	

Type of Application:
(check one)

☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

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

- Name to Appear on Water Permit Victory FARMS LLC
 (check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
 (name and complete address if different than above name)
 Mailing Address 48176 153rd st milbank SD 57252
 (Address) (City) (State) (Zip Code)
 Home Phone 605-432-5606 Cell 605-237-8391 Email Victory@TNICS.com
- Amount of water claimed 0.33 *CFS or 150 **GPM ***AF
 (*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply VERLEN AQUIFER
- Location of point of diversion 2 wells SE 1/4 of SE 1/4 sec 32 T119N R48W County Grant
 (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
 If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ No
 If "Yes," where will water be used? _____
 (example - NW1/4 section 12-T104N-R53W)
- County or counties where water will be used Grant
- Annual period during which water is to be used All Year January 1 - December 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
wells to be used to supply stock water for proposed Dairy

I, K M Soye, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

2012-09

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

**SOUTH DAKOTA
WATER PERMIT NO. 8015-3**

Date of first receipt of application May 13, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8015-3 to Victory Farms LLC, 48176 153rd St, Milbank SD 57252 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. 8015-3 appropriates 0.33 cubic feet of water per second from two wells to be completed into the Veblen Aquifer (132 feet deep) located in the SE 1/4 SE 1/4 Section 32-T119N-R48W.
2. The water appropriated shall be used for the purpose of commercial use in a dairy operation and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 8015-3 is July 28, 2014.
5. The date from which applicant may claim right is May 13, 2014.
6. One-fifth of the construction is to be completed on or before January 28, 2017.
7. All construction is to be completed on or before July 28, 2019.
8. Water is to be put to beneficial use on or before July 28, 2023.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under 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 wells authorized by Permit No. 8015-3 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. The water permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Veblen aquifer.

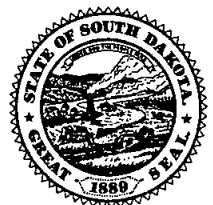
WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

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

AUG 18 2014

date



Supplemental Information

(Complete applicable portions only)

(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 2 Have test holes been drilled ☒ Yes ☐ No Drilled by Kearz well
(if yes, please provide copies of logs)b) If existing wells, how many Provide copy of log(s), if available. Drilled by c) ^{TEST} Well Depth 132 Depth to Top of Water Bearing Material 90 Depth to Water from Surface 10+

d) Distance to nearest existing domestic well:

On applicant's property Not Applicable On property owned by others half of mile**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**

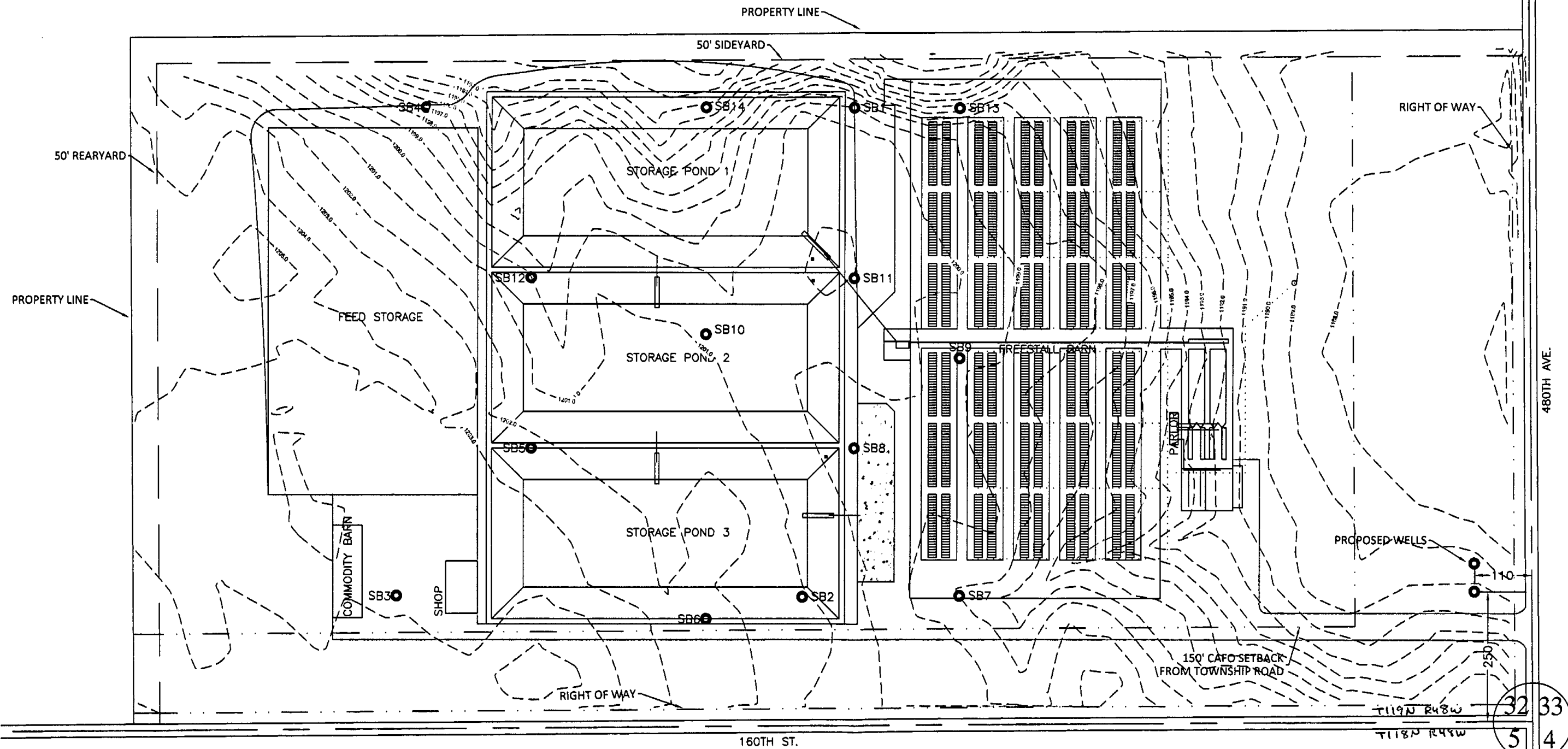
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

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 Feetj) Drainage Area Above Dam Acres

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SITE PLAN
VICTORY FARMS SOUTH AWMS

REV.	DATE	DESCRIPTION	BY	CHKD
1	5/7/14	TB		BF

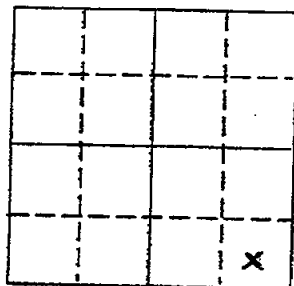
DAKOTA ENVIRONMENTAL CONSULTANTS INCORPORATED
P.O. BOX 636 HURON, SD 57350 605-352-5610



JOB NO:
1401
SCALE:
1"=200'
DWG:
2

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 Sec 32 Twp 119 Rg 48W
W VernonCounty
GrantPlease mark well
location with an "X"

Well completion Date _____

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

50 ft. from future freestall barn (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

rotary

CASING DATA:

☐ Steel ☐ Plastic ☐ Other

If other describe _____

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

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
		Lb/gal	FT	FT

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ 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 sample sent to for
water quality analysisWell Owner: Victory Farms

Business Name: _____

Address1: 48176 153rd Str.

Address2: _____

City, State, Zip: Milbank SD 57252

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	2
Yellow clay	2	9
Brown clay	9	18
Blue clay	18	90
Fine Sand	90	150
Coarser Sand	120	132

STATIC WATER LEVEL

FEET

If flowing: closed in pressure _____

PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: _____☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

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This well was drilled under license # 598WATER RIGHTS
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And this report is true and accurate.

Drilling firm: Kranz Well + ExcavSignature of License Representative: Charles King

Signature of Well Owner or Equitable Property Holder: _____

Date: May 8, 2014

Please use WHITE COPY for Drilling

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/13, 20 14

RECEIVED OF Victory Farms LLC 48176 153rd St Milbank SD 57252

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

Fee for Application for Permit No. <u>8015-3</u> to Appropriate Water, to construct and to put water to beneficial use	750	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>8015-3</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	950 00

No. **06855**

By J. Ann. Lordman
Chief Engineer



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8015-3, Victory Farms LLC**

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. 8015-3, Victory Farms LLC, c/o K M Souza, 48176 153rd Street, Milbank SD 57252.

The Chief Engineer is recommending APPROVAL of Application No. 8015-3 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 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 wells authorized by Permit No. 8015-3 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. The Water Permit Holder, shall report to the Chief Engineer annually the amount of water withdrawn from the Veblen aquifer.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
July 8, 2014

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8015-3
VICTORY FARMS LLC
C/O K M SOUZA
JULY 08, 2014

Water Permit Application No. 8015-3 proposes to appropriate water at a maximum diversion rate of 0.33 cubic feet of water per second (cfs) from two wells to be completed into the Veblen aquifer for use in a dairy operation. The wells are expected to be approximately 132 feet deep and are to be located in the SE ¼ SE ¼ Section 32; all in T119N-R48W in Grant County.

AQUIFER: Veblen (VEB)

Aquifer Characteristics:

The Veblen aquifer has been described in several different publications. Hedges and others (1982) described the aquifer as extending from the North Dakota and South Dakota border down through Marshall, Roberts, and Grant Counties to the Minnesota and South Dakota Border, shown in Figure 1. Hedges and others (1982) estimated the Veblen aquifer to underlie approximately 70,600 acres and contain an estimated 211,800 acre-feet (ac-ft) or recoverable water in storage in Grant County.

Green and Gilbertson (1987) described the Veblen aquifer as being truncated to the east by the valley of the Minnesota River and Big Stone Lake and to the south by the valley of the Whetstone River, shown in Figure 2. Green and Gilbertson (1987) identified an outwash unit underlying the eastern portions of the Veblen aquifer as the Fairmont aquifer. Hedges and others (1982) described the Fairmont aquifer as underlying approximately 2,000 acres in the Minnesota River valley in extreme northeastern Grant County and a large portion of Roberts County.

Hansen (1990) reported the Veblen aquifer extends north and west from Grant County into Roberts and Marshall Counties, south into Deuel County, and east into Minnesota, as shown in Figure 3. The Veblen aquifer, as described by Hansen (1990), underlies approximately 166,400 acres of Grant and Codington Counties with approximately 700,000 ac-ft of water in storage.

Thompson (2001) described the Veblen aquifer with a southern extent approximately 15 miles north of the Roberts County and Grant County line, indicating no connection with the Veblen aquifer in Grant County described by Hansen (1990). However, the Wilmot outwash group defined by Thompson (2001) lies in southeastern Roberts County and appears to extend into northeastern Grant County. The Wilmot outwash group defined by Thompson (2001) may be a portion of the Veblen aquifer defined by Hansen (1990) and Hedges and others (1982).

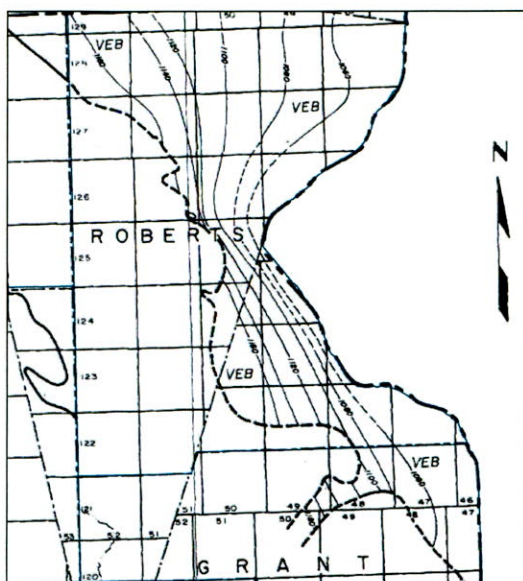


Figure 1- Veblen aquifer as described by Hedges and others (1982)

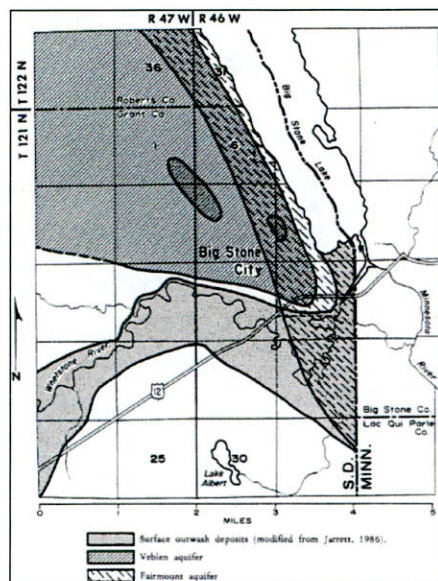


Figure 2- A portion of the Veblen and Fairmount aquifers as described by Green and Gilbertson (1987)

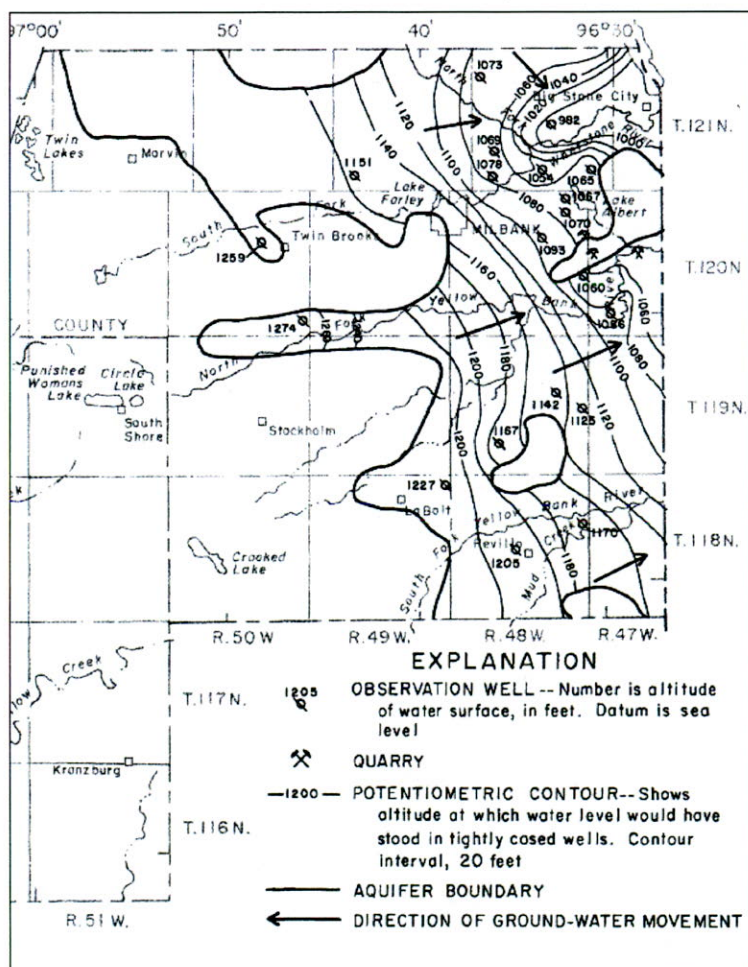


Figure 3- Veblen aquifer as described by Hansen (1990)

Barr Engineering conducted a groundwater investigation for Water Permit No. 6846-3. Barr Engineering (2007) further delineated the Veblen aquifer, as shown in Figure 4. Barr Engineering's (2007) and Hansen's (1990) delineation of the Veblen aquifer are similar in areal extent. The delineation by Barr Engineering (2007) estimates the Veblen aquifer underlies approximately 240,000 acres of Grant and southern Roberts Counties, based on Figure 4.

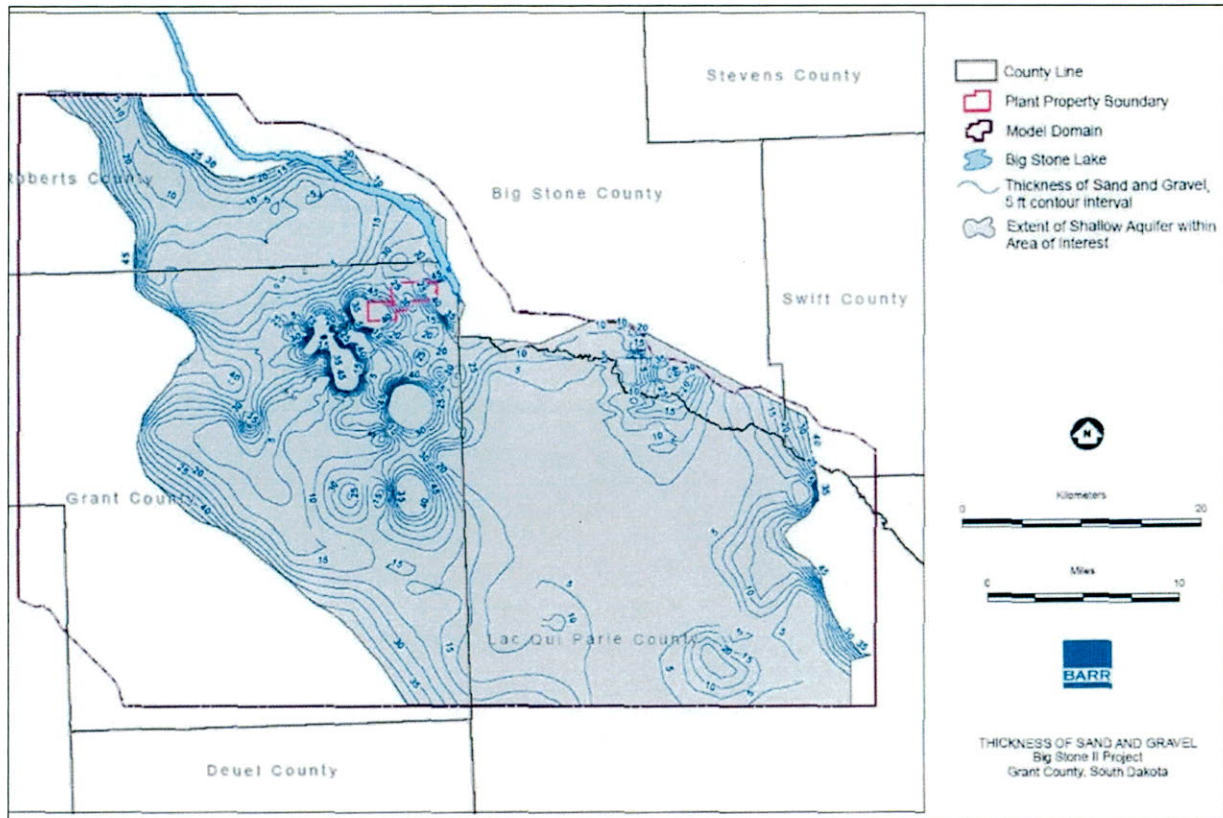


Figure 4- Veblen aquifer as delineated by Barr Engineering (2007)

For the purposes of appropriations by the SD DENR-Water Rights Program and the Water Management Board, the "Veblen aquifer" can be considered as the group of buried outwash deposits in Grant County that are found within the areal extent and interval of altitude defined by Hansen (1990). This "Veblen aquifer" probably includes the Fairmont aquifer defined by Green and Gilbertson (1987) and the Wilmot outwash group described by Thompson (2001) (Buhler, 2007).

The Veblen aquifer is primarily a buried outwash consisting of medium to coarse sand and fine gravel that is generally under confined conditions (Hansen, 1990). The aquifer is generally under confined conditions, except where it is at or near land surface (Hansen, 1990).

The test hole log submitted with the application identifies aquifer material, fine and coarser sand, from 90 to 132 feet below grade. The potentiometric surface in the area of the application should be 10 to 20 feet below ground surface (Hansen, 1990).

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

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for this 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 and effects on existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

This application proposes to appropriate water from the Veblen aquifer. The probability of unappropriated water available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older or lower than the Greenhorn Formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. In this case, the aquifer is not stratigraphically lower than the Greenhorn Formation and the applicant is not a public water system.

Hydrologic Budget:

Discharge:

Discharge from the Veblen aquifer occurs due to outflow to local lakes and rivers, especially the Whetstone River, and well withdrawals (Hansen, 1990). Currently, there are 47 water rights/permits authorizing the withdrawal of water from the Veblen aquifer with 38 in Grant and southern Roberts Counties alone with 10 of those being for non-irrigation purposes (Water Rights, 2014b). The non-irrigation water rights/permits along with permitted or estimated average annual use are shown in Table 1.

Permit No.	Name	County	Status	Use	CFS	Ac-ft/yr
548-3	City of Milbank	GT	LC	MUN	2.1	912.2
2006-3	Town of Corona	RB	LC	MUN	0.245	106.4
4050-3	City of Big Stone City	GT	LC	MUN	3.3	1433.5
5918-3	Victory Farms	GT	LC	COM/LCO	0.33	143.3
6161-3	Lou's Greenhouse	GT	LC	COM	0.04	17.38
6171-3	Cold Spring Granite Co	GT	LC	IND	0.111	48.2
6230-3	Riverview LLP	GT	LC	COM/LCO	0.39	169.4
6358-3	Michael Johnson	GT	LC	COM/LCO	0.11	47.8
6636-3	Western Consolidated COOP	GT	LC	COM	0.022	9.56
7649-3	Poet Biorefining	GT	PE	IND	3.34	2000 ^{1, 2}
7931-3	GCC Ready Mix	GT	PE	COM	0.11	5 ¹
					Total	4892.8
¹ = Permitted Volume, ² = Used as a backup supply when lake levels are low, RB= Roberts County, GT= Grant County, MUN= Municipal, COM= Commercial, LCO= Livestock Confinement Operation, IND= Industrial						

Table 1- Non-irrigation water use from the Veblen aquifer in Grant and southern Brown Counties (Water Rights, 2014b)

The estimated average annual use is based on pumping at the maximum permitted diversion rate for 60 percent of the time. Water Permit Nos. 7649-3 and 7931-3 are limited by an annual

appropriation volume so that is shown in Table 1. The City of Big Stone City buys water from the City of Ortonville, MN (Friedeman, 2014). Therefore, the estimated use by Water Right No. 4050-3 is likely less than 1,433.5 ac-ft/yr.

Average annual irrigation use from the Veblen aquifer in Grant and southern Roberts Counties as reported to the DENR-Water Rights Program is shown in Table 2. There has been some limited development of irrigation from the aquifer over the period of record.

Year	No. of Permits Reporting	Appropriation (ac-ft)	Pumpage (ac-ft)
2012	22	8325	1265.45
2011	20	7774	314.74
2010	20	8005	1100.69
2009	20	8005	1067.84
2008	20	8005	1350.26
2007	16	6547	1245.01
2006	16	6547	1440.48
2005	16	6547	1245.54
2004	17	6627	1283.56
2003	17	6627	1274.54
2002	17	6627	1024.95
2001	17	6627	1160.59
2000	17	6627	975.55
1999	17	6627	859.36
1998	16	6414	812.07
1997	15	5994	709.06
1996	15	5994	712.6
1995	16	6814	445.6
1994	18	7130	675.63
1993	18	7203	220.06
1992	18	7133	589.09
1991	21	7543	230.99
1990	18	6851.6	1329.9
1989	19	7200.6	1222.9
1988	17	6396.6	1897.35
1987	17	6673.6	1046.71
1986	17	6673.6	726.7
1985	16	5863.6	519.1
1984	16	5863.6	1189.03
1983	14	6571	808.3
1982	14	5962	704.84
1981	19	8366	1062
1980	15	6978	504
1979	15	6978	700
Min	14	5863.6	220.06
Max	22	8366	1897.35
Avg.	17.2	6885.9	932.8

Table 2- Irrigation water use from the Veblen aquifer in southern Roberts County and Grant County (modified from: Mathiowetz, 2012; Water Rights, 1980-2013)

Recharge:

Recharge to the Veblen aquifer is by direct infiltration and subsequent percolation of rainfall and snowmelt where the aquifer is at land surface and may occur through leakage from adjacent till (Hansen, 1990). Hedges and others (1985) estimated a range of recharge to the aquifer to be 0.24 in/yr across the entire aquifer using a regional flow-net analysis to 5.2 in/yr for the unconfined portions of the aquifer. The actual recharge rate for the Veblen aquifer is probably

within this range, and because the aquifer is mostly confined, the recharge rate is probably nearer to the flow-net analysis estimate (Stonesifer, 2013).

The Veblen aquifer underlies approximately 240,000 acres in southern Roberts County and Grant County as delineated in the Barr Engineering report with approximately 180,000 acres in Grant County alone (2007). Hansen (1990) estimated the aquifer underlies approximately 200,300 acres of Grant County. Comparing the two areal estimates, it is most appropriate to use 240,000 acres in Grant and southern Roberts Counties from the Barr Engineering Report as an areal extent to be conservative (2007).

Hydrologic Budget:

The estimated average annual withdrawal from the Veblen aquifer in Grant and southern Roberts Counties is 5,825.6 ac-ft/yr. The recharge rate necessary to have average annual withdrawal plus the estimated annual withdrawal by this proposed appropriation (143.3 ac-ft/yr) equal to estimated annual recharge is 0.30 in/yr. That annual recharge is on the low end of the range and is very reasonable. Therefore, there is a reasonable probability that unappropriated water is available for this proposed appropriation.

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 DENR-Water Rights Program monitors 34 observation wells completed into the Veblen aquifer with 16 in Grant and southern Roberts Counties (Water Rights, 2014a). The nearest observation wells to the proposed well site are GT-83C, GT-79G, and GT-77R, which are two miles north, 4.5 miles northeast, and 4.5 miles southeast of the proposed well site, respectively (Water Rights, 2014a). The water level in the observation wells show good response to climatic conditions. The water level rises (recharge) during wet years and gradually declines during dry years. The observation well hydrographs show minimal effects from pumping, especially GT-79G which is within approximately 0.5 miles of a high capacity irrigation well. The climatic effects on water level greatly mask the temporal impacts of well withdrawal. Therefore, recharge to and natural discharge from the Veblen aquifer significantly exceeds pumping. Recognizing that natural discharge can be captured for pumping, the hydrographs document that unappropriated water is available for this proposed appropriation. The hydrographs for GT-83C, GT-79G, and GT-77R are similar to the hydrographs for the other observation wells in the aquifer and are representative of the aquifer. Figures 5, 6, and 7 show the hydrographs for GT-83C, GT-79G, and GT-77R, respectively.

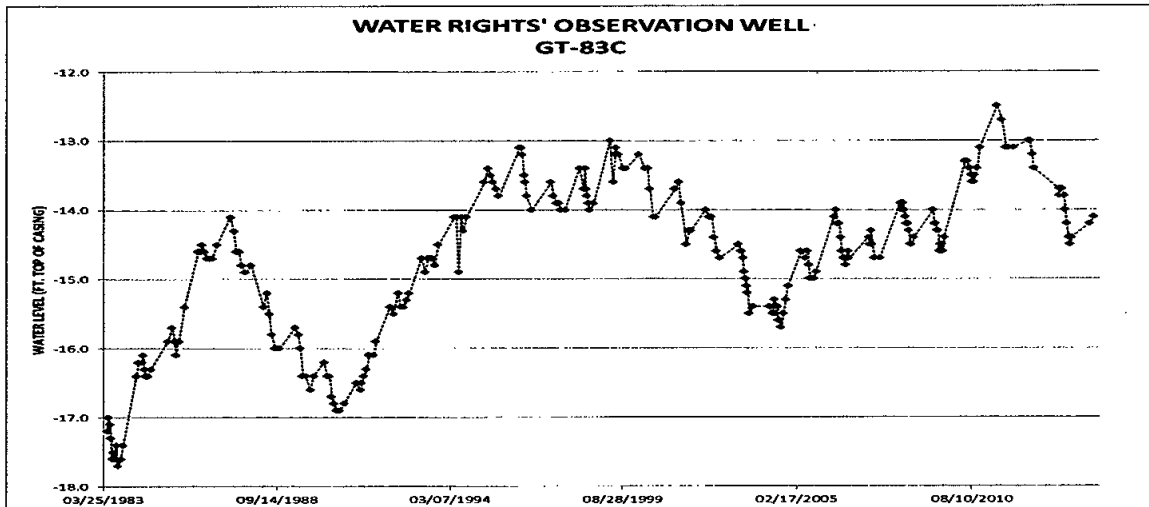


Figure 5- Hydrograph for observation well GT-83C (Water Rights, 2014a)

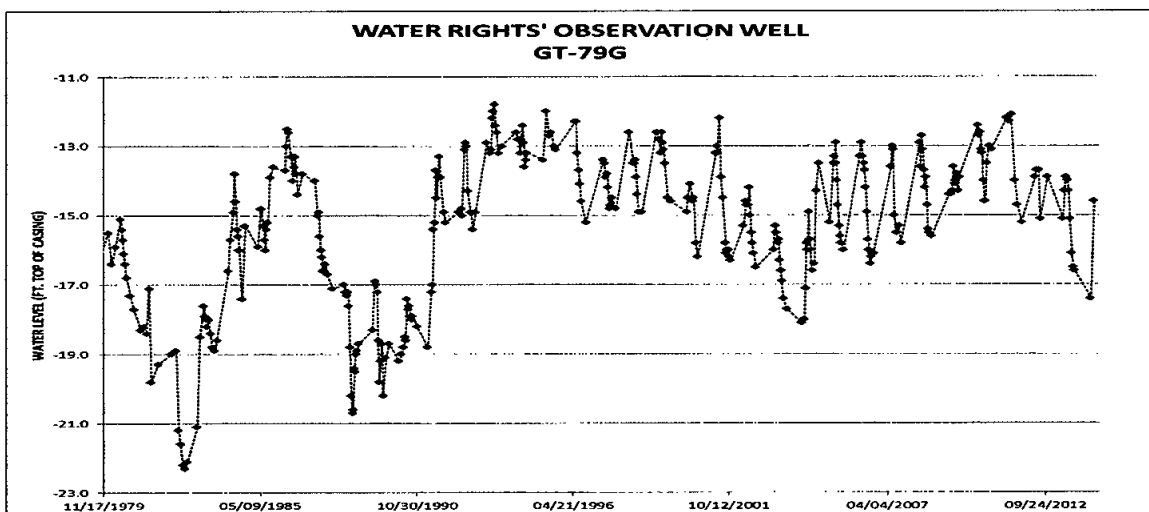


Figure 6- Hydrograph for observation well GT-79G (Water Rights, 2014a)

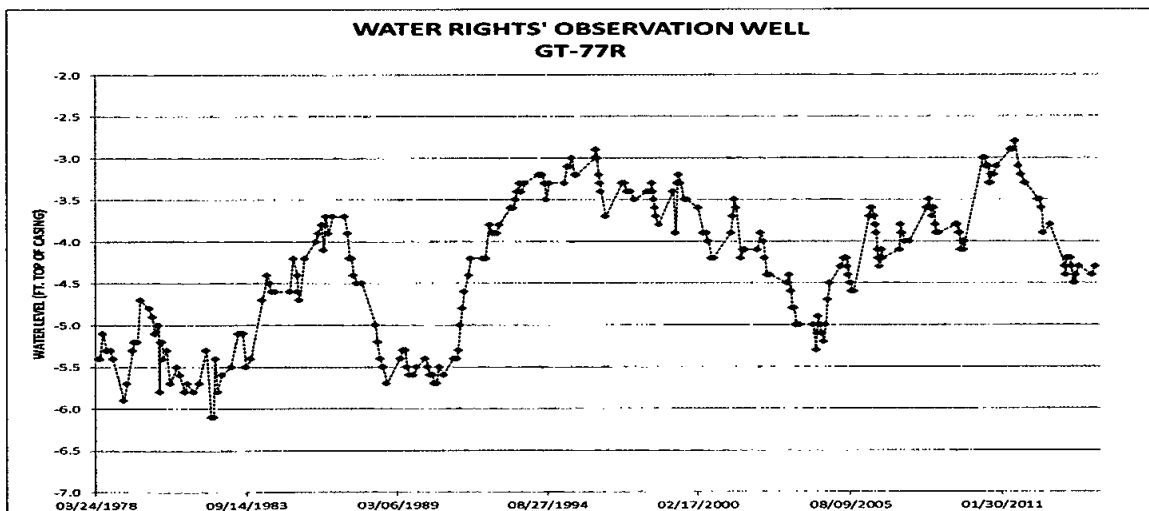


Figure 7- Hydrograph for observation well GT-77R (Water Rights, 2014a)

EXISTING WATER RIGHTS:

The nearest water right/permit authorized to have a well completed into the Veblen aquifer is approximately 4.8 miles northeast of the proposed well site (Water Rights, 2014b). There are two domestic wells on file with the SD DENR-Water Rights Program within approximately 1.5 miles of the proposed well site (Water Rights, 2014c). The nearest domestic well on file is approximately one mile southwest of the proposed well site.

In the area of this application, the Veblen aquifer is under confined conditions. Drawdown may extend some distance from the pumped well. It may be possible that drawdown from this proposed appropriation may be measureable in the nearby domestic and appropriative right wells. However, the impact of drawdown is not expected to be significant due to the distance between wells. The hydrograph for observation well GT-79G (see Figure 6) demonstrates that at 0.5 miles effects of pumping a high capacity well is barely noticeable on the water level.

SDCL 46-6-6.1 does not protect artesian head pressure as a means of delivery and the Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. To balance interests between irrigation use and delivery of water by artesian pressure, the Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

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

Depending on the specific characteristics of the Veblen aquifer at the well site proposed by this application, some existing well owners may need to lower their pumps to accommodate for deeper water levels. However, when considering the statute (SDCL 46-6-6.1) and rule (ARSD 74:02:04:20(7)), well interference from this proposed appropriation is not likely to cause a significant impact. Therefore, there is a reasonable probability that any interference will not be adverse.

CONCLUSIONS:

1. This application proposes to appropriate water from the Veblen aquifer at a maximum diversion rate of 0.33 cfs for commercial use in a dairy operation.
2. There is a reasonable probability that unappropriated water is available from the Veblen aquifer for this proposed appropriation.
3. There is a reasonable probability that the diversion proposed by this application will not adversely impact existing appropriative or domestic users.



Adam Mathiowetz
SD DENR-Water Rights Program

Approved by:



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Barr Engineering. 2007. Groundwater Supply Evaluation, Big Stone II Project, Grant County, South Dakota: Prepared for Otter Tail Power Company.
- Buhler, K.A. 2007. Report on Water Permit Application No. 6846-3 for Otter Tail Corporation. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
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- Green, S. and J.P. Gilbertson. 1987. Ground-Water Investigation for Big Stone City, South Dakota. Open-File Report No. 43-UR. SD DENR-Geological Survey. Vermillion, SD.
- Hansen, D.S. 1990. Water Resources of Codington and Grant Counties, South Dakota. Water-Resources Investigations Report 89-4147. U.S. Geological Survey. Huron, SD.
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- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-water Resources in Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
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Water Rights. 2014b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014c. Well Completion Reports. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Printer's Affidavit of Publication

RECEIVED

JUL 17 2014

STATE OF SOUTH DAKOTA
COUNTY OF GRANT

} ss.

WATER RIGHTS
PROGRAM

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 Grant County Review, Inc., 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 accounts receivable department thereof, have personal knowledge of all the facts stated in this affidavit; that the advertisement headed Notice of

Application NO. 8015-3 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>July 16</u>	<u>20 14</u>	<u>20</u>
<u>20</u>	<u>20</u>	<u>20</u>
<u>20</u>	<u>20</u>	<u>20</u>

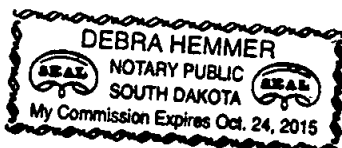
That \$ 22.16, being the full amount of the fee charged for the publication of said Notice, inures to the benefit of the publisher of the Grant County Review; that no agreement or understanding for the division thereof has been made with any person, and that no part has been agreed to be paid to any person whomsoever.

Ann Tuchscherer

Subscribed and sworn to before me this 16th day of July 2014

Debra Hemmer

Notary Public, Grant County, South Dakota



NOTICE OF APPLICATION NO. 8015-3 to Appropriate Water

Notice is given that Victory Farms LLC, c/o K M Souza, 48176 153rd St., Milbank, SD, 57252, has filed an application for a water permit to appropriate 0.33 cubic feet of water per second from two wells to be completed into the Veblen Aquifer (132 feet deep) located in the SE 1/4 SE 1/4 Section 32-T119N-R48W for commercial use in a dairy operation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8015-3 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'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 July 28, 2014.

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 an approximate
cost of \$22.16.

Publication Fee \$ 22.16
Notarial Fee c

RECEIVED

JUL 25 2014

WATER RIGHTS
PROGRAM

Form 8

DENR

NOTICE OF APPLICATION
NO. 8015-3 to Appropriate
Water

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Published once at the approximate cost of \$52.29. (July 16, 2014)

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

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Codington) SS

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:

July 16th, 2014

Cost of Printing \$55.84

Monica K. Saathoff
(Signature)

Bookkeeper

(Title)

July 16th, 2014

(Date Signed)



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



July 8, 2014

Grant County Review
PO Box 390
Milbank SD 57252

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 8015-3 to Appropriate Water. Please publish the notice once on July 16, 2014. 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 Victory Farms LLC, c/o K.M. Souza, 48176 153rd St, Milbank SD 57252 (Ph # 605-432-5606).

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

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



July 8, 2014

Public Opinion
PO Box 10
Watertown SD 57201

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

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DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



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

July 8, 2014

Victory Farms LLC
K.M. Souza
48176 153rd St
Milbank SD 57252

Dear Mr. Souza:

Water Permit Application No. 8015-3 for commercial 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 July 16, 2014. 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. 8015-3 to Appropriate Water

Notice is given that Victory Farms LLC, c/o K M Souza, 48176 153rd St, Milbank SD 57252 has filed an application for a water permit to appropriate 0.33 cubic feet of water per second from two wells to be completed into the Veblen Aquifer (132 feet deep) located in the SE 1/4 SE 1/4 Section 32-T119N-R48W for commercial use in a dairy operation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8015-3 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.

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Published once at the total approximate cost of _____.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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AUG 18 2014

Victory Farms LLC
Kevin Souza
48176 153rd St
Milbank SD 57252

Dear Mr. Souza:

Enclosed is Water Permit No. 8015-3 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

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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

AUG 04 2022

Victory Farms LLC
c/o Kevin Souza
48176 153rd St
Milbank SD 57252

Dear Mr. Souza:

Enclosed are Water Permit and Water License No. 8617-3. These are the final water right documents completing your process of obtaining a Water Right. Also, enclosed is a map showing the location of the wells.

As long as you use the water beneficially, as stated in the Water License, the 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

Note: The applicable portions of No. 8015-3 are incorporated into this water license.