

WATER PERMIT NO. 8336-3

Name of Applicant: L G. Everist Inc. c/o Chris Klein

Address: 350 S Main Ave, Suite 400, Sioux Falls SD 57104

Phone: 605 330-6570

Amount of Water Claimed: 0.044 cfs

Total Acres: NA

Source of Water Supply: groundwater (2 wells)

Water to be used for: industrial and commercial

County: Roberts

Type of Waste Disposal System:

Location: 4 miles west of Summit

PRIORITY

Date Received: 3-12-18

Application/License Fee: \$ 300

Corrected Application Received:

Period of Annual Use: Jan 1 – Dec 31

Remarks: Site has been in existence for many years

Diversion Point: SE 1/4 NW 1/4 and SW 1/4 NW

1/4 Sec 36-T122N-R52W

Land to be Irrigated: NA

Depth of Well: 15 feet and 190 feet

Well Driller: Wieber Well Drilling

Remarks:

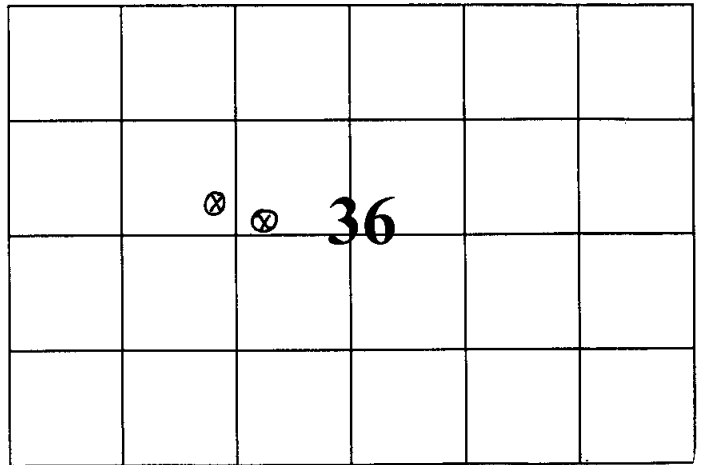
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 3-12-18

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 8336-3**

Date of first receipt of application March 12, 2018.

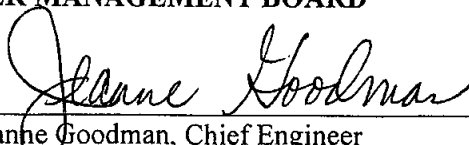
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8336-3 to L. G. Everist, Inc., c/o Chris Klein, 350 S Main Ave, Suite 400, Sioux Falls SD 57104 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8336-3 appropriates 5.5 acre-feet of water annually at a maximum pump rate of 0.044 cubic feet of water per second from two existing wells completed into the Big Sioux:North Aquifer (190 feet deep) and Prairie Coteau Aquifer (15 feet deep) located in the SE 1/4 NW 1/4 Section 36 and the SW 1/4 NW 1/4 Section 36; all in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Each well is capable of diverting at a rate of 10 gallons per minute and the site is located 4 miles west of Summit SD.
2. The water appropriated shall be used for the purpose of industrial and commercial use 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. 8336-3 is June 1, 2018.
5. The date from which applicant may claim right is March 12, 2018.
6. One-fifth of the construction is to be completed on or before December 1, 2020.
7. All construction is to be completed on or before June 1, 2023.
8. Water is to be put to beneficial use on or before June 1, 2027.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

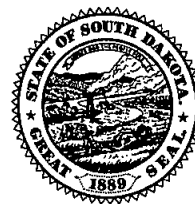
1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The Permit holder shall individually report to the Chief Engineer annually the amount of water withdrawn from the Big Sioux:North and Prairie Coteau aquifer.
3. Water Permit No. 8336-3 authorizes a total annual diversion of 5.5 acre foot of water (2.75 acre feet from well completed into the Big Sioux:North aquifer and 2.75 acre feet from the Prairie Coteau aquifer).

WATER MANAGEMENT BOARD

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

JUN 20 2018

date



RECEIVED

MAR 12 2018

WATER RIGHTS
PROGRAM

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8336-3</u> (office use only) Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>
	Newspaper <u>Sisseton Courier</u>
	<u>Public Opinion</u>

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

Check use(s) of water:

- | | | | |
|---|--|--|--|
| ☐ Municipal | ☐ Water Distribution System | ☐ Recreational | ☐ Institutional |
| ☐ Rural Water System | ☐ Commercial | ☐ Fish & Wildlife | ☐ Geothermal |
| ☐ 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.)

1. Name to Appear on Water Permit L.G. Everist, Inc. c/o Chris Klein

Mailing Address 350 S Main Ave, Suite 400 Sioux Falls SD 57104
(Address) (City) (State) (Zip Code)

Phone (605) 330-6570 Mobile _____ Email cmklein@lgeverist.com

2. Amount of water claimed 0.044 *CFS or 10 gpm each 20 **GPM and 5.5 ***AF or 1,800,000 Gallons
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use)

3. Source of water supply One 5" well and one 3' well #1 (new well) #2 (older well)

4. Location of point of diversion #1 - SE1/4 NW1/4, #2 - SW1/4 NW1/4, S36-T122N-R52W County Roberts
(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)

5. County or counties where water will be used Roberts

6. Annual period during which water is to be used January - December

7. 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 will be used to supply water for maintenance shop & office/break shack/lab.

I, Chris Klein

Name of Person

QC & Regulatory Manager

Title (if applicable)

, the applicant, certify under

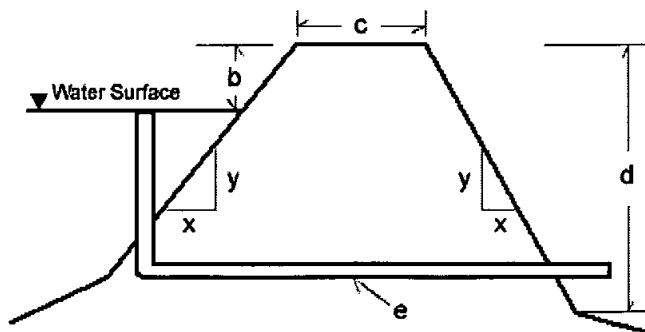
penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

(type or print)

(check one or both as applicable)

☐ Using existing well(s)

- For either Existing or Proposed Wells:



Supplemental Information

(type or print)

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

a) If new wells, how many _____ Have test holes been drilled ☐ Yes ☐ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 1 Provide copy of log(s), if available. Drilled by N/A

For either Existing or Proposed Wells:

c) Well Depth (required) 15' Depth to Top of Water Bearing Material 5' Depth to Water from Surface 5'

d) Distance to nearest domestic well on applicant's property 650' Property owned by others 1540'

2. Wastewater Disposal System Information

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

b) System Capacity (gallons) 1,000.00 Year Constructed 2017

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

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

4. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

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

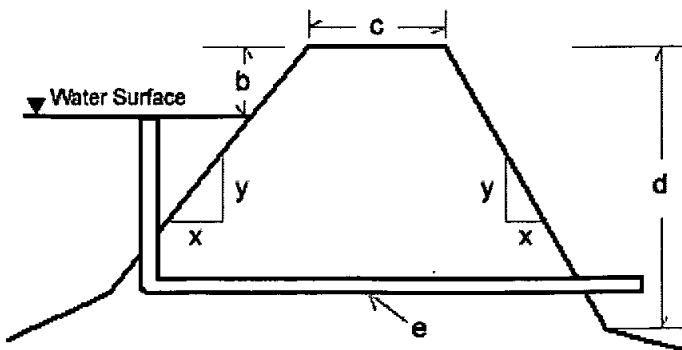
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



SOUTH DAKOTA WATER WELL COMPLETION REPORT

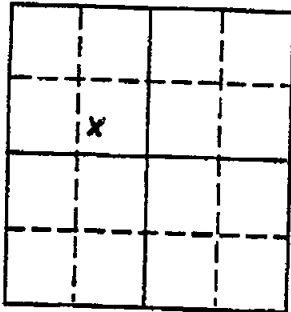
11-02

Location SE 1/4 NW 1/4 Sec 36 Twp 122-N Rg 52-W

County Roberts

Reservation
North

Please mark well location with an "X"



Well completion Date

10/12/17

1 Mile

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

2175 ft. from Septic

(Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

☐ Steel
☒ Plastic
☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
200 LB/FT	5 IN	6 FT	180 FT	8 1/2 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Wye Ben	12	10 lb/gal	6 FT	170 FT
		lb/gal	FT	FT

Describe grouting procedure Full hole grouting
Premix line to 170'

SCREEN:

☐ Perforated pipe
☒ Manufactured
 Diameter 5 Inches Length 10 Feet

Material POC Ever-Flow

Slot Size .030 Set From 180 Feet to 190 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 analysis

Chlorine

Perre

Please return White Copy to DENR Water Rights

Well Owner: L.G. Egerist

Business Name:

Address1: 14340 454th St.

Address2:

City, State, Zip: Summit, SD 57266

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
gravel sand	0	15
yellow clay	15	40
Blue clay	40	100
Hard blue clay	100	165
coarse sand	165	190

STATIC WATER LEVEL

60

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?

YES

WELL TEST DATA:

☐ Pumped Describe: Air line

☐ Bailed

☒ Other

Pumping Level Below Land Surface

100 Ft. After 1 Hrs. pumped 50 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate:

10 GPM

REMARKS

Prairie Coteau AM

This well was drilled under license # 480

And this report is true and accurate.

Drilling firm: Wieber Well Drilling

Signature of License Representative:

John Wieber

Signature of Well Owner or Equitable Property Holder:

Date: 10/12/17

523 E. Capitol Ave., Pierre SD 57501

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JAN 29 2018
WATER RIGHTS PROGRAM



DRAWN BY
C. KLEIN
DATE
02/26/2018
SCALE
1:800



Summit, SD
Well Location

L.G. EVERIST, INC.
AGGREGATE PRODUCERS
SIOUX FALLS, SD (605) 334-5000

DRAWING NO.
1



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

RECEIVED OF L.G. Everist, Inc. 350 S Main Ave Suite 490 Sioux Falls, SD 57104 Date March 12, 2018

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

Fee for Application for Permit No. <u>8336-3</u> to Appropriate Water, to construct and to put water to beneficial use	100	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>8336-3</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	300	00

No. **08622**

By

Jeanne Goodman
Chief Engineer
2711

Gronlund, Eric

From: Chris Klein <cmklein@LGEVERIST.com>
Sent: Monday, April 02, 2018 8:07 AM
To: Gronlund, Eric
Subject: RE: [EXT] Water permit application near Summit
Attachments: Summit Process Water Rights.pdf; Summit Well Water Rights.pdf

Eric –

I noticed I had the wrong section number on the application for the wells in Summit as well. I went ahead and amended both maps to correctly show Section 36 for the location, and both of them are attached.

Just let me know if you have any other questions.

Thanks.



CHRIS KLEIN, L.G. Everist, Inc. – QC & Regulatory Manager
350 S Main Ave, Suite 400, Sioux Falls, SD 57104
605.929.4017 || cmklein@lgeverist.com || www.lgeverist.com
SAFE...RELIABLE...PRODUCTIVE

From: Gronlund, Eric [<mailto:Eric.Gronlund@state.sd.us>]
Sent: Friday, March 30, 2018 2:24 PM
To: Chris Klein <cmklein@LGEVERIST.com>
Subject: RE: Water permit application near Summit

I am not aware of any great way to determine the consumptive component in this instance. You were right in at least providing a number as that reflect the quantity based on the beneficial use being made. However after discussing with another staff person, we will likely just include the pump rate in the public notice and set forth that LG Everist recycles and reuses the water and not get into the annual volume used. Eric

From: Chris Klein [<mailto:cmklein@LGEVERIST.com>]
Sent: Friday, March 30, 2018 1:49 PM
To: Gronlund, Eric
Subject: RE: [EXT] Water permit application near Summit

Eric –

You are correct on both counts.

1. That was a typo on the map – it should be Section 36.
2. I did use an estimated annual hours of operation multiplied by the system capacity (3,200 gpm) to get the total usage. I was under the impression that total water usage should be permitted, regardless of whether or not it was part of a recirculating load. I don't have anything definitive, but I'm guessing that at least 80% - 85% of that original estimate is recycled for reuse. In your experience reviewing applications, is there a good way to determine the consumptive portion in this type of scenario?



CHRIS KLEIN, L.G. Everist, Inc. – QC & Regulatory Manager

350 S Main Ave, Suite 400, Sioux Falls, SD 57104

605.929.4017 || cmklein@lgeverist.com || www.lgeverist.com

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From: Gronlund, Eric [<mailto:Eric.Gronlund@state.sd.us>]

Sent: Friday, March 30, 2018 1:11 PM

To: Chris Klein <cmklein@LGEVERIST.com>

Subject: Water permit application near Summit

Chris:

Regarding the application for pumping from the pond for the operation in Section 36-T122N-R52W.

- The submitted map submit with the application indicates the operation is in Section 35-T122N-R52W. I presume that is a typo and should be Section 36.
- How did you arrive at the annual volume of 1199 acre feet of water (320,720,000 gallons). I presume that is an estimate of the anticipated hours of operation (pumping) multiplied by the 3,200 gpm. Since LG Everist incorporates recycling & reuse in the operate, a large component of the 1199 acre-feet in non-consumptive in nature and the consumptive portion would be the incidental loss and the water used for dust control.

Eric Gronlund

Water Rights Program, DENR

605 773-3352

Eric.gronlund@state.sd.us

Schlaak, Karen

From: Chris Klein <cmklein@LGEVERIST.com>
Sent: Monday, March 12, 2018 12:00 PM
To: Schlaak, Karen
Subject: RE: [EXT] Application submitted

Karen –

Each well will use 10 gallons per minute. Well #1 is actually the new well and Well #2 is the old one in the application – my reasoning for that was because the new well is the one that was documented first and actually brought our attention to the need for a water right, whereas the old well was an addition to it once we knew about it. If it would be better to switch them around, let me know and I can change them on the aerial map and send you a new one.

Just let me know if you need any further information or have any other questions.

Thanks.



CHRIS KLEIN, L.G. Everist, Inc. – QC & Regulatory Manager
350 S Main Ave, Suite 400, Sioux Falls, SD 57104
605.929.4017 || cmklein@lgeverist.com || www.lgeverist.com
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From: Schlaak, Karen [<mailto:Karen.Schlaak@state.sd.us>]
Sent: Monday, March 12, 2018 11:39 AM
To: Chris Klein <cmklein@LGEVERIST.com>
Subject: Application submitted

Chris Klein,

We received the Application for Permit to Appropriate Water today. The application states the amount of water claimed as 20 gallons per minute from the 2 wells. Can you give me the gallons per minute from each well? I am assuming Well #1 is the older 15 foot well and Well #2 is the new well.

If you have questions, let me know.

Karen Schlaak
SD DENR, Water Rights Program
(605) 773-3352





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

February 22, 2018

L G Everist
14340 454th St
Summit SD 57266

Dear Sir:

A well driller's report filed by Wieber Well Drilling shows they completed a new well for L G Everist on October 12, 2017 located in the SE 1/4 NW 1/4 Section 36-T122N-R52W, Roberts County. A review of our files indicates that L G Everist has several water rights within the State but none for this location.

According to South Dakota Administrative Rule 74:02:01:01 (1) and 74:02:01:03, a water permit is needed for any water use except for reasonable, private domestic use. Without a water right you are not entitled to receive protection in the event of interference by a new or future user who has a water right.

Pursuant to South Dakota Codified Laws 46-1-15, 46-5-9, 46-5-10 and 46-2-18, you are required to have a water right in order to have a legal right to the use of the water.

Enclosed is an application form and instruction sheet to apply for a water permit. The completed form with the application fee and map can be returned to: Water Rights Program, 523 E. Capitol, Pierre, SD 57501.

Please contact Eric Gronlund or me if you have any questions.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

c: Chris Klein, L G Everist Inc.
350 S Main Ave, Suite 400
Sioux Falls SD 57104



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8336-3, L. G. Everist Inc.**

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. 8336-3, L. G. Everist Inc., c/o Chris Klein, 350 S Main Avenue, Suite 400, Sioux Falls SD 57104.

The Chief Engineer is recommending APPROVAL of Application No. 8336-3 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 Permit holder shall individually report to the Chief Engineer annually the amount of water withdrawn from the Big Sioux:North and Prairie Coteau aquifer.
3. Water Permit No. 8336-3 authorizes a total annual diversion of 5.5 acre foot of water (2.75 acre feet from well completed into the Big Sioux:North aquifer and 2.75 acre feet from the Prairie Coteau aquifer).

See report on application for additional information.

Jeanne Goodman, Chief Engineer
May 17, 2018

Report to the Chief Engineer
Water Permit Application No. 8336-3 and 8341-3
L. G. Everist
May 5, 2018

Water Permit Application No. 8336-3 for L.G. Everist, Inc. c/o Chris Klein proposes to appropriate 5.5 acre-feet of water per year at a maximum instantaneous diversion rate of 0.044 cubic feet per second (cfs) from two existing wells. One well is completed into the North management unit of the Big Sioux aquifer (Big Sioux: North) located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 36 in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The other well is completed into the Prairie Coteau aquifer located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 36 in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Each well is capable of diverting at a rate of 10 gallons per minute (gpm) for industrial and commercial use at the site in Roberts County about four miles west of Summit.

Water Permit Application No. 8341-3 for L.G. Everist, Inc. c/o Chris Klein proposes to appropriate at a maximum instantaneous diversion rate of 7.13 cubic feet per second (cfs) from a gravel pit created by previous extraction of sand and gravel located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ all in Section 36-T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The gravel pit has a surface area of approximately 27 acres with a storage capacity of 164 acre-feet of water. The water is for industrial use in an existing sand and gravel operation including an aggregate wash plant that recycles water back to the gravel pit located in Section 36-T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Water will also be utilized for dust control. However, the proposed use under this application will primarily be non-consumptive. Best available information suggests the gravel pit is completed into the Big Sioux: North aquifer and also receives some surface water from the surrounding drainage area.

A site map is shown in Figure 1.



Figure 1: Site Map

Aquifer: Big Sioux: North (BS: N) and Prairie Coteau (PCO)

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 there is unappropriated water available for the applicant's proposed use, the proposed diversion can be developed without unlawful impairment of existing rights, and the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and potential effects on existing rights from the aquifer that are pertinent to this application.

Water Availability

Water Permit Application No. 8326-3 and 8341-2 propose to appropriate water from the Big Sioux: North and the Prairie Coteau aquifers. The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older or lower than the Greenhorn

Formation and a water distribution system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a water distribution system is not involved and the Big Sioux: North and Prairie Coteau aquifers are not older or lower than the Greenhorn Formation. Therefore, the withdrawal/recharge issue must be considered.

A branch of the Big Sioux: North aquifer located north of Watertown in Codington County is likely fully appropriated. The well site that this application proposes to utilize is not located in that branch of the aquifer. Therefore, this application is not expected to have any impact on the area of the Big Sioux: North aquifer that is likely fully appropriated.

Big Sioux: North aquifer

Big Sioux: North Aquifer Characteristics

The Big Sioux aquifer is a shallow aquifer made up of glacial outwash ranging from medium sand to medium gravel and is well to poorly sorted (Hanson, 1990). The aquifer primarily underlies the flood plain of the Big Sioux River and its tributaries (Hansen, 1990). The outwash can also be mantled by alluvium. The Big Sioux aquifer is considered to be primarily an unconfined aquifer, however it can be found under locally confined conditions (Hedges et al., 1982; Hanson, 1990).

Hedges et al. (1982) estimated the North management unit of the Big Sioux aquifer (Big Sioux: North aquifer) to underlie about 83,500 acres of Codington, Grant, Hamlin, and Roberts Counties (Hedges et al., 1982). Hedges et al. (1982) estimates that the Big Sioux: North aquifer contains about 187,880 acre-feet of recoverable water. Hedges et al. (1982) also mapped several areas extending from Big Sioux: North aquifer with potential to contain additional aquifer area. Stonesifer (2013b) used the investigations of Hansen (1994), Kume (1985), Putnam and Thompson (1996), and Thompson (2001) to further refine the delineation of the aquifer from that of Hedges et al. (1982), resulting in an estimated areal extent of about 111,700 acres. The aquifer is hydraulically connected to the Big Sioux River, Lake Kampeska, Pelican Lake, and Still Lake (Putnam and Thompson, 1996). It is also hydraulically connected along its southern edge to the Brookings management unit of the Big Sioux aquifer (Hedges et al., 1982).

The well completion report for the 15 foot deep well for Application No. 8336-3 is not available. Based on the well depth and location it is most likely completed into the Big Sioux: North aquifer. Area geological information indicates that the sand and gravel in which the Big Sioux: North aquifer occurs could potentially be thicker than 15 feet in the vicinity of this well (SDGS, 2018). Therefore, there is some potential that the 15 foot well for Application No. 8336-3 may not be an adequate well as defined by Administrative Rule of South Dakota (ARSD) 74:02:04:20(6).

The “ponds” for Application No. 8341-3 are described as being created by the previous extraction of sand and gravel, so the better descriptor is gravel pit. This extraction of sand and gravel likely reached a depth below the static water level of the Big Sioux: North aquifer allowing groundwater to enter the excavated area. Water use from the gravel pit will be primarily non-consumptive since water used to wash and process sand/gravel is recycled back through the

gravel pit system. Losses from the gravel pit will be due to water use for dust control and losses to evaporation.

Big Sioux: North Hydrologic Budget

Recharge

Recharge to the aquifer is from infiltration of precipitation and seepage from lakes, ponds, streams, and rivers when water levels are higher than the aquifer water levels (Putnam, and Thompson, 1996). Several studies have estimated recharge rates to the Big Sioux aquifer. Hedges et al. (1985) estimated recharge rates to the various management units of the Big Sioux aquifer ranging from 2.7 to 6.9 inches per year, not including the estimates from flow net analysis. By observation well analysis, Hedges et al. (1985) estimated a recharge rate of 3.2 inches per year for just the North management unit of the aquifer. Hansen (1990) estimated recharge to the aquifer to range from four to ten inches per year. Putnam and Thompson (1996) used observation well data to estimate the average annual recharge rate to the Big Sioux aquifer to be in the range of 2.9 to 5.8 inches per year for a study area consisting of primarily Grant and Codington Counties. For the steady-state modeling of the aquifer in the Putnam and Thompson (1996) study area, a recharge rate of 5.53 inches per year best reproduced average water levels during the study period. Applying the recharge rates from the observation well analysis of Putnam and Thompson (1996) over the aquifer area of Stonesifer (2013b) yields an estimated average annual recharge range of 26,990 to 53,980 acre-feet per year. However, given that in the steady state modeling a recharge rate of 5.53 inches per year best reproduced average water levels during the study period and Hedges et al. (1985) estimated a recharge rate of 3.2 inches per year to the management unit, the actual average annual recharge rate for the aquifer is likely at least toward the middle portion of the estimated average annual recharge range.

Withdrawals

Discharge from the aquifer is by withdrawals from wells, seepage to hydrologically connected surface water, groundwater outflow, and evapotranspiration where the aquifer is at or near land's surface (Hansen, 1990). In examining aquifer water levels in relation to Big Sioux River gages, Putnam and Thompson (1996) concluded that the aquifer generally discharges to the river. There are currently 101 water rights/permits authorized to appropriate water from the Big Sioux: North aquifer and three future use permits for the City of Watertown. Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget.

There are 37 non-irrigation water rights/permits currently authorized to appropriate water from the aquifer and three future use permits. The three future use permits for the City of Watertown reserve a total volume of 3,469 acre-feet per year, and it is assumed for estimating water use that future use permits will be fully developed. Historically, average water use by non-irrigation appropriations limited by instantaneous diversion rate has been less than 60% of full time pumping at the permitted diversion rate. For water rights/permits limited to an annual

volume, full use of that volume is assumed for estimation of average annual withdrawal. Using this methodology, maximum water usage under the water rights for the City of Watertown is estimated at 11,669 acre-feet per year, however, actual use (shown in Table 1) has historically been much less. Water Right No. 6595-3 for the Clark Rural Water System is for an annual appropriation of 404 acre-feet per year, however, reported use (shown in Table 1) has historically been much less. Water Right No. 5158-3 for Sioux Rural Water System had been on standby since 1998 (Buhler, 2012). Sioux Rural Water System has recently resumed use of one of the four wells authorized under Water Right No. 5158-3 and is considering resuming use of a second well (Friedeman, 2017). Water Right No. 5158-3 is limited by diversion rate; therefore average annual water use is estimated at less than 1,060 acre-feet per year. The remaining non-irrigation water rights/permits limited by diversion rate have an estimated average annual use of 2,725 acre-feet per year. The remaining non-irrigation water permit limited by annual volume is estimated to have an average annual use of 35 acre-feet. Therefore, withdrawal due to non-irrigation use water rights/permits and future use permits is estimated to be at maximum 19,362 acre-feet per year.

Table 1: Reported water use from the Big Sioux: North aquifer by Clark RWS and the City of Watertown (modified from Mathiowetz, 2015; Water Rights, 2005-2018)

Year	Clark RWS (acre-feet)	Watertown (acre-feet)
2017	150	4,220
2016	156	4,208
2015	140	4,110
2014	136	4,040
2013	127	4,095
2012	108	4,260
2011	143	3,864
2010	143	3,947
2009	164	3,735
2008	127	3,984
2007	44	4,062
2006	n/a	2,961
2005	n/a	2,392
2004	n/a	2,126
Avg.	131	3,715

The Water Rights Program collects irrigation data from across the state. Reported irrigation usage from 1979 to 2016 from the Big Sioux: North is shown in Figure 2. Average reported pumpage over the period of record shown in Figure 2 is 2,327 acre feet per year. Water rights/permits currently authorize the irrigation of 9,727.15 acres. However, starting in 2012 there has been a notable increase in acreage permitted for irrigation. Water permits issued since the start of 2012 have authorized the irrigation of 3,137 acres. In looking at the percent change in authorized acres since the start of 2012, the authorized acres have increased by 47.6 percent.

Since the permits issued since the start of 2012 only have a few years of pumping data represented in the reported irrigation pumpage, average annual irrigation usage is estimated to be approximately 47.6 percent greater than the average over the period of record. This results in an estimated average annual irrigation use of 3,434 acre-feet per year, although it is worth noting that this estimate could be considered to be slightly conservative since irrigation data from 2012 to 2016 (which includes some reported irrigation under newer permits) was included in the average that the estimate was based on.

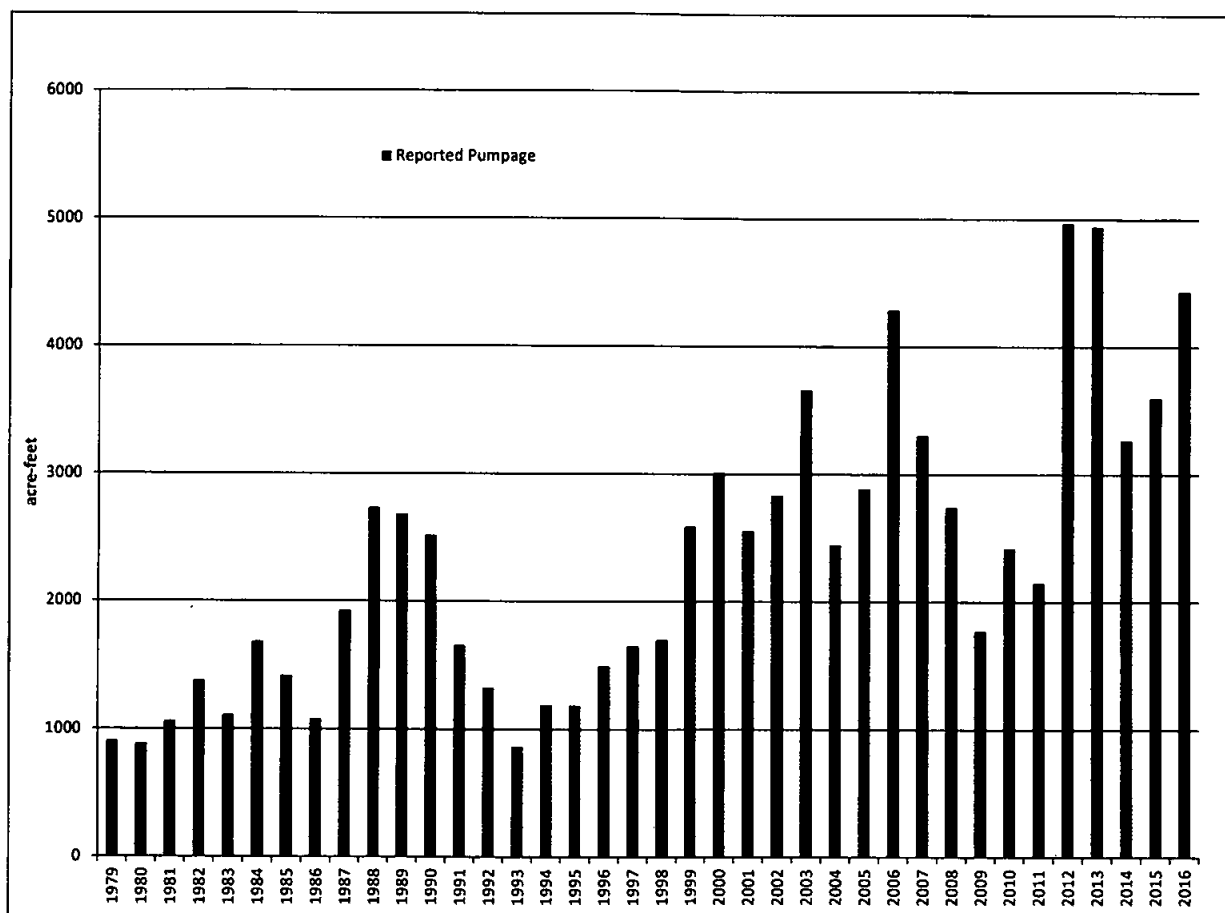


Figure 2: Reported irrigation pumpage over the period of record from the Big Sioux: North aquifer (Water Rights, 1980-2017)

Balance

The estimated average annual recharge to the Big Sioux: North aquifer ranges from 26,990 to 53,980 acre-feet per year. The estimated annual usage from the aquifer is less than 22,797 acre-feet per year, however actual use is expected to be less. Therefore based on a review of the hydrologic budget for the aquifer, there is a reasonable probability that there is unappropriated water is available in the Big Sioux: North aquifer for the applicant's proposed use.

Big Sioux: North Observation Wells

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program monitors 29 observation wells completed into the Big Sioux: North aquifer. In general, the observation wells in the Big Sioux: North aquifer document relatively stable water levels throughout the aquifer. Two observation wells (GT-77D and CD-76B) show recent water level decreases that stand out from historical fluctuations; these are likely reflective of localized conditions rather than conditions across the entire aquifer. The nearest observation wells to the well site are GT-82A and GT-57A located about one mile and 1.5 miles to the south. The hydrographs for these observation wells are shown in Figure 3 and Figure 4. Water levels in the observation wells increase during wet periods and gradually decrease during dry periods; this is in general typical of other observation wells in the aquifer. Observation wells in the Big Sioux: North aquifer generally demonstrate that the aquifer responds well to climatic conditions, with the response of the aquifer to climatic conditions masking the effects of well withdrawals. This indicates that natural conditions dominate the aquifer, and that recharge to and natural discharge from the aquifer exceeds pumping. Since recharge to and natural discharge from an aquifer can be captured for pumping, there is a reasonable probability that unappropriated water is available in the aquifer for the Big Sioux: North portion of the appropriation proposed by this application. Additionally, since this site has been in existence and utilizing the Big Sioux: North for several years and water levels in the area observation wells have been relatively stable over their periods of record (1982 to current and 1957 to current). This further indicates that there is a reasonable probability that unappropriated water is available in the aquifer for the Big Sioux: North portion of the appropriation proposed by this application.

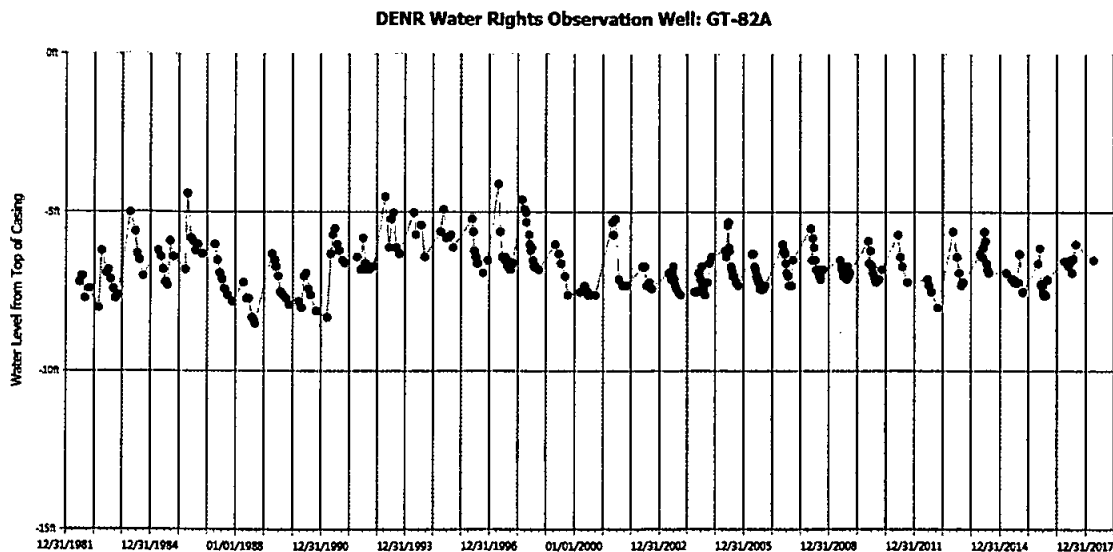


Figure 3: Hydrograph of observation well GT- 82A (Water Rights, 2018a)

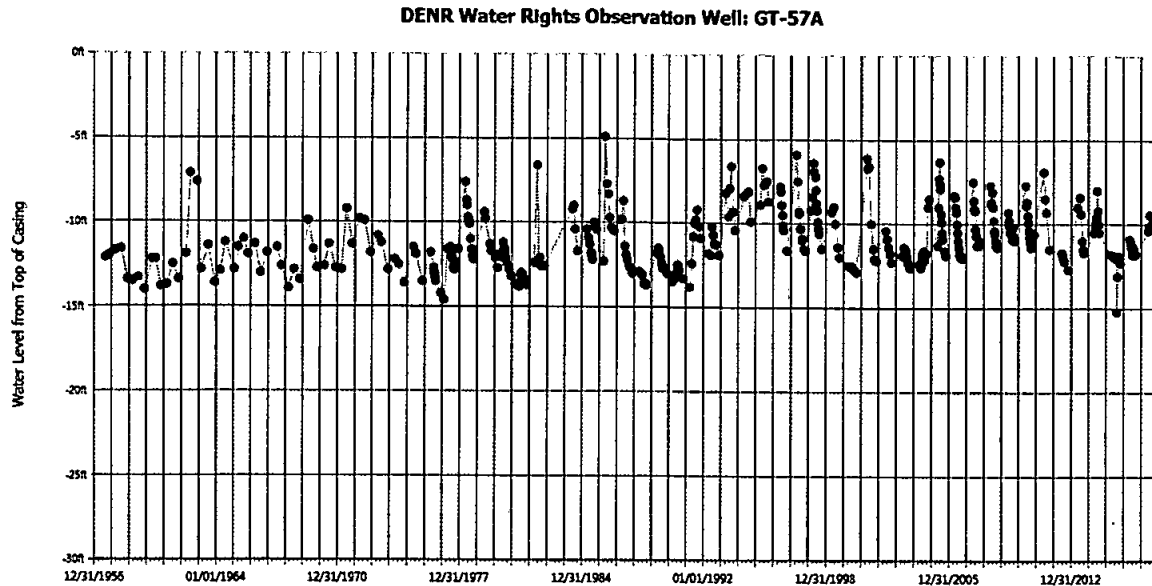


Figure 4 : Hydrograph of observation well GT- 57A (Water Rights, 2018a)

Big Sioux: North Existing Users

Area water rights/permits currently authorized to appropriate water from the Big Sioux: North in the area of the well site are shown in Figure 5 and summarized in Table 2. The nearest water permit/right currently authorized to appropriate water from the Big Sioux: North is Water Permit No. 7405-3 held by the Zirbel Dairy located about two miles to the southwest. There are well completion reports on file for domestic wells with the Water Rights Program within a mile of the wellsite for this application that are likely completed into the Big Sioux: North aquifer (Water Rights. 2018c).

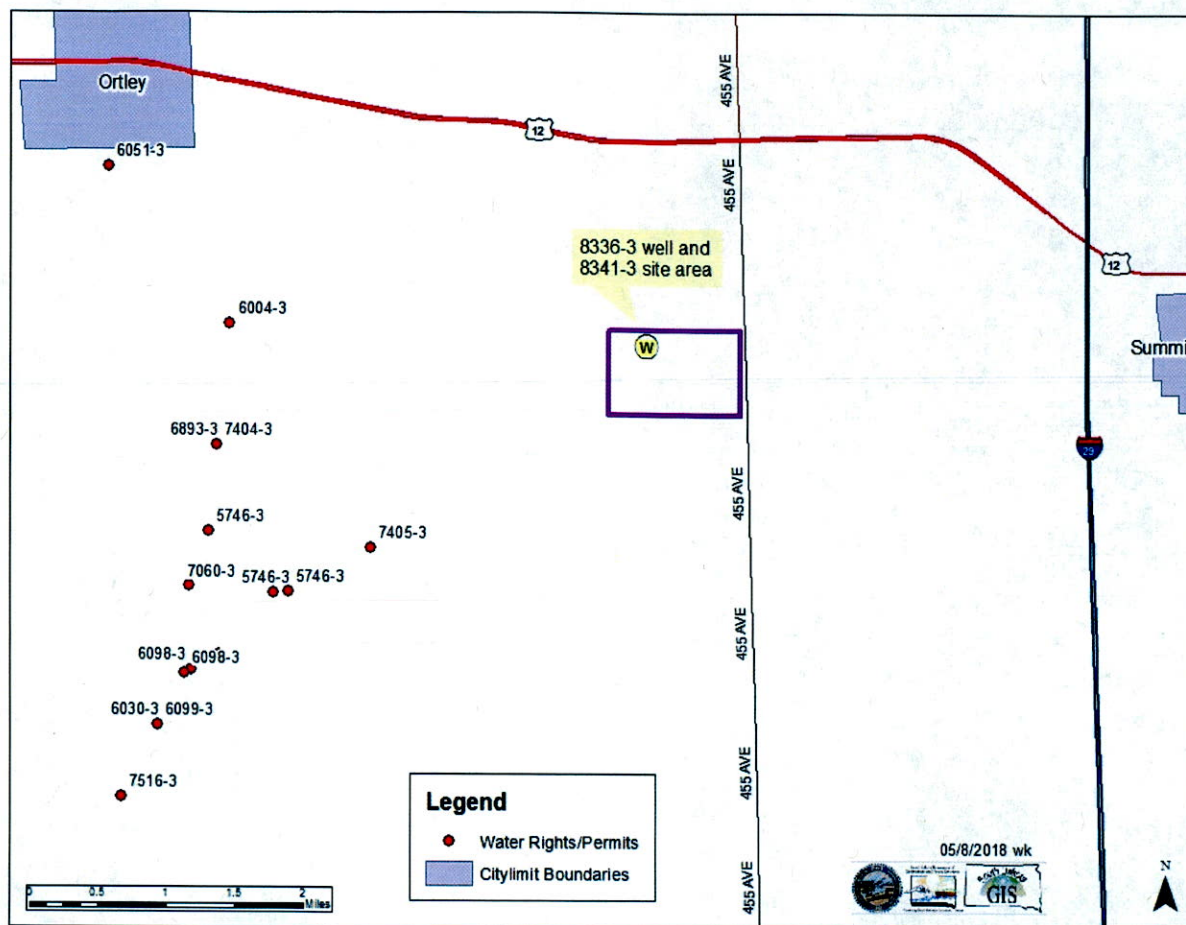


Figure 5: Area water rights/permits currently authorized to appropriate water from the Big Sioux: North aquifer in the area of the site for Application Nos. 8336-3 and 8341-3 (Water Rights, 2018b)

Table 2: Summary of Water Rights/Permits shown in Figure 5 (Water Rights, 2018b)

Permit No.	Name	STATUS	Use	Rate (cfs)	Acres
5746-3	ZIRBEL DAIRY	LC	IRR	2.33	337
5968-3	DON ENDRES	LC	IRR	2.11	132
6004-3	DON ENDRES	LC	IRR	2.22	136
6030-3	ENDRES FAMILY TRUST	LC	IRR	2.12	132
6051-3	JERRY & DAVID WIEBER	PE	IRR	0	0
6098-3	CHERYL BERGER	LC	IRR	2	110
6099-3	ENDRES FAMILY TRUST	LC	IRR	2.11	132
6893-3	ZIRBEL DAIRY	PE	IRR	2.28	160
7060-3	ZIRBEL DAIRY	PE	IRR	1.55	50
7404-3	ZIRBEL DAIRY	PE	IRR	0	160
7405-3	ZIRBEL DAIRY	PE	IRR	3.33	280
7516-3	DAVID ZUBKE	PE	IRR	2.22	170
LC=water right, PE=water permit, IRR=irrigation					

In the past, the Water Management Board has recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur. Administrative Rule of South Dakota (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.” In regard to the Big Sioux: North well requested by Application No. 8336-3, the drawdown due to pumping is not expected to be significant far from the well site due to the unconfined nature of the aquifer and the relative low diversion rate (10 gpm). In regard to the gravel pits water use is primarily non-consumptive and the aquifer is under unconfined conditions, therefore drawdown due to pumping is not expected to be significant far from the gravel pit. Additionally the Big Sioux: North aquifer portion of the water use from these applications has been in existence for several years and the Big Sioux: North aquifer observations wells in the vicinity show very limited to no drawdown of water levels in the area (Figure 3 and Figure 4). Therefore, these applications, if approved, are not expected to adversely impact existing water rights or domestic users with adequate wells in the Big Sioux: North aquifer.

In some locations the Big Sioux: North aquifer is a relatively thin aquifer with a limited amount of water in storage. While the best available information indicates that long term average annual withdrawals would not exceed average annual recharge to the aquifer, short term conditions may occur when withdrawals exceed recharge. When this occurs, water will be removed from storage and consequently reduce the saturated thickness of the aquifer. If the saturated thickness is reduced to the extent that existing water rights/permits can no longer pump at their developed or “historically established” rates, this may be considered an adverse impact. Therefore as a precaution, this water permit, if approved, should include a qualification that the

well owner shall control their withdrawals so there is not a reduction of needed water supplies for adequate domestic wells or for adequate wells having prior water rights. However, when all of the above is considered nearby adequate wells as defined by ARSD 74:02:04:20(6) are not expected to be adversely impacted by the appropriation proposed by this application.

Prairie Coteau aquifer (Application No. 8336-3)

Prairie Coteau Aquifer Characteristics

The Prairie Coteau aquifer was investigated in the Grant and Codington counties by Hansen (1990) and Roberts County and the Lake Traverse Reservation by Thompson (2001). The Prairie Coteau consists of coarse to very coarse sand and fine gravel ranging in color from brown to grey (Hansen 1990). The Prairie Coteau aquifer is a discontinuous aquifer, consisting of a group of outwash deposits located in elevation from 1,610 to 1,800 feet of varying depths and thickness in the study area of Thompson (2001).

The areal extent of this portion of the Prairie Coteau aquifer was estimated by Stonesifer (2013a) and is shown in Figure 6. This portion of the Prairie Coteau aquifer primarily underlies portions of Codington, Grant, and Roberts Counties with an aerial extent of about 184,500 acres. This portion of the Prairie Coteau aquifer is primarily under confined conditions (Water Rights, 2018a and Water Rights, 2018c), and water movement is generally north to south (Hanson, 1990).

The well completion report indicates “coarse sand” was encountered from 165 to 190 feet below grade. At the time of completion (October 12, 2017), the static water level for this well was 60 feet below the measuring point. The aquifer is under confined conditions at this well location. The approximate elevation of the “coarse sand” is consistent with the portion of the Prairie Coteau aquifer monitored by Water Rights Observation Well GT-79A (Water Rights, 2018a).

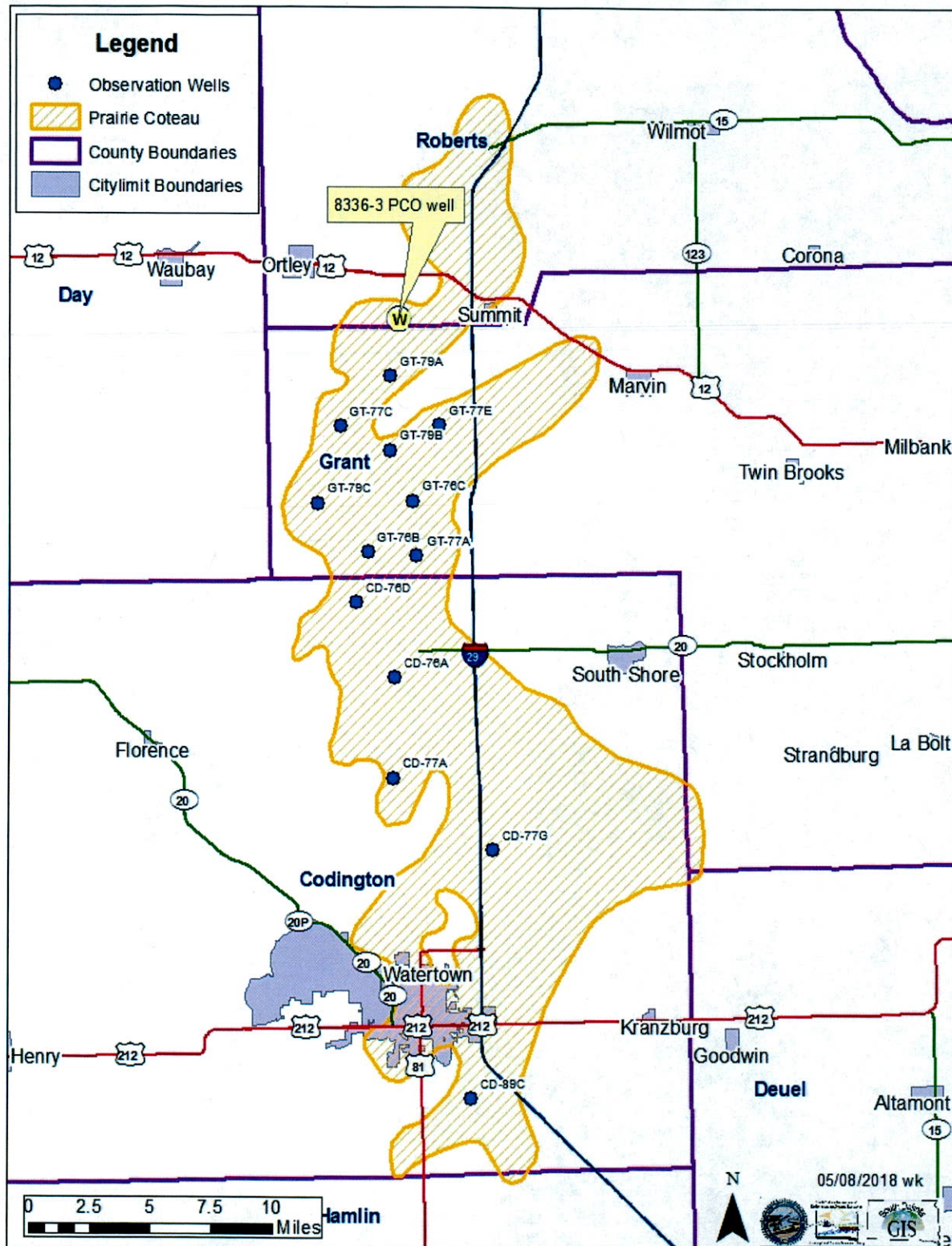


Figure 6: Map of the portion of the Prairie Coteau aquifer that includes the Prairie Coteau well for Application No. 8336-3 and observation wells completed into this portion of the Prairie Coteau (Stonesifer, 2013a and Water Rights, 2018a)

Prairie Coteau Hydrologic Budget

Recharge

This portion of the Prairie Coteau aquifer is recharged by leakage through the till and leakage from the Big Sioux and Coteau Lakes aquifers in areas where they overlie this portion of the Prairie Coteau aquifer (Hansen, 1990). Recharge to this portion of the Prairie Coteau aquifer has not been quantified. For confined aquifers, Hedges et al. (1985) recommends utilizing a range of recharge rate from 0.15 to 0.60 inches per year for management and development programs to estimate recharge. When applying this rate to the areal extent of this portion of the Prairie Coteau aquifer, recharge can be estimated to range from 2,306 acre-feet per year to 9,225 acre-feet per year.

Withdrawals

Withdrawals from this portion of the Prairie Coteau aquifer are primarily due to wells (Hanson, 1990). There are currently 37 water rights/permits that are appropriating water from this portion of the Prairie Coteau aquifer (Water Rights, 2018b). These water rights/permits are summarized in Table 3. Withdrawals from domestic wells are not considered a significant portion of the hydraulic budget for this aquifer due to their relatively low diversion rates and annual volumes.

Table 3: Summary of Water Rights/Permits Completed into this Portion of the Prairie Coteau Aquifer (Water Rights, 2018b)

Permit No.	Name	County	Status	Use	Rate (cfs)	Acres
2715-3	MARVIN AMDAHL	GT	LC	IRR	1.78	132
3229-3	DON ENDRES	CD	LC	IRR	2.66	224
3503-3	MICHAEL OR NANCY JOHNSON	GT	LC	IRR	1.88	132
4184-3	JABE KAHNKE	GT	LC	IRR	2.67	243
4417-3	FALK FARMS INC	CD	LC	IRR	6	770
4588-3A	DON ENDRES	CD	LC	IRR	1.77	170
4749-3	A M FARMS INC	CD	LC	IRR	3.77	264
5165-3	JEFF L & LYNAE GRABOW	CD	LC	IRR	1.77	132
5166A-3	JOHN T NORDGAARD	CD	LC	IRR	1.87	131
5166B-3	NORTHERN CON-AGG INC	CD	LC	IRR	0.84	59
5174-3	DONALD L ENDRES	CD	LC	IRR	1.77	130
5269-3	WARREN FALK	GT	LC	IRR	0.86	60
5271B-3	WARREN FALK	GT	LC	IRR	1	132
5376-3	DONALD L ENDRES	CD	LC	IRR	1.11	83
5378-3	ENDRES FAMILY TRUST	GT	LC	IRR	1	70
5807-3	MICHAEL JOHN MEYER	CD	LC	IRR	1	95
6100-3	NORSWISS DAIRY	GT	LC	COM/LCO	0.267	
6533-3	BITTER SWEET LODGE	GT	LC	COM	0.033	
6906-3	TIM J GRABOW	CD	PE	IRR	0	180
6907-3	JEFF L GRABOW	CD	PE	IRR	4	440
7028-3	ROGER AMDAHL	CD	PE	IRR	2.77	223
7036-3	JAMES AND JOHNNYLEE WOHLLEBER	GT	LC	IRR	2	130
7065-3	JAMES AMDAHL	GT	PE	IRR	3.78	264
7242-3	ROLLIN J MOREHOUSE	GT	LC	IRR	4	287
7305-3	TIM GRABOW	CD	PE	IRR	1.57	110
7328-3*	MARVIN AMDAHL	GT	PE	IRR	1.78	162
7351-3	MICHAEL JOHN MEYER	CD	PE	IRR	0.68	0
7629-3	WILLIAM BUCKLIN	GT	PE	IRR	0.63	44
7680-3	FALK FARMS INC	GT	PE	IRR	2	140
7681-3	MICHAEL JOHNSON	CD	PE	IRR	1.56	133.65
7682-3	MICHAEL JOHNSON	CD	PE	IRR	1.33	137.2
7783-3	MARVIN AMDAHL	GT	PE	IRR	1.78	132
7927-3	TERRY BRITZMAN	CD	PE	IRR	1.78	135.3
7943-3*	MARVIN AMDAHL	GT	PE	IRR	0	38
8076-3	TIM GRABOW	CD	PE	IRR	0.52	33
8077-3	JEFF GRABOW	CD	PE	IRR	1.04	66
8194-3	LAKESIDE DAIRY	GT	PE	COM/LCO	0.446	

CO=Codington, GT=Grant, LC=water right, PE=water permit, IRR=irrigation, COM=commercial, LCO=livestock confinement operation,
 *=also authorized to withdraw water from the Big Sioux: North

There are three water rights/permits for non-irrigation uses appropriating water from this aquifer. Water Right Nos. 6100-3 and 6533-3 are both limited by maximum instantaneous diversion rate. Historically, average water use by non-irrigation appropriations limited by instantaneous diversion rate has been less than 60% of full time pumping at the permitted diversion rate. Average annual water use for these water rights is estimated to be less than 131 acre-feet per year. Water Permit No. 8194-3 authorizes the appropriation of 275 acre-feet of water annually. For water rights/permits limited to an annual volume, full use of that volume is assumed for estimation of average annual withdrawal. Water Permit No. 8194-3 is required to

report annual water use, and reported using 0.33 acre-feet in 2016 and 1.8 acre-feet in 2017 (Water Rights, 2005-2018). The average annual withdrawals due to non-irrigation use are estimated to be less than 406 acre-feet per year.

There are 34 water rights/permits for irrigation use appropriating water for the irrigation of 5,482.15 acres from this portion of the Prairie Coteau aquifer. However, two of these water permits (No. 7328-3 and No. 7943-3) are also irrigated in part by wells completed in the Big Sioux: North aquifer. The annual reported irrigation pumpage for the aquifer for 1979 to 2017 is shown in Figure 7. The average annual reported irrigation pumpage for this aquifer is 1,121 acre-feet per year. Water Permit No. 7629-3 had not been constructed as per the submitted 2017 Irrigation Questionnaire. As of the submittal of the 2017 Irrigation Questionnaire, Water Right No. 3503-3 has not resumed irrigation after being brought out of CRP in 2015.

The annual reported pumpage and the number of acres irrigated each year can be utilized to calculate an average application rate for the aquifer. Kilts (2015) updated the application rate of Stonesifer (2013a) to include data from 2012 and 2013, which yielded an average application rate for this aquifer of 5.63 inches per irrigated acre per year. Applying this application rate to the total number of acres irrigated by the current water rights/permits for irrigation use in this aquifer yields a value of 2,572 acre-feet per year. Since in reviewing the irrigation data for this aquifer not every authorized acre is irrigated every year average annual irrigation usage from the aquifer is estimated to be between 1,121 to 2,572 acre-feet per year.

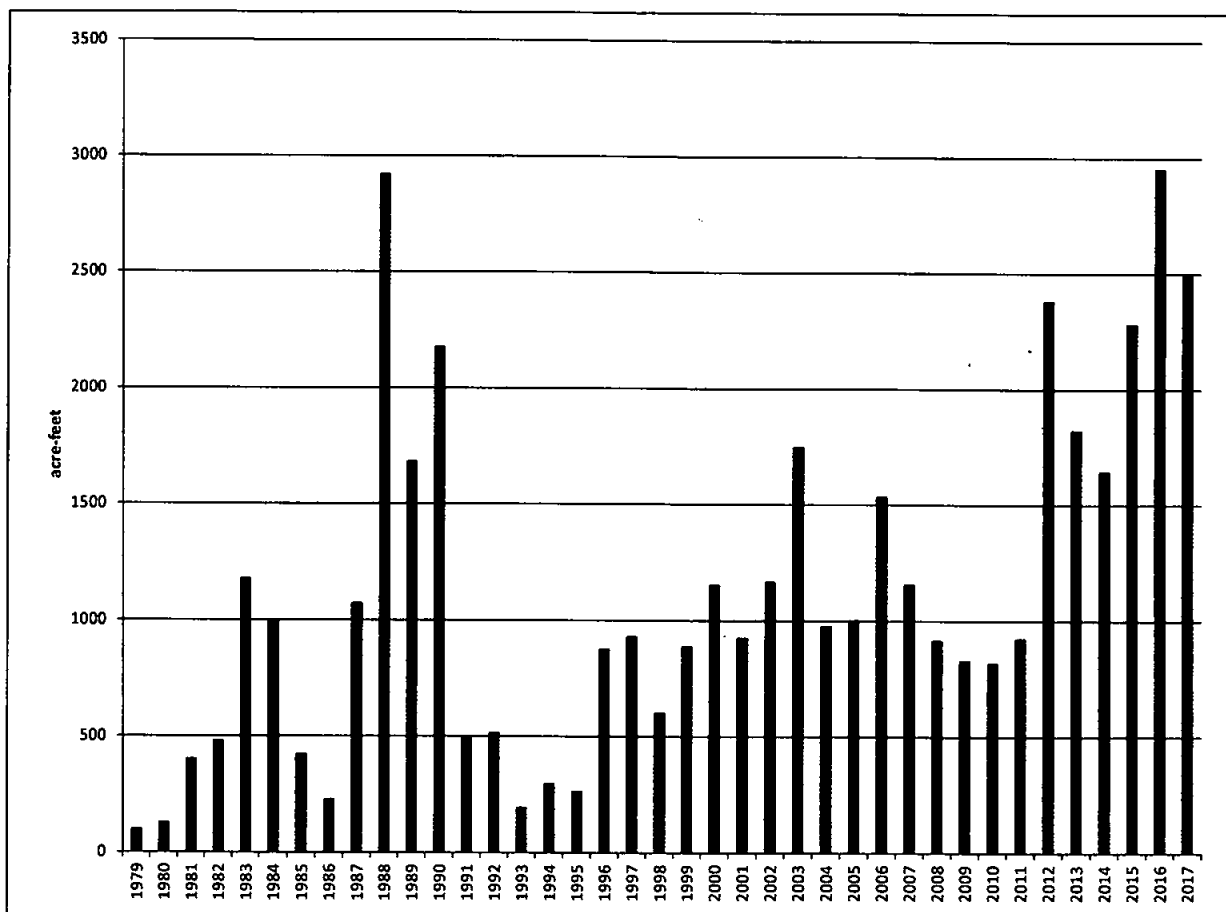


Figure 7: Reported irrigation pumpage over the period of record from this portion of the Prairie Coteau aquifer (Water Rights, 1980-2017 and 2018d)

For this portion of the Prairie Coteau aquifer estimated average annual withdrawals from irrigation and non-irrigation use are estimated to be between 1,527 to 2,978 acre feet per year. When compared to the estimated range of average annual recharge (2,306 acre-feet per year to 9,225 acre-feet per year) estimated average annual withdrawals for the aquifer are near the bottom of this range. Therefore there is a reasonable probability that there is water available to for the proposed diversion from this portion of the Prairie Coteau aquifer by Application No. 8336-3 (5.5 acre-feet of water annually split between this aquifer and the Big Sioux: North aquifer).

Prairie Coteau Observation Wells

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program monitors 13 observation wells completed into this portion of the Prairie Coteau aquifer. The nearest is observation well GT-79A located about 2.6 miles to the

south of the Prairie Coteau well site for Application No. 8336-3. The hydrograph for this observation well is shown in Figure 8. Since June of 2014 the United State Geological Survey (USGS) has been monitoring observation well GT-79A; the data from USGS is shown in Figure 9. Note that USGS data is presented as depth to water from land surface not depth to water from top of well casing. Observation well GT-77C is located about five miles to the southwest; the hydrograph for this observation well is shown in Figure 10. The hydrographs for the Grant County observation wells for this portion of the Prairie Coteau aquifer are shown in Figures 11 - 16.

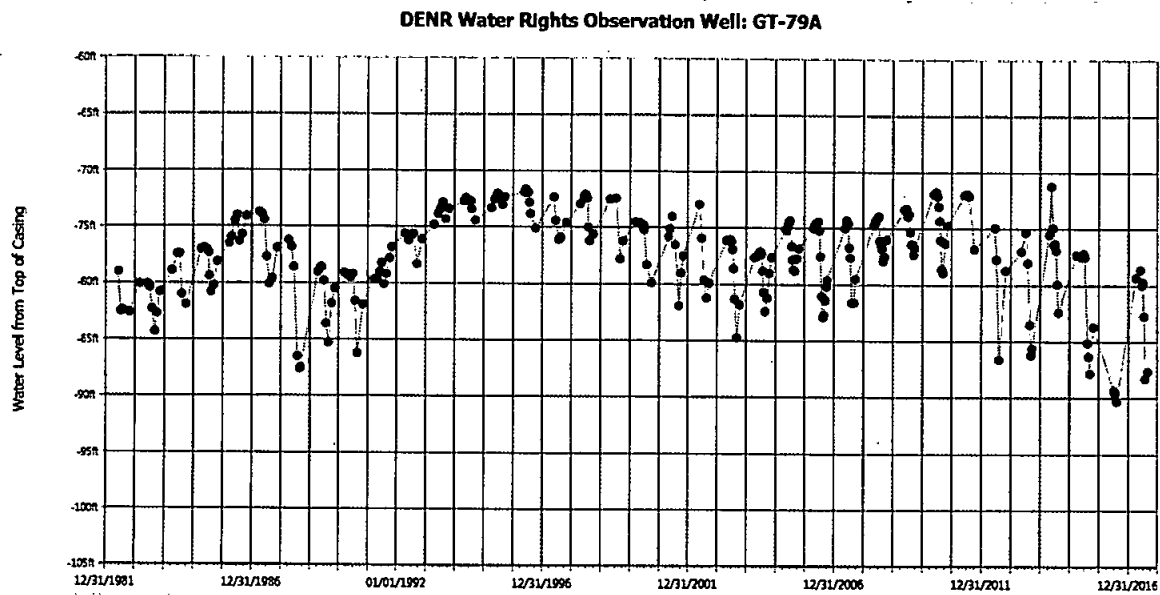


Figure 8: Hydrograph of observation well GT-79A (Water Rights, 2018a)

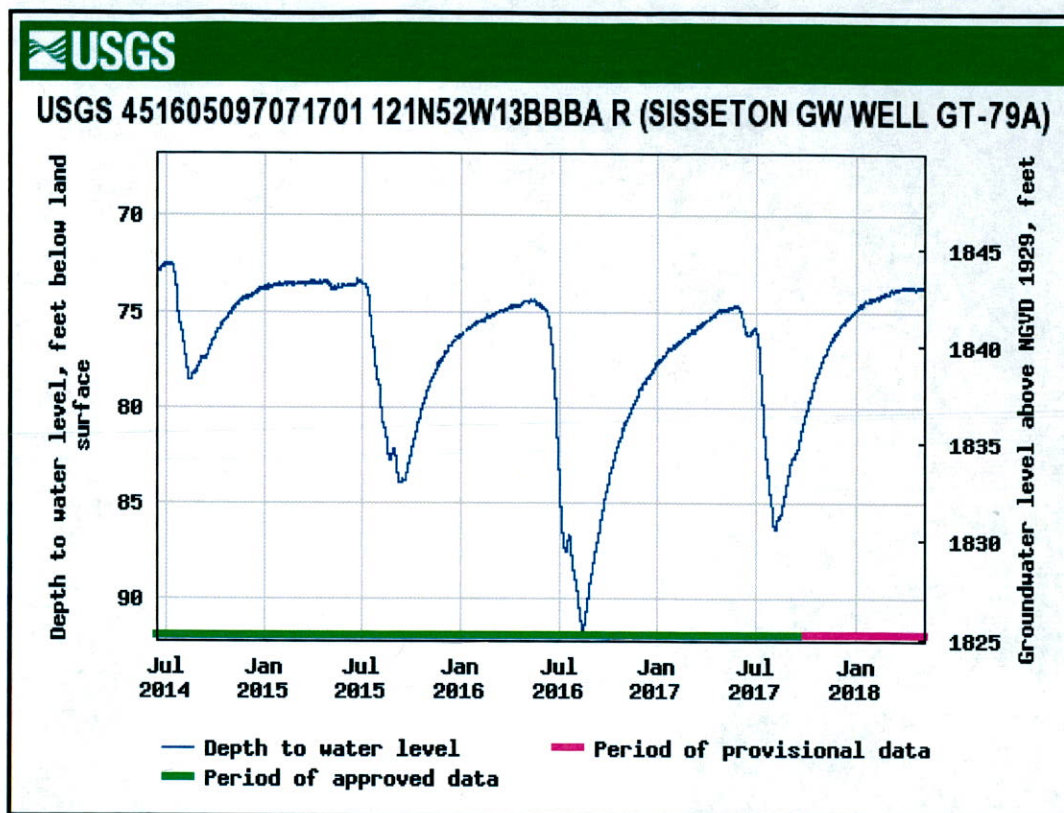


Figure 9: USGS Data for GT-79A (note data is depth to water from land surface)(USGS, 2018)

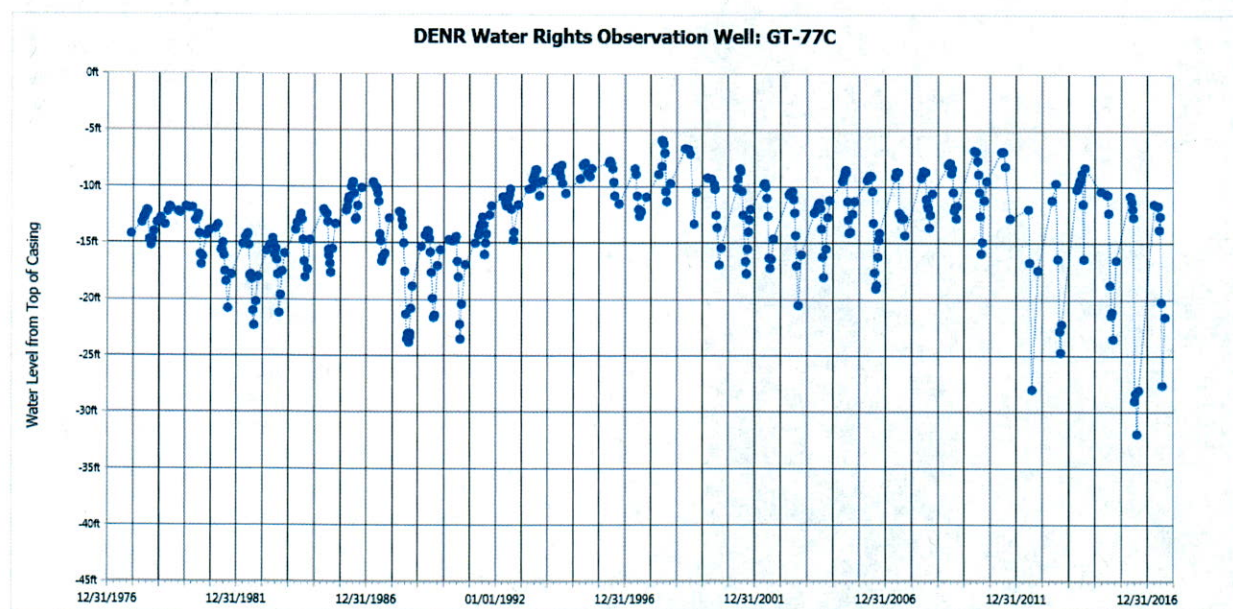


Figure 10: Hydrograph of observation well GT-77C (Water Rights, 2018a)

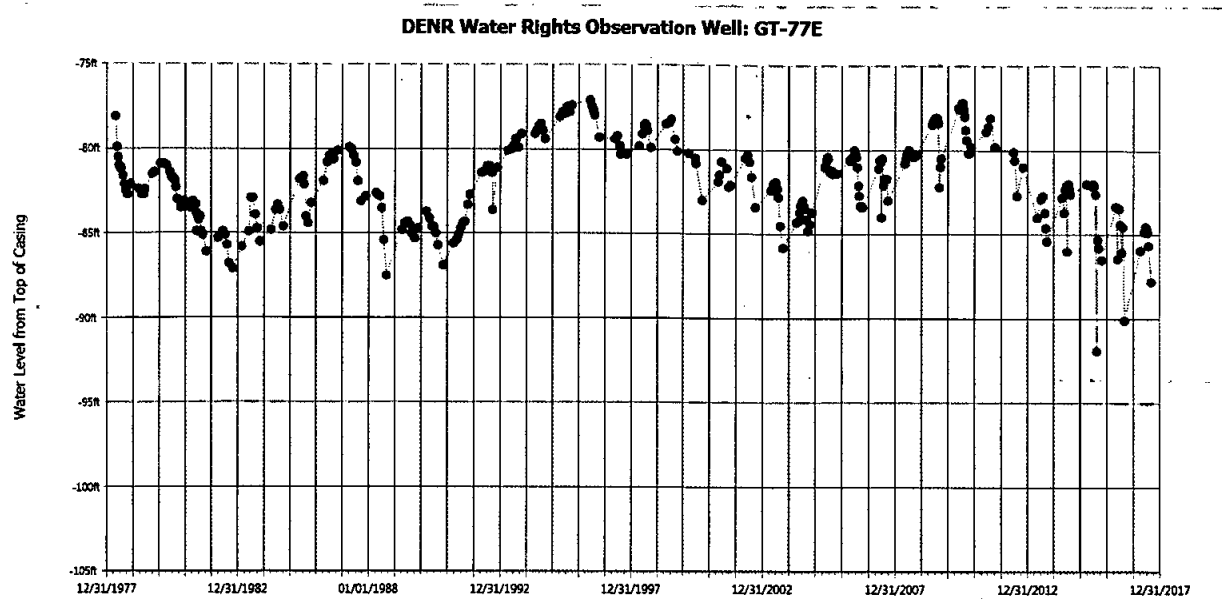


Figure 11: Hydrograph of observation well GT-77E located about 4.8 miles southeast (Water Rights, 2018a)

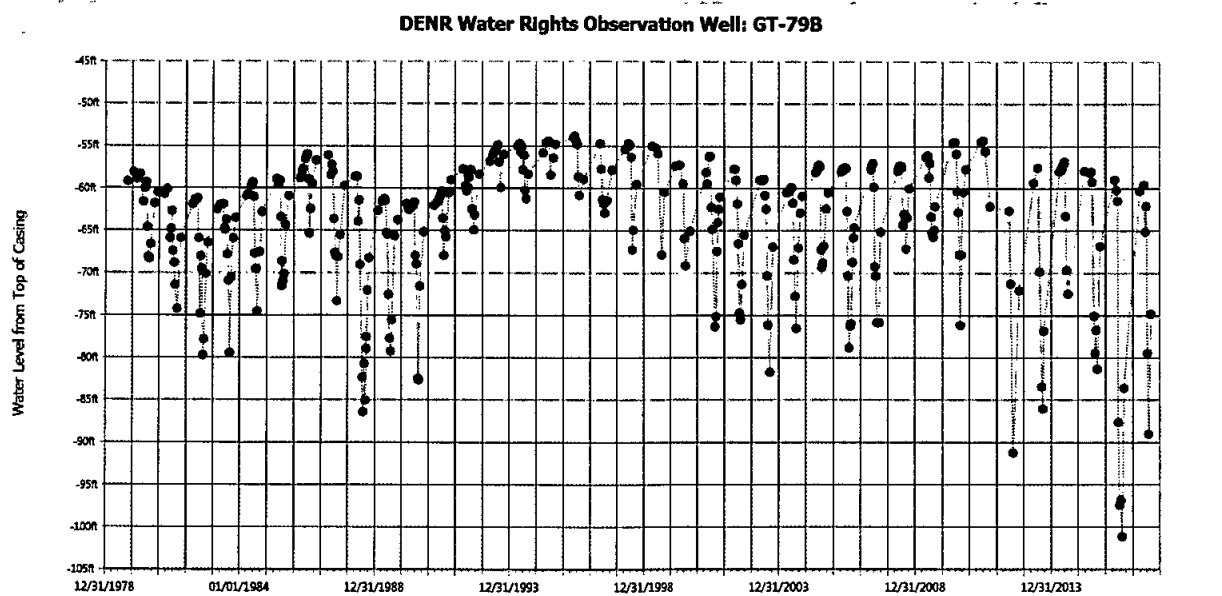


Figure 12: Hydrograph of observation well GT-79B located about 5.3 miles south (Water Rights, 2018a)

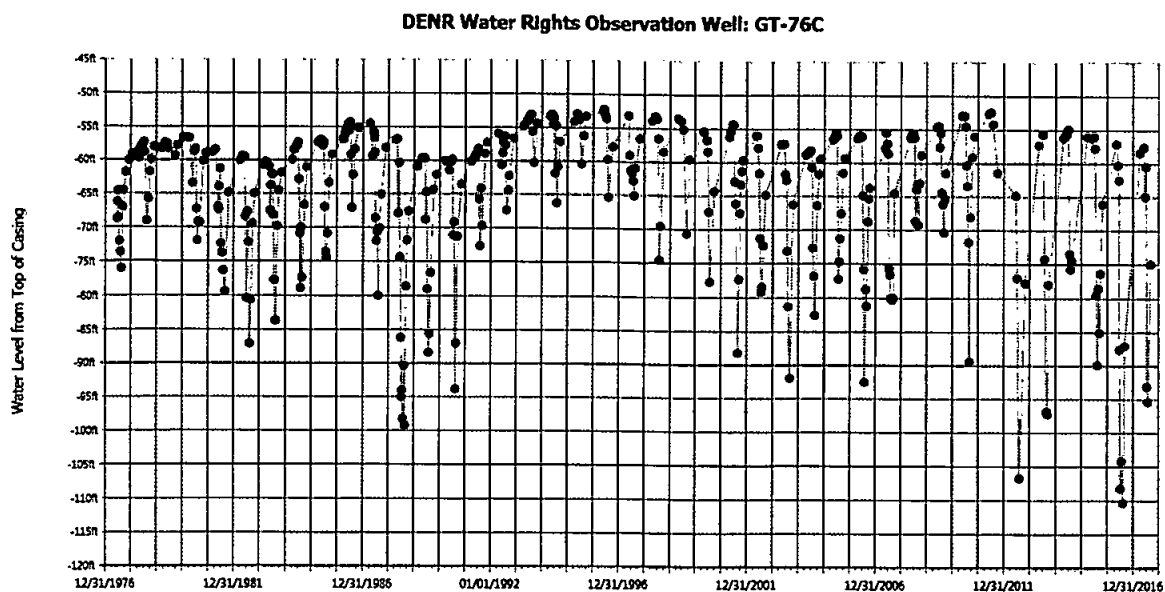


Figure 13: Hydrograph of observation well GT-76C located about 7 miles south (Water Rights, 2018a)

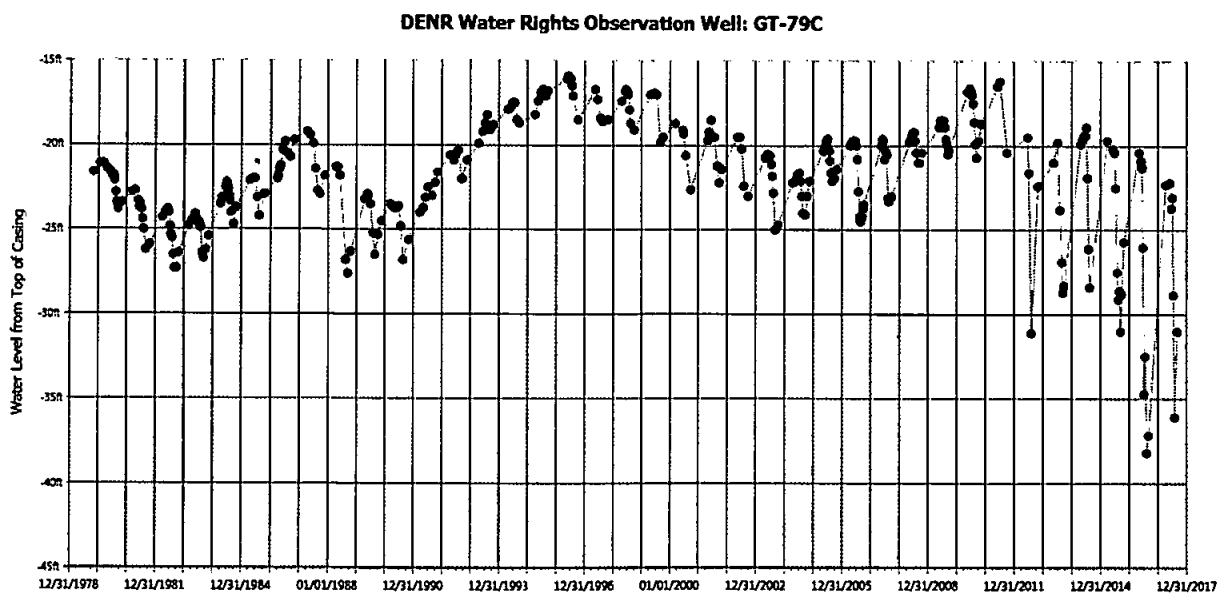


Figure 14: Hydrograph of observation well GT-79C located about 8 miles south southwest (Water Rights, 2018a)

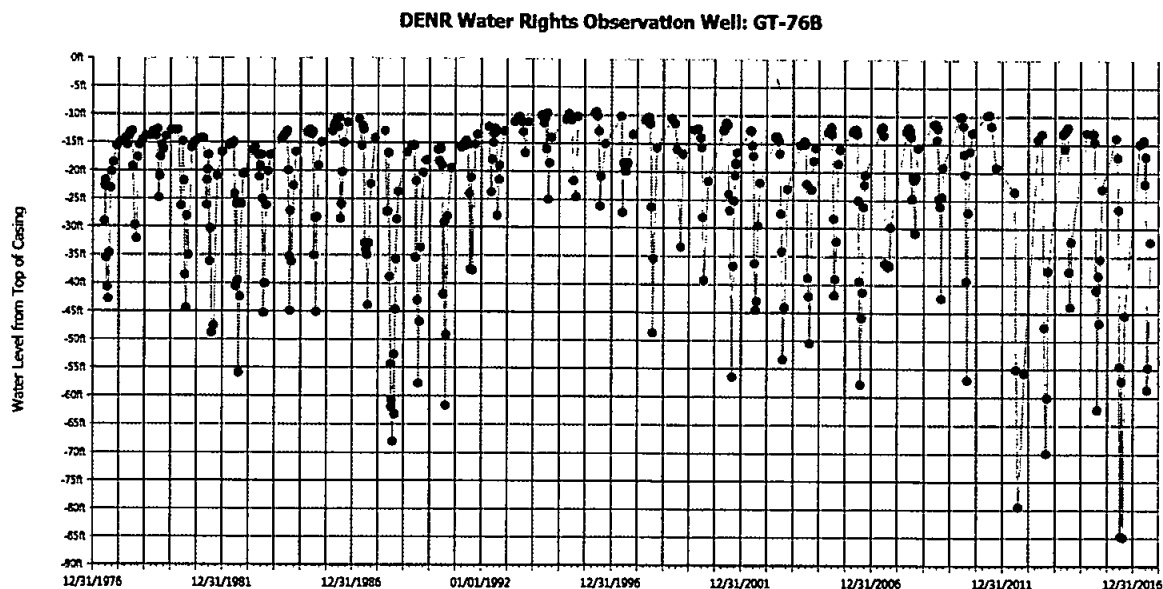


Figure 15: Hydrograph of observation well GT-76B located about 9.5 miles south (Water Rights, 2018a)

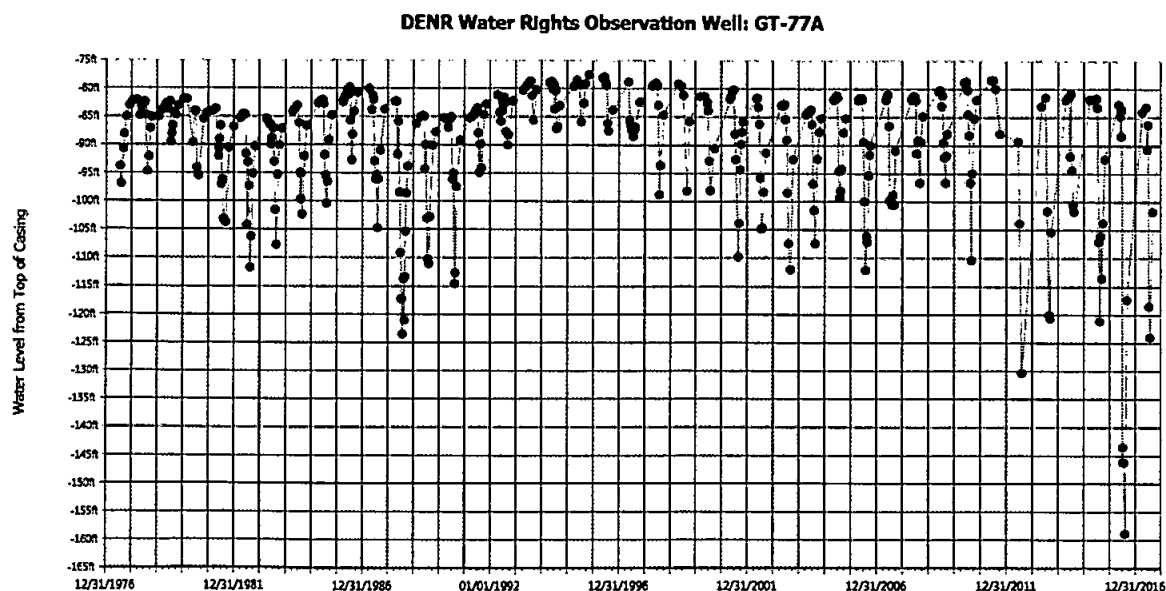


Figure 16: Hydrograph of observation well GT-77A located about 9.7 miles south southeast (Water Rights, 2018a)

The Grant County observation wells are representative of the rest of the observation wells in this portion of the Prairie Coteau aquifer. All the observation wells in the aquifer show some amount of seasonal fluctuation in the water level pressure of the aquifer. The magnitude of seasonal fluctuations varies based on proximity to the high capacity irrigation wells in the aquifer. However, all of the observation wells completed into this portion of the Prairie Coteau aquifer show recovery after the end of the irrigation season. At least six of the newer irrigation permits in the aquifer started irrigation in the 2014 and 2015 irrigation seasons. During the 2011

and 2012 irrigation season at least four irrigation permits started irrigation. Several of the observation wells in this portion of the Prairie Coteau appear to still be stabilizing in relation to the newer pumping in the aquifer. Although still stabilizing to the newer pumping in this portion of the Prairie Coteau, the impacts of climate can still be seen in several of the observation wells. The spring water levels before the start of the irrigation season are still within what has been historically observed during other climatically drier periods during the periods of record for these observation wells and during the 2012 to current time period there have been several drier years in this region of the state. While the hydrographs do show the seasonal impacts of well withdrawal on water level, the spring pre-irrigation water levels are still within the range of historic climate fluctuations seen in the period of record for these observation wells. Therefore, when considering this along with the hydrologic budget for this portion of the Prairie Coteau aquifer there is a reasonable probability that there is water available for the relatively small amount of water requested by Application No. 8336-3 from this portion of the Prairie Coteau aquifer, 5.5 acre-feet of water annually split between this aquifer and the Big Sioux: North aquifer.

Prairie Coteau Existing Users

Area water rights/permits currently authorized to appropriate water from this portion of the Prairie Coteau aquifer in the area of the well site are shown in Figure 17 and summarized in Table 3. The nearest water permit/right currently authorized to appropriate water from this portion of the Prairie Coteau is Water Right No. 6100-3 held by Norswiss Dairy located about three miles to the southwest. There are well completion reports on file for domestic wells with the Water Rights Program within a mile of the wellsite for this application that are completed into this portion of the Prairie Coteau aquifer (Water Rights, 2018c).

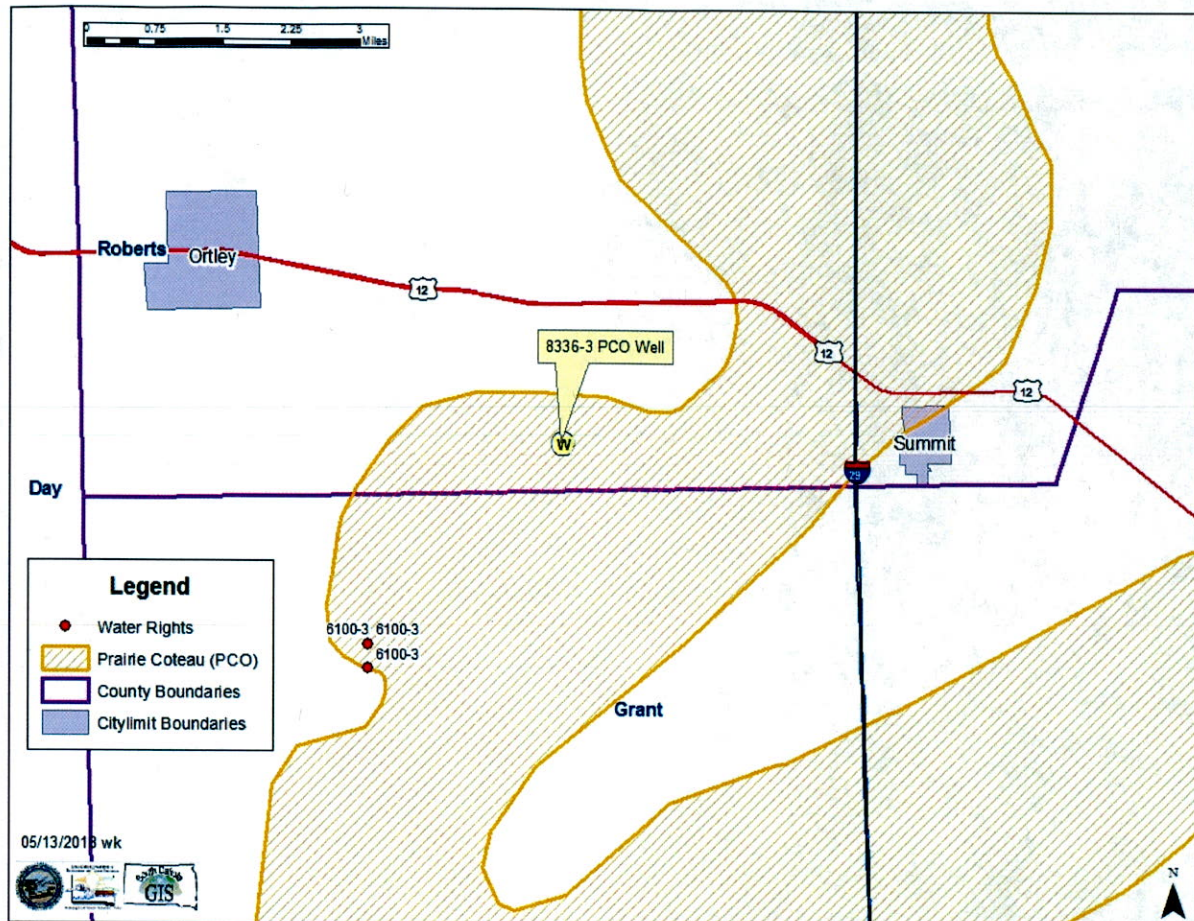


Figure 17: Area water rights/permits currently authorized to appropriate water from this portion of the Prairie Coteau aquifer in the area of the site for Application Nos. 8336-3 and 8341-3 (Water Rights, 2018b)

The exact amount of drawdown as the result of pumping due to this proposed diversion cannot be quantified without aquifer testing. However, given the relatively low diversion rate requested by this application from this portion of the Prairie Coteau aquifer (10 gpm), this permit, if approved, would not be expected to adversely impact adequate wells in the area. The Water Management Board has promulgated rules that allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Board has defined 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.” In the case of Water Permit Application No. 2313-2 for the Coca-Cola Bottling Company of the Black Hills the Water Management Board adopted findings that noted that if the increased costs or decreased production as a result of the impacts of legitimate users on artesian head pressure could be considered an adverse impact it would conflict with SDCL 46-1-4 (Water

Rights, 1995). SDCL 46-1-4 requires the water resources of the state be put to beneficial use to the maximum extent of which they are capable (Water Rights, 1995).

Prairie Coteau Additional Considerations

This portion of the Prairie Coteau aquifer has a history of complaints related to the seasonal impacts of pumping on artesian head pressure in the aquifer. These have been primarily focused in the central portion of the aquifer. The most recent complaint was in July 2016. Several domestic well owners expressed concerns in regard to irrigation causing problems with their domestic wells. A member of the Water Rights Staff investigated these complaints and concluded that their pumps were not set to a sufficient depth to meet the definition of an adversely impacted domestic well as defined by Administrative Rule of South Dakota (ARSD) 74:02:04:20(7) (Mathiowetz, 2018). Therefore the domestic wells were not being adversely impacted by the irrigation pumping from the aquifer. The domestic well owners were advised to lower their pumps, and there have not been further complaints since 2016.

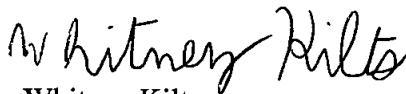
The nearest observation well to the 2016 complaint is observation well GT-77A. The hydrograph for this observation well is shown in Figure 16. The lowest water level recorded in this well occurred in August 2016 and was 158.8 feet below the top of casing. The aquifer at this observation well is 166 to 190 feet below grade with a clay lens from 174 to 178 feet below grade. Due to the low diversion rate requested from this portion of the Prairie Coteau aquifer, Application No. 8336-3, if approved, is not expected to significantly contribute to seasonal drawdown in the aquifer.

Prairie Coteau and Big Sioux North Conclusions

1. Water Permit Application No. 8336-3 for L.G. Everist, Inc. proposes to appropriate 5.5 acre-feet of water per year at a maximum instantaneous diversion rate of 0.044 cfs from two existing wells. One well is completed into the Big Sioux: North aquifer located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 36 in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The other well is completed into the Prairie Coteau aquifer located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 36 in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Each well is capable of diverting at a rate of 10 gallons per minute (gpm) for industrial and commercial use.
2. Water Permit Application No. 8341-3 for L.G. Everist, Inc. proposes to appropriate at a maximum instantaneous diversion rate of 7.13 cfs from a gravel pit created by previous extraction of sand and gravel located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ all in Section 36-T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The gravel pit has a surface area of approximately 27 acres with a storage capacity of 164 acre-feet of water. The water is for industrial use in an existing sand and gravel operation including an aggregate wash plant located in Section 36-T122N-R52W that recycles water back to the gravel pit. Water will also be utilized for dust control.

However, the proposed use under this application will primarily be non-consumptive. Best available information suggests the gravel pit is completed into the Big Sioux: North aquifer and also receives some surface water from the surrounding drainage area.

3. Based on a review of the hydrologic budget for the Big Sioux: North aquifer and the observation well information for the aquifer, there is a reasonable probability that water is available in the Big Sioux: North aquifer for the applicant's proposed use as required by SDCL 46-2A-9.
4. Based on a review of the hydrologic budget for this portion of the Prairie Coteau aquifer, there is a reasonable probability that water is available in this portion of the Prairie Coteau aquifer for the applicant's proposed use as required by SDCL 46-2A-9.
5. There is a reasonable probability that pumping under this permit, if approved, will not adversely impact existing water rights/permits with adequate wells or adequate domestic wells as defined by ARSD 74:02:04:20(6) in either the Big Sioux: North aquifer or this portion of the Prairie Coteau aquifer.



Whitney Kilts

SDDENR Water Rights Program

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JUN 06 2018

WATER RIGHTS
PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA }
County of Roberts ss.

Kevin H. Deutsch of said county, being first duly sworn, on oath says, that he is Editor of THE SISSETON COURIER, a weekly newspaper printed and published in Sisseton, in said county of Roberts, and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bonafide circulation of at least two hundred copies weekly, and has been published within said county for 52 successive weeks next prior to the publication of the notice herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the Notice of Notice Of Application Nos. 8336-3 And 8351-3, 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 in each week for one successive weeks, on the day of each week on which said newspaper was regularly published, to-wit:

May 22, 2018; _____;
_____; _____;
_____; _____;
_____; _____;
_____; _____;

that the full amount of the fee is charged for publication of said Notice insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the division there has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever and that the fees charged for the publication there of are \$ 33.99

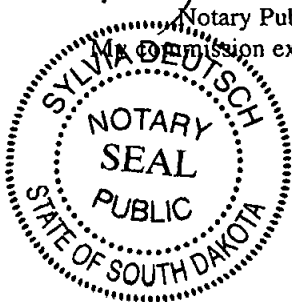
Kevin H. Deutsch

Subscribed and sworn to before me this 22nd day of

May, A.D., 2018

Sylvia Deutsch

Notary Public, Roberts County, South Dakota
My commission expires February 3, 2022



NOTICE OF APPLICATION NOS. 8336-3 AND 8341-3 TO APPROPRIATE WATER

Notice is given that L G Everist, Inc, c/o Chris Klein, 350 S Main Ave, Suite 400, Sioux Falls SD 57104 has filed the following applications for a water permit.

Application No. 8336-3 proposes to appropriate 5.5 acre-feet of water annually at a maximum pump rate of 0.044 cubic feet of water per second from two existing wells to be completed into the Big Sioux: North Aquifer (190 feet deep) and Prairie Coteau Aquifer (15 feet deep) located in the SE 1/4 NW 1/4 Section 36 and the SW 1/4 NW 1/4 Section 36; all in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Each well is capable of diverting at a rate of 10 gallons per minute for industrial and commercial use and the site is located 4 miles west of Summit SD.

Application No. 8341-3 proposes to appropriate water and place to beneficial use 1,199 acre-feet of water annually at a maximum pump rate of 7.13 cubic feet of water per second from a gravel pit located in the SE 1/4 NW 1/4 and NE 1/4 SW 1/4 Section 36-T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The gravel pit is approximately 27 surface acres with a storage capacity of 164 acre feet of water. The gravel pit's primary source is groundwater but the gravel pit does receive water from the drainage. The water is for industrial use in an existing sand and gravel operation including an aggregate wash plant located in Section 36-T122N-R52W. Water is recycled by discharging to a settling pond prior to being diverted back to the gravel pit for reuse. Water will also be used for dust control. The site is located 4 miles west of Summit, SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 8336-3 and 8341-3 with qualifications because 1) unappropriated water is available, 2) exist-

ing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the applications, and staff report are available at <http://denr.sd.gov/> public or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting these applications 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 June 1, 2018.

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

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

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

Published once at the total approximate cost of \$33.99.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
 County of Codington) SS

I, Jackie Wettstad

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:

May 22, 2018

Cost of Printing \$76.16

Jackie Wettstad
 (Signature)

Accounting Clerk
 (Title)

May 25, 2018
 (Date Signed)

**DEPT
 ENVIRONMENT
 AND NATURAL
 RESOURCES**

**NOTICE OF APPLICATION
 NOS. 8336-3 and 8341-3 to
 Appropriate Water**

Notice is given that L. G. Everist, Inc., c/o Chris Klein, 350 S Main Ave., Suite 400, Sioux Falls SD 57104 has filed the following applications for a water permit. Application No. 8336-3 proposes to appropriate 5.5 acre-feet of water annually at a maximum pump rate of 0.044 cubic feet of water per second from two existing wells to be completed into the Big Sioux North Aquifer (190 feet deep) and Prairie Coteau Aquifer (15 feet deep) located in the SE 1/4 NW 1/4 Section 36 and the SW 1/4 NW 1/4 Section 36; all in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Each well is capable of diverting at a rate of 10 gallons per minute for industrial and commercial use and the site is located 4 miles west of Summit SD. Application No. 8341-3 proposes to appropriate water and place to beneficial use 1,199 acre-feet of water annually at a maximum pump rate of 7.13 cubic feet of water per second from a gravel pit located in the SE 1/4 NW 1/4 and NE 1/4 SW 1/4 Section 36-T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The gravel pit is approximately 27 surface acres with a storage capacity of 164 acre feet of water. The gravel pit's primary source is groundwater but the gravel pit does receive water from the drainage. The water is for industrial use in an existing sand and gravel operation including an aggregate wash plant located in Section 36-T122N-R52W. Water is recycled by discharging to a settling pond prior to being diverted back to the gravel pit for reuse. Water will also be used for dust control. The site is located 4 miles west of Summit SD. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends

APPROVAL of Application Nos. 8336-3 and 8341-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the applications, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below. Any person interested in opposing or supporting these applications 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 June 1, 2018. The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the applications is received, the Chief Engineer shall act on the applications pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition. Steven M. Pimer, Secretary, Department of Environment and Natural Resources. 76.16
 Published once at the total approximate cost of \$71.16.
 (May 22, 2018)

RECEIVED

MAY 31 2018

**WATER RIGHTS
 PROGRAM**

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, May 17, 2018 11:46 AM
To: legals@thepublicopinion.com
Subject: 8336-3 & 8341-3, L G Everest Inc.
Attachments: 8336-3&8341-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on May 22, 2018.

L G Everist Inc., c/o Chris Klein, 350 S Main Ave, Suite 400, Sioux Falls SD 57104 (605 330-6570) has been notified to contact you to authorize publication and arrange for payment.

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

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

Karen Schlaak
SD DENR, Water Rights Program
(605) 773-3352



Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, May 17, 2018 11:45 AM
To: Sisseton Courier (news@sissetoncourier.com)
Subject: 8336-3 & 8341-3, L G Everest Inc.
Attachments: 8336-3&8341-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on May 22, 2018.

L G Everist Inc., c/o Chris Klein, 350 S Main Ave, Suite 400, Sioux Falls SD 57104 (605 330-6570) has been notified to contact you to authorize publication and arrange for payment.

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

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

Karen Schlaak
SD DENR, Water Rights Program
(605) 773-3352





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

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

May 17, 2018

L. G. Everist Inc
c/o Chris Klein
350 S Main Ave, Suite 400
Sioux Falls SD 57104

Dear Mr. Klein:

Water Permit Application Nos. 8336-3 and 8341-3 for industrial and commercial use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Sisseton Courier printed at Sisseton SD (Ph # 605-698-7642) and the Public Opinion printed at Watertown SD (Ph # 605-886-6901). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and report on the applications are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the 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 applications.

Sincerely,

Eric Gronlund /KS
Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendations, 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 applications.

NOTICE OF APPLICATION NOS. 8336-3 and 8341-3 to Appropriate Water

Notice is given that L G. Everist, Inc, c/o Chris Klein, 350 S Main Ave, Suite 400, Sioux Falls SD 57104 has filed the following applications for a water permit.

Application No. 8336-3 proposes to appropriate 5.5 acre-feet of water annually at a maximum pump rate of 0.044 cubic feet of water per second from two existing wells to be completed into the Big Sioux:North Aquifer (190 feet deep) and Prairie Coteau Aquifer (15 feet deep) located in the SE 1/4 NW 1/4 Section 36 and the SW 1/4 NW 1/4 Section 36; all in T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. Each well is capable of diverting at a rate of 10 gallons per minute for industrial and commercial use and the site is located 4 miles west of Summit SD.

Application No. 8341-3 proposes to appropriate water and place to beneficial use 1,199 acre-feet of water annually at a maximum pump rate of 7.13 cubic feet of water per second from a gravel pit located in the SE 1/4 NW 1/4 and NE 1/4 SW 1/4 Section 36-T122N-R52W within the former boundaries of the Sisseton Wahpeton Indian Reservation. The gravel pit is approximately 27 surface acres with a storage capacity of 164 acre feet of water. The gravel pit's primary source is groundwater but the gravel pit does receive water from the drainage. The water is for industrial use in an existing sand and gravel operation including an aggregate wash plant located in Section 36-T122N-R52W. Water is recycled by discharging to a settling pond prior to being diverted back to the gravel pit for reuse. Water will also be used for dust control. The site is located 4 miles west of Summit SD.

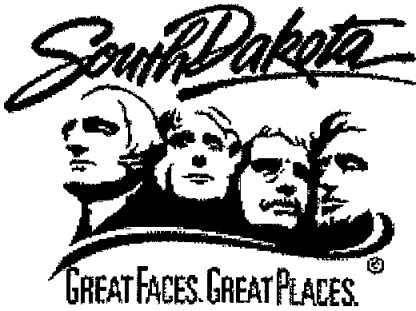
Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 8336-3 and 8341-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the applications, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting these applications 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 June 1, 2018.

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

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

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

JUN 20 2018

L. G. Everist Inc.
c/o Chris Klein
350 S Main, Suite 400
Sioux Falls SD 57104

Dear Mr. Klein:

Enclosed are Water Permit Nos. 8336-3 and 8341-3 authorizing construction of the water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed form after you have finished each 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

8336-3
RECEIVED

AUG 02 2021

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 07-29-2021TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181FROM: L.G. Everist, Inc c/o Chris Klein

(name)

350 S Main Ave, Suite 400

(address)

Sioux Falls, SD 57104

(city, state, zip)

(605) 330-6570

(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 8336-3 states that the water use system is to be constructed by06/01/2023

(date)

, and water is to be put to beneficial use by 06/01/2027

(date)

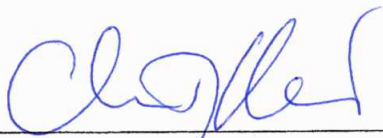
The water use system was completed on 12/31/2020

(date)

Applying the water to beneficial use was completed on 12/31/2020

(date)

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



(signature)



Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8336-3

I have this day, August 18, 2021, made a thorough examination of the water use system constructed by L G Everist Inc., 350 S Main Ave, Suite 400, Sioux Falls, SD 57104 of Permit No. 8336-3, bearing the priority of March 12, 2018 authorizing the diversion of 0.044 cu. ft. per second of the waters of the Big Sioux: North Aquifer and Prairie Coteau Aquifer for industrial & commercial use purposes, in Roberts County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Wieber Well Drilling (for 190' deep well)
- 2) No. of Wells 2
- 3) Depths 190 and 15 feet
- 4) Well logs available Yes for 190' deep well; No for 15' deep well

Casing: (information for 190' deep well)

- 1) Diameter 5 inches
- 2) Length 180 feet
- 3) Type Plastic

Screen: (information for 190' deep well)

- 1) Type PVC
- 2) Length 10 feet
- 3) Static water level 60 feet

Pump:

- 1) Make NA
- 2) Model Submersible
- 3) Size NA
- 4) Capacity each 10 GPM

Motor: unknown

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) 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:

Well #1: 2,350' S and 1,715' E of the NW corner of Section 36, T122N, R52W (SE ¼ NW ¼)

Latitude 45.30529 Longitude -97.11699

Well #2: 2,205' S and 1,195' E of the NW corner of Section 36, T122N, R52W (SW ¼ NW ¼)

Latitude 45.30565 Longitude -97.11897

The above legal descriptions are within the former boundaries of the Sisseton Wahpeton Indian Reservation.

2. The works are capable of diverting and conveying to the place of use **0.044** cu. ft. per second of water which is to be used for **industrial & commercial use**.

The license should be issued for **0.044** cfs.

3. All structures, wells and lands on map **Y**

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

The map was developed with the aid of FSA maps and ArcMAP software

The company's telephone number is 605/334-5000 while Chris Klein's direct number is 605/330-6570 (office) & 605/929-4017 (cell). The company address on the inspection materials is current.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: **August 20, 2021**

August 30, 2021: Email communication from Chris Klein: wells have not changed capacity since permitted and are still 10 gpm each. No well log is available for the 15' deep well

**Genny McMath
Water Rights Program**



0 0.075 0.15 0.3 0.45 0.6 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program

McMath, Genny

From: Chris Klein <cmklein@LGEVERIST.com>
Sent: Monday, August 30, 2021 2:21 PM
To: McMath, Genny
Subject: RE: [EXT] Water Permit No. 8336-3 (maintenance shop etc - Roberts County)

Genny –

The well pumps haven't changed – should be 10 gpm for each one for a total of 20. I apologize, as we apparently had a misunderstanding regarding that when he looked at them the other day.

Unfortunately, I don't have a drill log for the 15' well and if I had to guess I would say that it was more than likely made by a previous owner as it's essentially a 15' piece of 36" concrete culvert that was buried in the ground. Either way it was already in place when we purchased the property in 2005 – we just didn't know we needed a water right for it until the other one was drilled in 2018.

Hopefully this helps. Just let me know if you have any more questions.

Thanks!



CHRIS KLEIN, L.G. Everist, Inc. – Mine Planning & Regulatory Manager

350 S Main Ave, Suite 400, Sioux Falls, SD 57104

605.929.4017 || cmklein@lgeverist.com || www.lgeverist.com

SAFE...RELIABLE...PRODUCTIVE

From: McMath, Genny <Genny.McMath@state.sd.us>
Sent: Monday, August 30, 2021 1:37 PM
To: Chris Klein <cmklein@LGEVERIST.com>
Subject: Water Permit No. 8336-3 (maintenance shop etc - Roberts County)

Chris,

Recently a staff inspector with our program did an investigation of the water use system under No. 8336-3. The permit is for two wells.....one drilled by Wieber Drilling (190 feet deep) and another shallow well at 15 feet.

Do you know who drilled the 15' deep well or would you happen to have a well log for it?

Additionally, the inspection report indicates the wells are 5 gallons per minute for each well. The permit had the wells at 10 gpm each. Do you feel like the 5 gpm is correct now instead of 10?

Sorry for the questions – we just want to make sure we get the license issued correctly.

Genny McMath

Genny McMath

DANR – Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

8336-3

AUG 31 2021

Chris Klein
L G Everist Inc
350 S Main Ste 400
Sioux Falls SD 57104

Dear Mr. Klein:

Enclosed is Water License No. 8336-3. 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

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8336-3**

(1) L G Everist Inc., 350 S Main Ave., Suite 400, Sioux Falls SD 57104 made Application No. 8336-3, March 12, 2018 for a water permit to divert 0.044 cubic feet of water per second (5.5 acre feet annually) from ground water, two wells (Big Sioux North Aquifer and Prairie Coteau Aquifer), Roberts County, South Dakota for industrial and commercial use purposes. Permit No. 8336-3, with a priority date of March 12, 2018 was approved June 1, 2018 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 1, 2023 and for the application to beneficial use of said water on or before June 1, 2027.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 0.044 cubic feet of water per second for beneficial use. The diversion points are within the former boundaries of the Sisseton Wahpeton Indian Reservation and are described as follows:

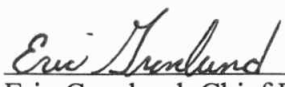
- **Well #1:** 2,350'S and 1,715'E of the NW corner of Section 36, T122N, R52W (SE ¼ NW ¼)
Latitude 45.30529 Longitude -97.11699 (Prairie Coteau Aquifer)
- **Well #2:** 2,205'S and 1,195'E of the NW corner of Section 36, T122N, R52W (SW ¼ NW ¼)
Latitude 45.30565 Longitude -97.11897 (Big Sioux North Aquifer)

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 L G Everist Inc., 350 S Main Avenue, Suite 400, Sioux Falls SD 57104 the holder and/or owner of Water Right No. 8336-3 is issued a license to appropriate water, the right to use 0.044 cubic feet of water per second (5.5 acre feet annually) from ground water, two wells (Big Sioux North Aquifer and Prairie Coteau Aquifer), with a priority date of March 12, 2018 from the locations specified in (2) of this license for industrial and commercial purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8336-3 and subject to the following qualifications:

- The wells approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right 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.
- The Water Right holder shall individually report to the Chief Engineer annually the amount of water withdrawn from the Big Sioux North and Prairie Coteau Aquifers.
- Water Right No. 8336-3 authorizes a total annual diversion of 5.5 acre feet of water (2.75 acre feet from well completed into the Big Sioux North aquifer and 2.75 acre feet from the Prairie Coteau Aquifer).


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

AUG 31 2021
date

