

WATER PERMIT NO. 7919-3

Name of Applicant: Larry & Marlene Erickson

Address: 29859 461st Ave, Centerville SD 57014

Phone: 605 563-2467

Amount of Water Claimed: 1.83 cfs

Total Acres: 83.83

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Clay

Type of Waste Disposal System:

Location: 6 miles northeast of Wakonda

PRIORITY

Date Received: 10-23-13

Application/License Fee: \$ 950

Corrected Application Received: 10-30-13

Period of Annual Use: May 1 – September 30

Remarks:

Diversion Point: center of NE 1/4 Sec 9-T95N-R52W

Land to be Irrigated: NE 1/4 Sec 9-T95N-R52W

Depth of Well: 75 feet

Well Driller: Lacey Well Drilling

Remarks:

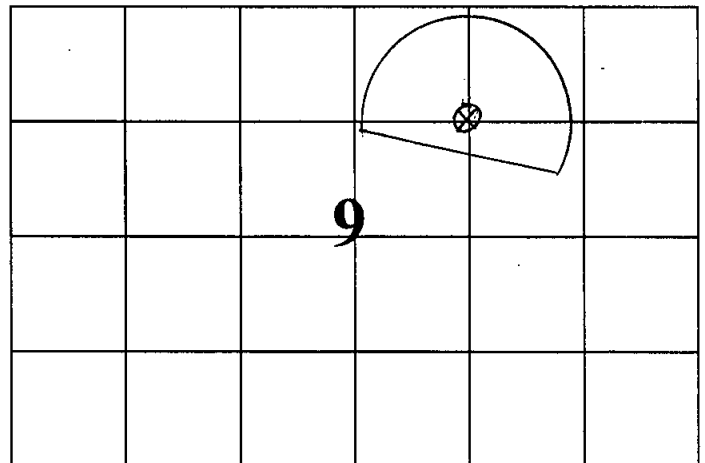
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 10-30-13

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7919-3</u> (office use only) Hydrologic Unit <u>10120102</u>	RECEIVED OCT 23 2013 WATER RIGHTS PROGRAM
	Basin <u>Vermillion River</u> Newspaper <u>Plain Talk 201 W Cherry St 3695</u> <u>605-665-7811</u> <u>57068</u> <u>Press-Dakotan 319 Walnut Spinkton 57028</u>	

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

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

- Name to Appear on Irrigation Permit Larry & Marlene Erickson
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent 29859 461st ave
(name and complete address if different than above name)
Mailing Address 29859 461st ave Centerville SD 57014
(Address) (City) (State) (Zip Code)
Home Phone 605 543 2467 Cell _____ Email _____
- Amount of water claimed 1.83*CFS or 825**GPM 825***AF Total Acreage 83.83
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply _____
- Location of point of diversion 9-95N-52W NE 1/4 (approximate Ctr)
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
County Clay
- County or counties where water will be used Clay
- Annual period during which water is to be used May 1 - Sept. 30
- List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>NE 1/4 north side</u>	<u>83.83</u>		
<u>Sec 9-T9SN-R52W</u>			

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

X I, Larry Erickson, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7919-3 FOR IRRIGATION

Date of first receipt of application October 23, 2013.

Date of return to applicant for corrections, amendments or changes October 24, 2013.

Date of receipt of corrected application October 30, 2013.

The Water Management Board approved Water Permit No. 7919-3 on March 6, 2014 for Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 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. 7919-3 appropriates 1.83 cubic feet of water per second from one well completed into the South Management Unit of the Upper Vermillion Missouri Aquifer to be approximately 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is October 23, 2013.
4. One-fifth of the construction is to be completed on or before September 6, 2016.
5. All construction is to be completed on or before March 6, 2019.
6. Water is to be put to beneficial use on or before March 6, 2023.
7. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7919-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7919-3 authorizes a maximum diversion rate of 1.83 cubic feet of water per second for the irrigation of 83.83 acres with an annual volume not to exceed 2 acre feet of water per acre per year.

WATER MANAGEMENT BOARD

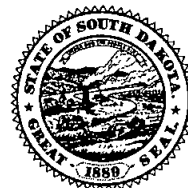
By: 

Jeanne Goodman, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

APR 11 2014

date



Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)a) If new wells, how many 1 Have test holes been drilled ☒ Yes ☐ No Drilled by Lacey Dell Rapids
(if yes, please provide copies of logs)b) If existing wells, how many Provide copy of log(s), if available. Drilled by Laceyc) Well Depth 25 ft Depth to Top of Water Bearing Material Depth to Water from Surface

d) Distance to nearest existing domestic well:

On applicant's property 1/4 mile On property owned by others 1 1/2 miles

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

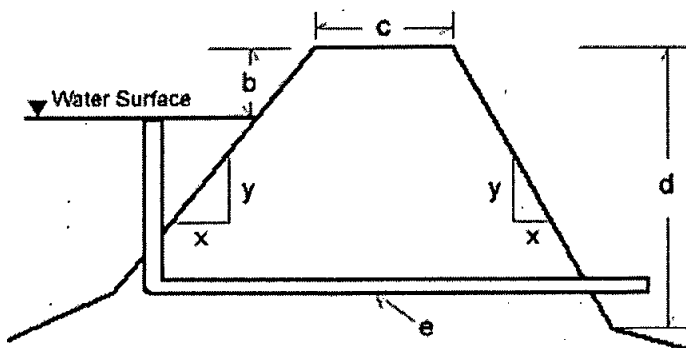
3. Dugout Information

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

Sec 5
T095N
R52W

Sec 4
T095N
R52W

Sec 3
T095N
R52W

Sec 8
T095N
R52W

Sec 9
T095N
R52W

Sec 10
T095N
R52W

Sec 17
T095N
R52W

Sec 16
T095N
R52W

Sec 15
T095N
R52W



Lindsay Manufacturing Co.



2707 North 108th Street
Omaha, NE 68164
800 - 829 - 5300 office

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OCT 23 2013

WATER RIGHTS
PROGRAM

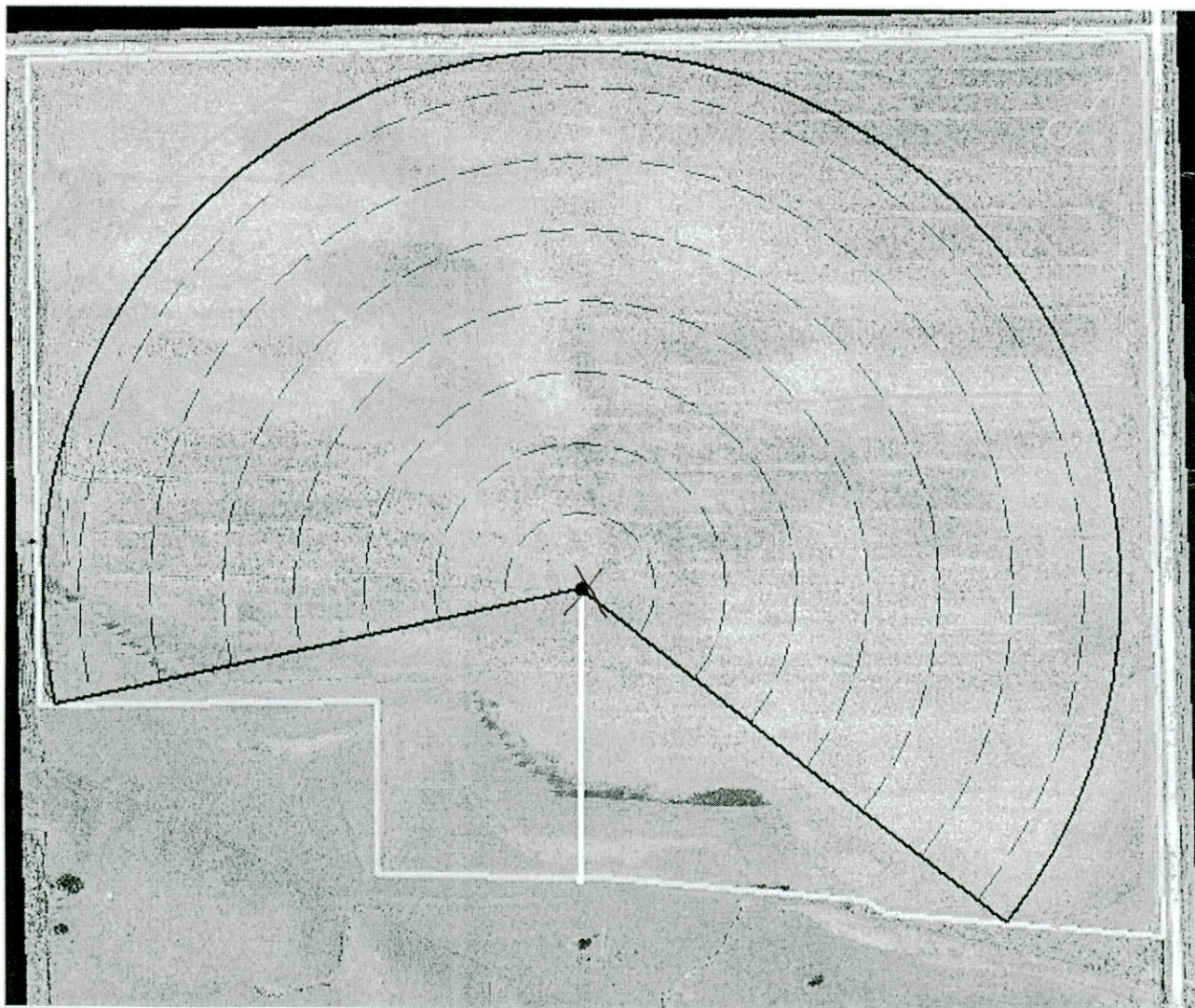
Farm: Field1

Grower: Larry Erickson

9/11/2013

Systems:	Length	Spans	Total area including endgun
● Pivot 2	1289.17 ft	7 spans + 85.0 ft o.h.	83.83 acres

Pipe and Wire:	Length / Size	Description
○ Pipe 2	697.72 ft / 8"	



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Test Hole 82'

10-9-13

LOG

Larry Erickson

29854 461 Ave.

Drilled 10-8-13

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Centerville, S.Dak. 57014

0-5 Topsoil

5-10 Sand

10-20 yellow Sand

20-50 Good Sand

50-57 Uniform Sand

57-67 Good Sand

67-82 Fine Sand

SWL-10'

Drilled by: Joan Redder-Lacey

LACEY Well Drilling Co.

LC #: 111

Joan Redder-Lacey

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 10/23, 2013

RECEIVED OF Larry Erickson 29859 461st Ave Centerville SD 57014

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

Fee for Application for Permit No. <u>7919-3</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>79119-3</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. **06467**

By J. Anne Leadman
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

October 24, 2013

Larry & Marlene Erickson
29859 461st Ave
Centerville SD 57014

Dear Mr. & Mrs. Erickson:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation in Clay County. In order to complete the application, the following is required.

- Please sign the lower portion of the application where indicated.
- Enclosed is the aerial photo map submitted with the application. The map needs to reference a government section corner or quarter corner including section, township and range. For your use, I have enclosed a map with those designations. Please outline the acres to be irrigated and mark the proposed well location with an "X".

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7919-3, Larry and Marlene Erickson**

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. 7919-3, Larry and Marlene Erickson, 29859 461st Avenue, Centerville SD 57014.

The Chief Engineer is recommending DEFERRAL of Application No. 7919-3 pending the completion of the study by South Dakota Geologic Survey that is currently ongoing in the area. The information from the study is necessary to determine the source of water proposed in the application to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
December 27, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7919-3
LARRY & MARLENE ERICKSON
DECEMBER 27, 2013

Water Permit Application No. 7919-3 proposes to withdraw groundwater at a maximum diversion rate of 1.83 cubic feet of water per second (cfs) from one well to be completed in the approximate center of the NE ¼ Section 9; T95N-R52W. The well is expected to be 75 feet deep. Water will be used to irrigate 83.83 acres located in NE ¼ of Section 9; T95N-R52W in Clay County. The applicant is requesting a diversion rate greater than the statutory limit.

From the information currently available, including previous mapping, area test holes and wells, and lithologic logs, this application proposes to appropriate water from one of the following aquifers: Parker-Centerville, Upper Vermillion Missouri, or the Lower Vermillion Missouri (Hedges et. al, 1982; SDGS, 2013; Water Rights, 2013). Figure 1 is a map of the area water rights/permits, deferred permits, and a first occurrence map of aquifer materials (Jensen, 2000; Water Rights, 2013).

Based on the Water Rights Program staff analysis of the Upper Vermillion Missouri aquifer, located in Appendix A (Buhler, 2012), the Chief Engineer recommended deferral of water permit applications proposing to withdraw water from the Upper Vermillion Missouri aquifer. The staff analysis concluded that the availability of unappropriated water could not be determined at the time. On March 7, 2013, the Water Management Board agreed with the Chief Engineer's recommendation and subsequently deferred those permits mentioned in Buhler's report (2012). The SD DENR-Geological Survey is currently studying the area of this application. However, the new information is not yet available.

At this time, it is not possible to determine if this application proposes to withdraw water from the Upper Vermillion Missouri aquifer. Therefore, Water Permit Application No. 7919-3 should also be deferred pending the completion of the SD DENR-Geological Survey study.



Adam Mathiowetz
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

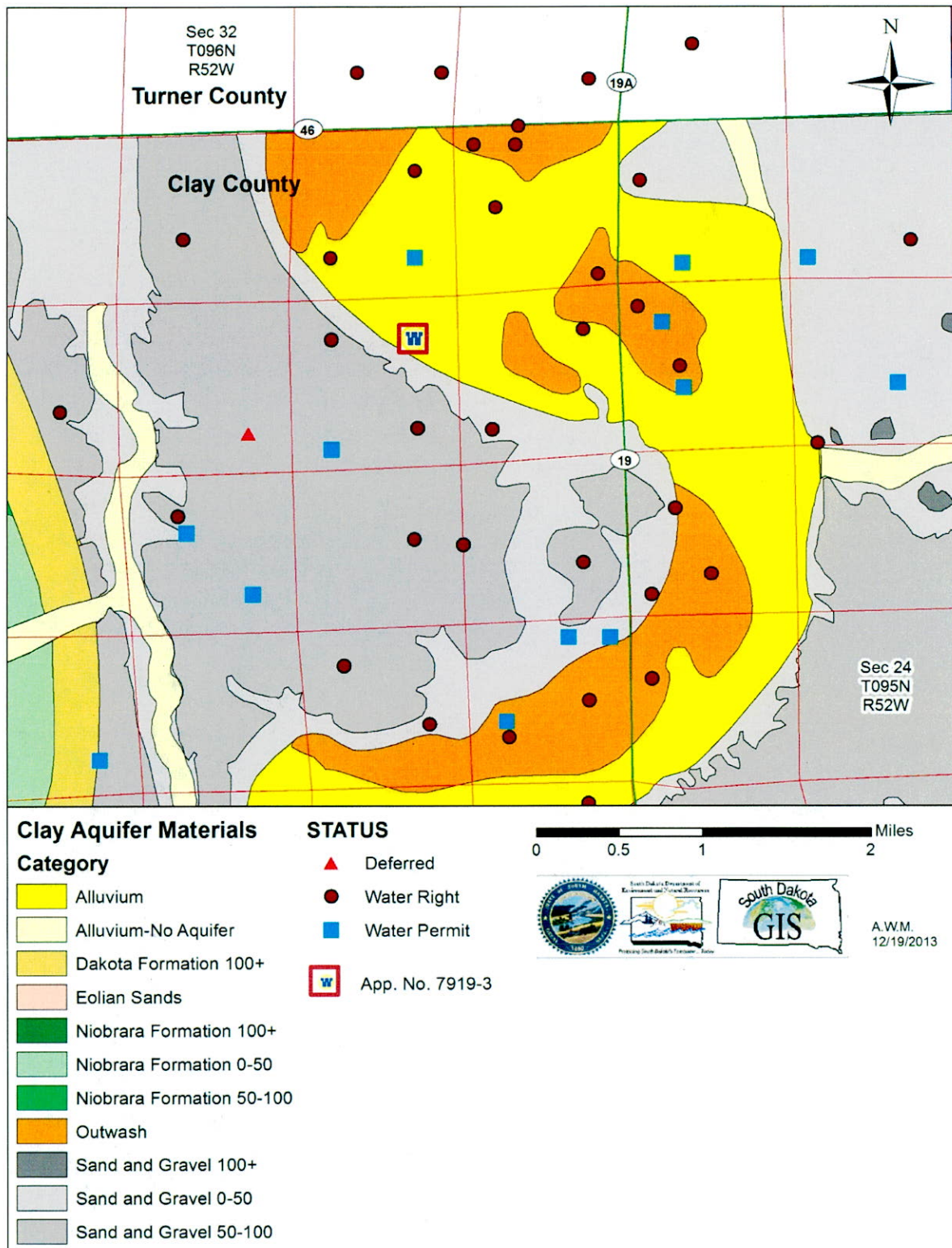


Figure 1- Map of water rights/permits, deferred permits, and first occurrence map of aquifer materials (Jensen, 2000; Water Rights, 2013)

REFERENCES:

- Buhler, K.A., 2012, Report to the Chief Engineer on Water Permit Application No. 7441-3 & 7442-3, Gary or Julie Peterson; Water Permit Application No. 7452-3, Jerome Hult; Water Permit Application No. 7466-3, Bethel Hagen Trust; Water Permit Application No. 7467-3 & 7468-3, Cleland Hagen Trust; and Water Permit Application No. 7535-3 Donald D Benson, December 11, 2012: SD DENR- Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- Jensen, A.R. 2000. First Occurrence of Aquifer Materials in Clay County, South Dakota. Aquifer Materials Map 1. SD DENR-Geological Survey. Vermillion, South Dakota
- SDGS. 2013. Lithologic Logs Database Search. < <http://www.sddenr.net/publist/>>. SD DENR-Geological Survey. Vermillion, South Dakota.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Water Rights. 2013. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Appendix A

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NOS. 7441-3 & 7442-3, GARY OR JULIE PETERSON
WATER PERMIT APPLICATION NO. 7452-3, JEROME HULT
WATER PERMIT APPLICATION NO. 7466-3, BETHEL HAGEN TRUST
WATER PERMIT APPLICATION NOS. 7467-3 & 7468-3, CLELAND HAGEN TRUST
WATER PERMIT APPLICATION NO. 7535-3, DONALD D BENSON
DECEMBER 11, 2012

Water Permit Application No. 7441-3 proposes to appropriate up to 280 acre-feet of per year (ac-ft/yr) at a maximum diversion rate of 1.79 cubic feet of water per second (cfs) from one well to be completed into the Upper Vermillion Missouri aquifer. The well is expected to be approximately 175 feet deep and is to be located in the center of the SE $\frac{1}{4}$ of Section 8, T95N-R52W. This application proposes to irrigate 140 acres located in the SE $\frac{1}{4}$ of Section 8, T95N-R52W.

Water Permit Application No. 7442-3 proposes to appropriate up to 80 ac-ft/yr to irrigate 40 acres located in the W $\frac{1}{2}$ NE $\frac{1}{4}$ Section 17, T95N-R52W using an existing well which is authorized by Water Right No. 5982-3. Water Right No. 5982-3 appropriates up to 320 ac-ft/yr at a maximum diversion rate of 2.28 cfs from one well 165 feet deep completed into the Upper Vermillion Missouri aquifer, located in the center of the NW $\frac{1}{4}$ of Section 17, T95N-R52W. This application does not propose to increase the diversion rate authorized for this well.

Water Permit Application No. 7452-3 proposes to appropriate up to 220 ac-ft/yr at a maximum diversion rate of 1.78 cfs from one well to be completed into the Upper Vermillion Missouri aquifer. The well is expected to be approximately 190 feet deep and is to be located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 32, T98N-R52W. This application proposes to irrigate 110 acres located in the W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 32, T98N-R52W. This application is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Water Permit Application No. 7466-3 proposes to appropriate up to 304 ac-ft/yr at a maximum diversion rate of 1.78 cfs from one well to be completed into the Upper Vermillion Missouri aquifer. The well is expected to be approximately 169 feet deep and is to be located in the approximate center of the NE $\frac{1}{4}$ of Section 5, T96N-R51W. This application proposes to irrigate 152 acres located in the NE $\frac{1}{4}$ of Section 5, T96N-R51W.

Water Permit Application No. 7467-3 proposes to appropriate up to 304 ac-ft/yr at a maximum diversion rate of 1.78 cfs from one well to be completed into the Upper Vermillion Missouri aquifer. The well is expected to be approximately 134 feet deep and is to be located in the approximate center of the NW $\frac{1}{4}$ of Section 13, T96N-R51W. This application proposes to irrigate 152 acres located in the NW $\frac{1}{4}$ of Section 5, T97N-R52W.

Water Permit Application No. 7468-3 proposes to appropriate up to 304 ac-ft/yr at a maximum diversion rate of 1.78 cfs from one well to be completed into the Upper Vermillion Missouri aquifer. The well is expected to be approximately 134 feet deep and is to be located in the

approximate center of the NE¼ of Section 26, T96N-R51W. This application proposes to irrigate 152 acres located in the NE¼ of Section 5, T98N-R52W.

Water Permit Application No. 7535-3 proposes to appropriate up to 130 ac-ft/yr at a maximum diversion rate of 1.78 cfs from one well to be completed into the Upper Vermillion Missouri aquifer. The well is expected to be approximately 220 feet deep and is to be located in the SW¼ NW¼ of Section 30, T98N-R53W. This application proposes to irrigate 65 acres located in the NW¼ of Section 30, T98N-R53W. This application is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

AQUIFER: Upper Vermillion Missouri aquifer (UVM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Upper Vermillion Missouri aquifer is a buried glacial outwash deposit that consists of fine sand to medium-pebble gravel. The aquifer underlies approximately 204,832 acres of Hutchinson, Turner, Lincoln and Clay Counties (see Figure 1). The Upper Vermillion Missouri aquifer blends into the Lower Vermillion Missouri aquifer in northern Clay County. The average thickness of the outwash is estimated to be 68 feet in Turner County (Lindgren and Hansen, 1990) and is estimated to be 100-150 feet thick in the areas proposed by these applications (Stephens, 1967). The aquifer contains an estimated 1.8 million acre feet (ac-ft) of water in storage in Turner and Hutchinson Counties (Lindgren and Hansen, 1990) and an estimated 317,180 ac-ft of recoverable water in storage in Clay and Lincoln Counties (Hedges and others, 1982). The aquifer is primarily under confined conditions although unconfined conditions do occur over a small area where the outwash is at or near ground surface in T96N-R52W at the Clay-Turner County line (Lindgren and Hansen, 1990). Groundwater movement in the aquifer is to the south-southeast at a gradient that Lindgren and Hansen (1990) estimated at approximately four feet per mile (ft/mi). However, based on DENR-Water Rights' observation wells the gradient was 4.3- 4.6 ft/mi in May 2012 (Water Rights, 2012a). The outwash generally overlies the Carlile Shale although Sioux quartzite directly underlies the aquifer in northern portion of the aquifer (Lindgren and Hansen, 1990). The Upper Vermillion Missouri aquifer overlies the Niobrara Formation in western Turner County. The aquifer is generally buried by glacial till; however, in places it is overlain by and is hydraulically connected to the surficial Parker Centerville aquifer.

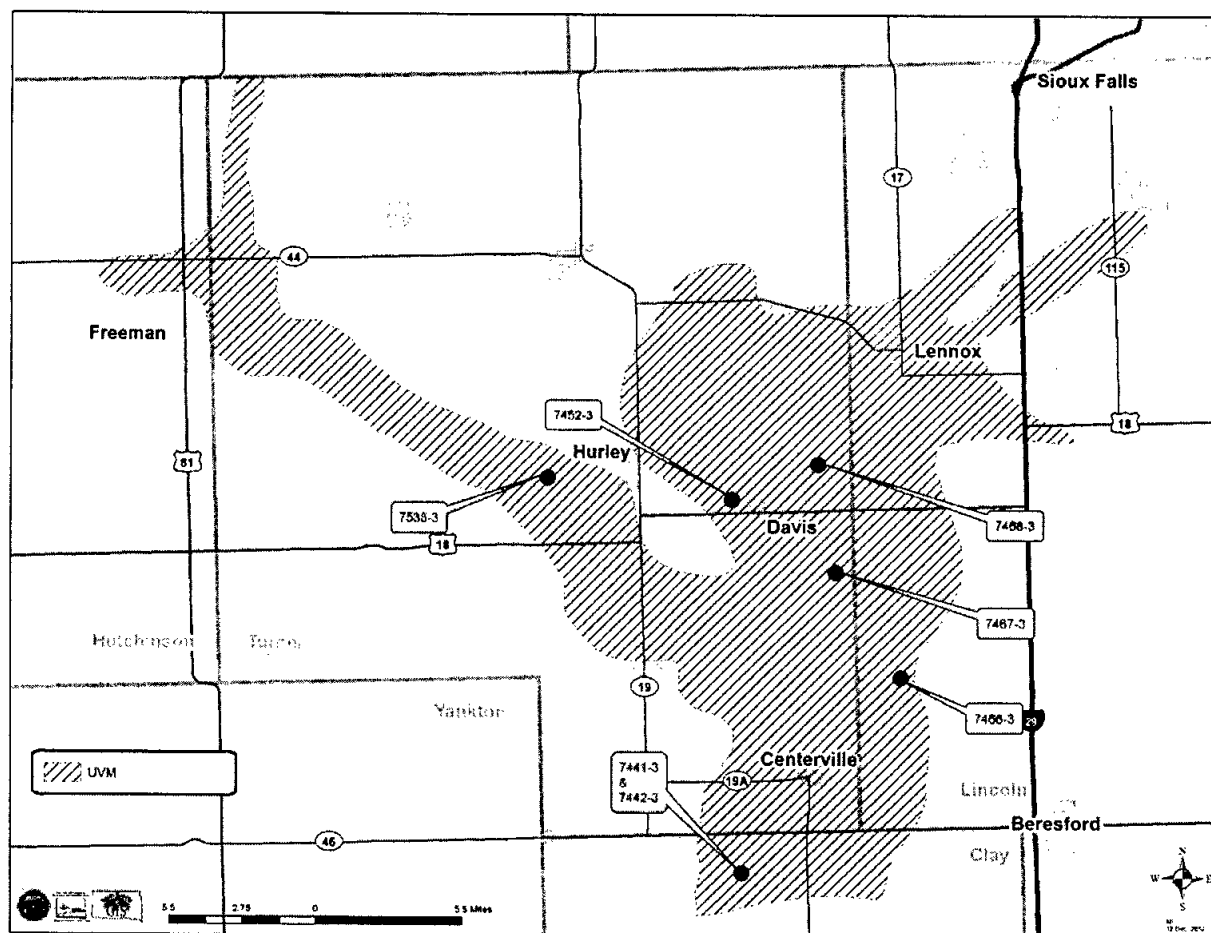


Figure 1. Areal extent of the Upper Vermillion aquifer modified from (Lindgren and Hansen, 1990; Hedges and others, 1982; and Niehus, 1994), and the locations of well sites proposed by Water Permit Application Nos. 7441-3, 7442-3, 7452-3, 7466-3, 7467-3, 7468-3 and 7535-3.

SDCL 46-2A-9

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

WATER AVAILABILITY:

Water Permit Application Nos. 7441-3, 7442-3, 7452-3, 7466-3, 7467-3, 7468-3, and 7535-3 proposes to appropriate up to 1,622 acre-feet annually from the Upper Vermillion Missouri aquifer. The actual water use if these applications are approved will likely be less than the appropriations. 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."

Recharge versus Discharge:

Recharge:

Recharge to the Upper Vermillion Missouri aquifer occurs through: 1) direct infiltration of precipitation in areas where the aquifer is at or near ground surface; 2) inflow from fractures in the Sioux Quartzite; and 3) inflow from the Niobrara aquifer.

Previous Estimates:

Hedges and others (1985) estimated a recharge rate to the Upper Vermillion Missouri aquifer of 0.25 inches per year calculated from regional flow net analysis. However, Hedges and others (1985) noted:

“It should be noted that recharge rates calculated using flow-net analysis are suspect and conclusions based on this method are questionable”

Given a recharge rate of 0.25 inches per year, average annual recharge to the Upper Vermillion Missouri aquifer is 4,267 ac-ft/yr.

2012 Flow net analysis

The recharge potential of the Upper Vermillion Missouri aquifer was evaluated by interpreting a regional flow net analysis based on the May 2012 water level data from the DENR-Water Rights' Observation Well Network. A flow net analysis is a calculation of the amount of water flowing through the aquifer according to the equation:

$$Q = TIL$$

Where:

Q= flow in gallons per day

T= Transmissivity in gallons per day per foot

I= Hydraulic gradient in feet per mile

L= Cross sectional length in miles

The average transmissivity for the Upper Vermillion Missouri aquifer was estimated based on the transmissivity calculated from the specific capacities of irrigation wells completed into the aquifer where the data to allow these calculations was available (Water Rights, 2012b; Water Rights, 2012c) (“Transmissivity from Specific Capacity”). These transmissivity values are shown in Table 1.

Permit No.	Type	Drawdown (ft)	Yield (gpm)	Specific Capacity (gpm/ft)	Transmissivity (g/d/ft)
1930-3	A	15	1200	80.0	160000
3784-3	A	92	900	9.8	19600
3901-3	A	9	1000	111.1	222200
4265-3	A	25	900	36.0	72000
4560-3	A	83	800	9.6	19200
5259-3	A	6	1400	233.3	466600
5352-3	WT	20	2100	105.0	157500
5371-3	A	45	860	19.1	38200
5425-3	A	22	1100	50.0	100000
5632-3	A	24	800	33.3	66600
5886-3	A	9	800	88.9	177800
5899-3	A	25	800	32.0	106600
5982-3	A	27	800	29.6	92400
6054-3	A	25	900	36.0	72000
6301-3	A	16	1100	68.8	137600
6810-3	A	6	750	125.0	250000
6868-3	A	10	900	90.0	180000
6922-3	A	11	810	73.6	147200
6968-3	A	11	840	76.4	152800
6984-3	A	7	1200	171.4	342800
7002-3	WT	10.5	720	68.6	102900
7128-3	A	15	750	50.0	100000
Min		6	720	9.64	19200
Max		92	2100	233.33	466600
Average		23	974	72.62	144727

Table 1. Irrigation well data from the Upper Vermillion Missouri aquifer

The hydraulic gradient for the Upper Vermillion Missouri aquifer was estimated to average 4.5 feet per mile based on data from the DENR-Water Rights' Observation Well Network (Water Rights, 2012c).

The cross section length of the Upper Vermillion Missouri aquifer was determined to be approximately eight miles based on the current aquifer delineation.

The amount of water moving through the Upper Vermillion Missouri aquifer is estimated as follows:

$$\begin{aligned}
 Q &= ((144,727 \text{ gpd/ft}) \times (4.5 \text{ ft/mile}) \times (8 \text{ miles})) / (325,851 \text{ gallons/ac-ft}) \\
 &= 15.99 \text{ ac-ft/day} \\
 &= \underline{5,836 \text{ ac-ft/yr}}
 \end{aligned}$$

In order to sustain this estimated volume of groundwater moving through the aquifer, the recharge rate in inches per acre per year based on an area of the aquifer of 204,832 acres would be 0.34 inches. This recharge rate cannot be considered "average annual recharge" since it used only 2012 data; however the estimate does agree with the average annual recharge estimate from Hedges and others (1985).

The recharge rates estimated for the Upper Vermillion Missouri aquifer should be considered reflective of "existing conditions". Lindgren and Hansen (1990) identified that approximately the southern 19.5 miles of the western boundary of the Upper Vermillion Missouri aquifer in

Turner County is hydraulically connected to and receives recharge from the Niobrara aquifer. Increased recharge will be induced from the Niobrara aquifer with increased pumping from the Upper Vermillion Missouri aquifer.

Discharge:

Discharge for the Upper Vermillion Missouri aquifer occurs through groundwater outflow to the Lower Vermillion Missouri aquifer and by well withdrawals. There are a number of completion reports on file with the DENR-Water Rights Program for domestic use wells that appear to be completed into the Upper Vermillion Missouri aquifer (Water Rights, 2012b); however withdrawals from domestic users are not expected to be significant. There are currently 100 water rights/permits appropriating water from the Upper Vermillion Missouri aquifer. Appropriations authorize municipal, commercial, rural water system and irrigation uses.

Municipal use:

Municipal use appropriations include water rights for: 1) the City of Viborg, 2) the City of Centerville, and 3) the Town of Davis. At this time, Viborg and Davis are supplied completely by TM Rural Water System (Friedeman). The City of Centerville receives 70% of its 64,000 gallons per day average from Lewis and Clark Rural Water System and 30% from the Upper Vermillion Missouri aquifer (Kittay). Therefore the average municipal water use from the Upper Vermillion Missouri aquifer is 21.5 ac-ft/yr.

Commercial use:

There are two water rights appropriating water from the aquifer for commercial use. Water Right No. 6662-3, Vannorsdel's Inc., appropriates water for a concentrated animal feeding operation permitted for 1,800 head of beef cattle (Roth). Assuming an average use of 18 gallons per animal unit per day, the average water use by the permit is estimated to be 36 ac-ft/yr. Water Right No. 5833-3, Advanced Prescription Fertilizer Inc, appropriates water for a fertilizer plant. The average annual use through this appropriation is estimated to be under 1,000,000 gallons per year (i.e. 3.07 ac-ft/yr) (Nelson). Estimated average annual use for commercial use from the Upper Vermillion Missouri aquifer therefore is 40 ac-ft/yr.

Rural Water System Use:

Two rural water systems are supplied by the Upper Vermillion Missouri aquifer: TM Rural Water System and South Lincoln Rural Water System. The water use of the rural water systems as reported to the DENR-Water Rights Program is shown in Table 2.

	TM Rural Water District	South Lincoln RWS
2011	1146	1108
2010	1184	1095
2009	950	987
2008	776	779
2007	2	607
2006	3	599
2005	1	611
2004	12	583
2003	17	354

Table 2. Reported water use in acre-feet per year from TM RWS and South Lincoln RWS (Water Rights 2003-2012)

Irrigation Use:

The majority of the water pumped from the Upper Vermillion Missouri aquifer is for irrigation use. The irrigation water use from the aquifer as reported to the DENR-Water Rights Program is shown in Table 3.

YEAR	NO. OF PERMITS	APPROPRIATION (ac-ft/yr)	PUMPAGE REPORTED (ac-ft/yr)
1979	56	28081.0	3247
1980	54	28081.0	5082
1981	61	30455.0	4159
1982	52	25589.6	3778.57
1983	51	25025.6	2983.12
1984	59	29867.6	2791.00
1985	57	28643.6	2479.00
1986	57	28067.6	3544.00
1987	55	26561.6	3781.00
1988	54	26072.6	6753.10
1989	55	26492.6	5758.60
1990	61	27977.6	6626.20
1991	59	27469.0	6220.00
1992	61	27723.0	1793.20
1993	58	25021.0	534.50
1994	55	23792.0	4313.79
1995	55	23792.0	4484.34
1996	59	24403.6	4672.19
1997	59	24642.6	5408.00
1998	62	24842.6	5343.85
1999	62	25062.6	5056.06
2000	62	25938.6	6181.55
2001	62	25938.6	6195.66
2002	64	26498.6	7169.69
2003	64	26195.6	5930.90
2004	62	25747.6	7414.06
2005	61	25369.6	6856.39
2006	64	26071.6	7906.32
2007	69	27293.6	6983.20
2008	76	28890.2	7467.98
2009	77	28856.9	3878.92
2010	79	29280.9	150.49
2011	79	29280.9	5615.12
Max	79	30455	7906.32
Min	31	23792	150.49
Average	60	26758	4865.42

Table 3. Irrigation from the Upper Vermillion Missouri aquifer (Water Rights, 1980-2012)

Future Use Permits:

A future use permit is a reservation of water and does not authorize withdrawals. However, in theory future use permits can be completely developed. Future use permits reserving water from the Upper Vermillion Missouri aquifer are shown in table 4.

Future Use Permit No.	Name	Amount of water remaining reserved
5358-3	TM Rural Water District	530 ac-ft/yr
6705-3	TM Rural Water District	210 ac-ft/yr

Table 4. Future Use Permits from the Upper Vermillion Missouri aquifer (Water Rights, 2012c)

Recharge versus Discharge Summary:

The total of well withdrawals from the Upper Vermillion Missouri aquifer plus the amount of water that can be developed from future use permits is estimated to be approximately 7,900 acre-feet per year assuming average municipal, commercial, and irrigation use; 2,250 ac-ft/yr rural water system use; and 740 ac-ft/yr from future use permits. The estimated average annual recharge currently is estimated to be approximately 5,836 ac-ft/yr. Therefore the current estimated average annual withdrawal from the Upper Vermillion Missouri aquifer appears to exceed the estimated average annual recharge to the aquifer.

As stated earlier, the recharge rates estimated for the Upper Vermillion Missouri aquifer should be considered reflective of “existing conditions”. Increased recharge will be induced from the Niobrara aquifer with increased pumping from the Upper Vermillion Missouri aquifer.

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 to the aquifer”.

The DENR-Water Rights Program monitors 29 observation wells completed into the Upper Vermillion Missouri aquifer. The observation well data shows seasonal fluctuations in water levels corresponding to recharge and discharge. The aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years.

Hydrographs for two observation wells completed into the Upper Vermillion Missouri aquifer are shown in Figures 2 and 3.

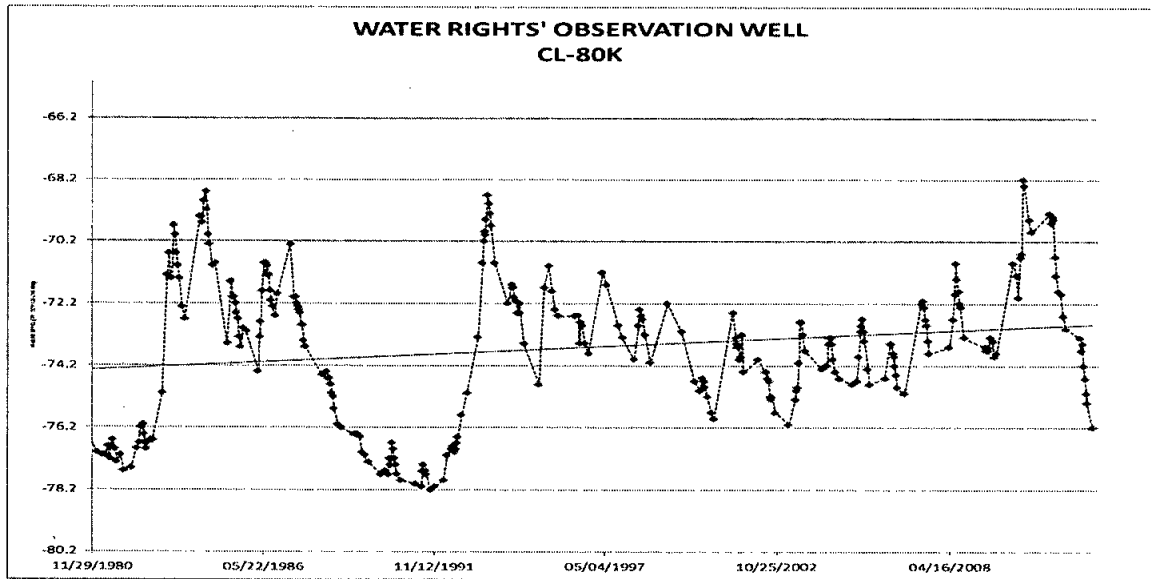


Figure 2. Hydrograph with an upward trending linear trend line for an observation well completed into the Upper Vermillion Missouri aquifer

The hydrograph for CL-80K documents that in the area of the observation well, there is currently more water in storage in the aquifer than when the well was completed and the linear trend line for the data shows a positive slope, indicating that in general, recharge has exceeded discharge in this area over the period of record.

Other observation wells completed into the Upper Vermillion Missouri aquifer document downward trending water levels, such as the hydrograph for TU-77F (see figure 3).

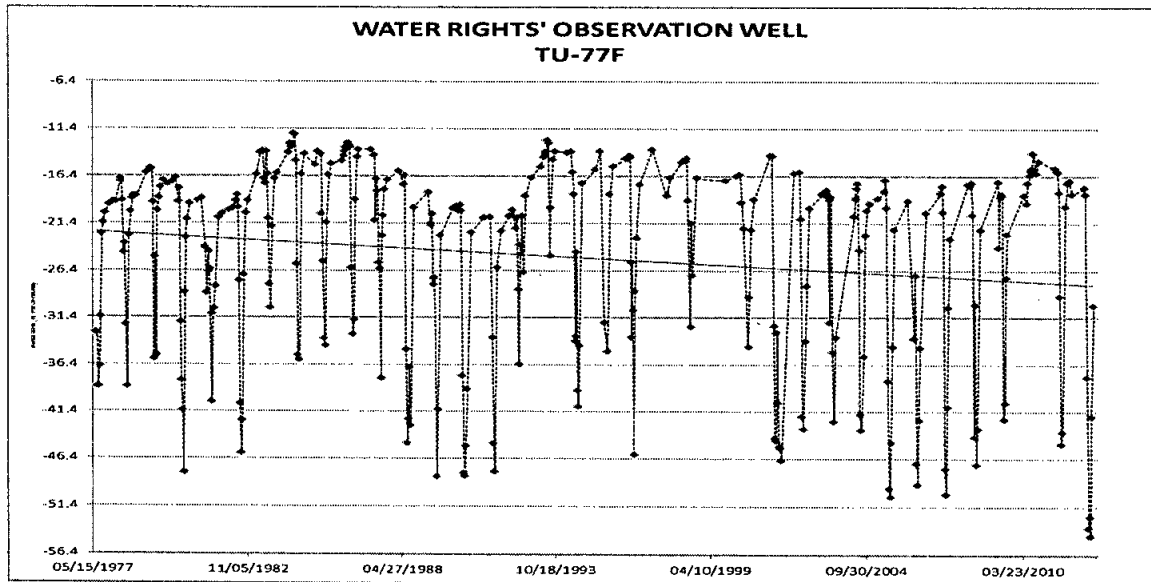


Figure 3. Hydrograph with a downward trending linear trend line for an observation well completed into the Upper Vermillion Missouri aquifer

The slope of the linear trend lines for observation wells completed into the Upper Vermillion Missouri aquifer are shown in Table 5.

OBSERVATION WELL	SLOPE (FT/YR)
CL-80K	0.0365
HT-81A	1.2045
LN-78B	0.073
LN-78E	0.073
MC-83G	-0.219
MC-83JR	-0.292
TU-77B	-0.1095
TU-77D	-0.00183
TU-77F	-0.146
TU-77G	-0.1095
TU-77H	-0.01825
TU-77I	-0.073
TU-77L	0.073
TU-77M	0.073
TU-77P	-0.146
TU-77S	0.3285
TU-77T	0.073
TU-77U	-0.146
TU-77V	0.1095
TU-77W	-0.073
TU-77X	0.1095
TU-77Y	-0.00183
TU-77Z	0.2555
TU-78B	0.0365
TU-80H	0.073
TU-80I	0.03285
TU-82A	-0.657
TU-83A	-0.292
TU-90A	-0.949

Table 5. Slope of the linear trend lines of observation wells completed into the Upper Vermillion Missouri aquifer

From Table 5 it can be seen that the slope of the trend lines for 15 of the 29 observation wells completed into the Upper Vermillion aquifer is negative (i.e. downward sloping). The observation wells with downward trending water levels are concentrated in two areas: an area in the north-central portion of the aquifer and an area in the northwest portion of the aquifer (see Figure 4). The first area is in the vicinity of South Lincoln Rural Water System wells and the second area is in the vicinity of TM Rural Water District wells.

The water use from the two areas of declining water levels has steadily increased (see Table 2). At this time, data is not available to determine if the water levels in these areas will stabilize under steady rural water system withdrawals.

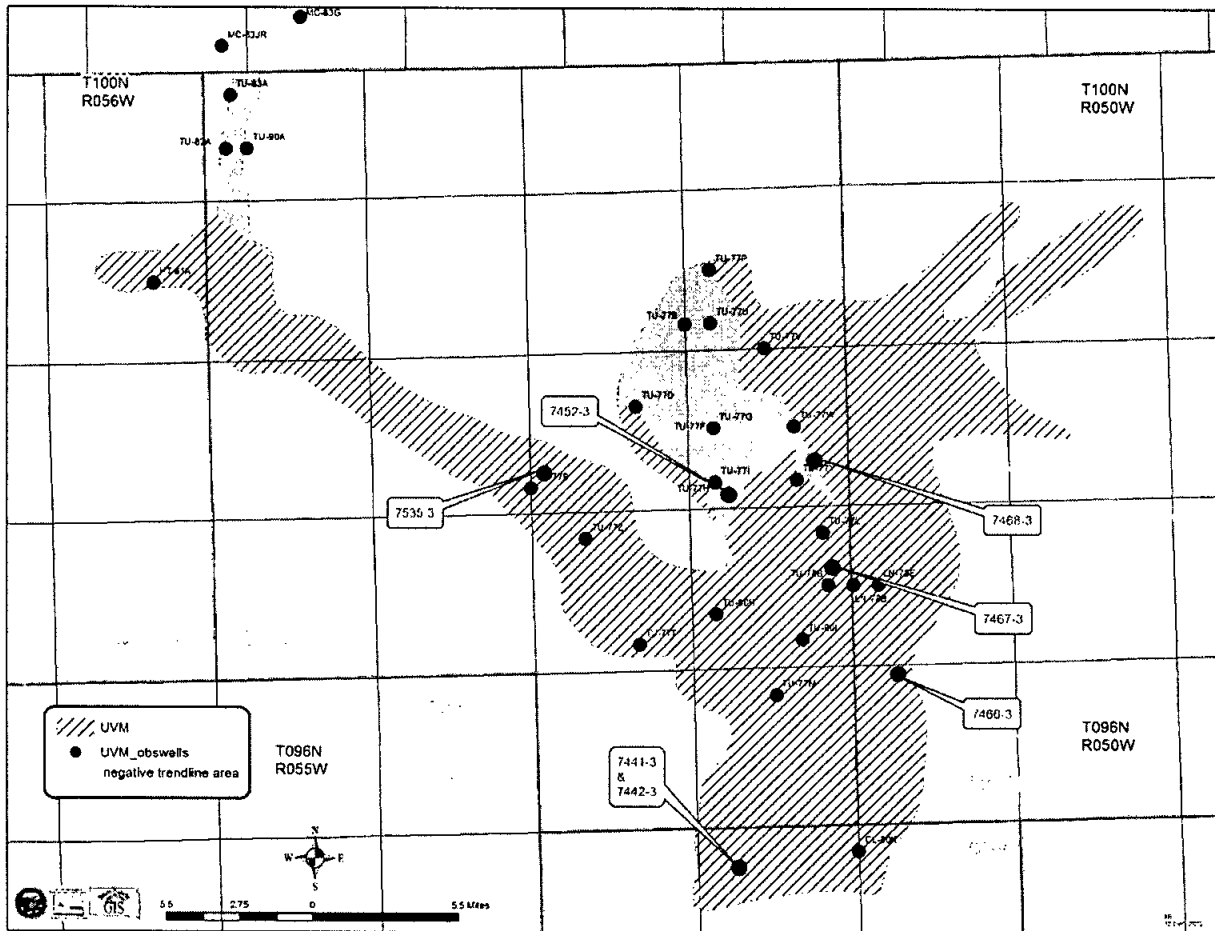
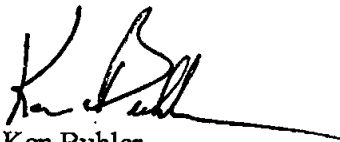


Figure 4. Upper Vermillion Missouri aquifer, locations of the applications discussed in this report, location of DENR-Water Rights' observation wells completed into the Upper Vermillion Missouri aquifer and the areas where water levels trend downward

CONCLUSIONS:

1. Water Permit Application No. 7441-3 proposes to appropriate up to 280 acre-feet per year from the Upper Vermillion Missouri aquifer.
2. Water Permit Application No. 7442-3 proposes to appropriate up to 80 acre-feet per year from the Upper Vermillion Missouri aquifer.
3. Water Permit Application No. 7452-3 proposes to appropriate up to 220 acre-feet per year from the Upper Vermillion Missouri aquifer.
4. Water Permit Application No. 7466-3 proposes to appropriate up to 304 acre-feet per year from the Upper Vermillion Missouri aquifer.
5. Water Permit Application No. 7467-3 proposes to appropriate up to 304 acre-feet per year from the Upper Vermillion Missouri aquifer.
6. Water Permit Application No. 7468-3 proposes to appropriate up to 220 acre-feet per year from the Upper Vermillion Missouri aquifer.
7. Water Permit Application No. 7535-3 proposes to appropriate up to 130 acre-feet per year from the Upper Vermillion Missouri aquifer.

8. The Upper Vermillion Missouri aquifer is a buried glacial outwash that underlies approximately 204,832 acres of Hutchinson, Turner, Lincoln and Clay Counties.
9. Recharge to Upper Vermillion Missouri aquifer is through infiltration of precipitation, inflow from the Sioux Quartzite, and leakage from the Niobrara aquifer.
10. The average annual recharge to the Upper Vermillion Missouri aquifer has been estimated to be 0.25 inches per year (4,267 ac-ft/yr).
11. A recharge rate based on a regional flow net analysis of 2012 observation well data was estimated to be approximately 5,836 ac-ft/yr.
12. Average annual discharge from the Upper Vermillion Missouri aquifer is estimated to be approximately 7,260 ac-ft/yr.
13. Future use permits reserve 740 ac-ft/yr from the Upper Vermillion Missouri aquifer which in theory can be fully developed.
14. Anticipated average annual withdrawal under current appropriations is expected to exceed average annual recharge estimates.
15. Since a source of recharge to the Upper Vermillion Missouri aquifer is leakage from the Niobrara aquifer, increased withdrawal from the Upper Vermillion Missouri aquifer will induce additional recharge from the Niobrara aquifer.
16. The amount of recharge that can be induced from the Niobrara aquifer has not been quantified.
17. Data from DENR-Water Rights Program observation wells documents downward trending water levels in 15 of the 29 observation wells completed into the Upper Vermillion Missouri aquifer.
18. Downward trending observation wells are currently concentrated in two areas corresponding to areas of TM Rural Water System pumping and South Lincoln Rural Water System pumping.
19. At this time, data is not available to determine if the water levels in these areas will stabilize under steady withdrawals.



Ken Buhler
DENR-Water Rights Program

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PLAIN TALK

Marlene Erickson
29859 461st ave
Centerville, SD 57014

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

TERA SCHMIDT BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT SHE IS THE CLASSIFIED MANAGER OF YANKTON
MEDIA INC., A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED AND CIRCULATED
IN THE CITY OF VERMILLION, SAID COUNTY AND STATE, AND ONE OF THE
OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS STATED IN THIS
AFFIDAVIT; THAT THE ANNEXED
NOTICE OF HEARING on

APPLICATION NO. 7919-3 to Appropriate Water

NEWSPAPER ON THE 10th DAY OF January 2014
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$68.68 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 1/10/14

FILED ON: 1/13/14

Tera A. Schmidt

SUBSCRIBED AND SWORN TO BEFORE ME THIS

14th DAY OF

January

2014

[Signature]
NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

**NOTICE OF HEARING on
APPLICATION NO. 7919-3 to
Appropriate Water**

Notice is given that Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 has filed an application for a water permit to appropriate 1.83 cubic feet of water per second from one well to be completed to an approximate

depth of 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends DEFERRAL of Application No. 7919-3 pending the completion of the study by South Dakota Geologic Survey that is currently ongoing in the area. The information from the study is necessary to determine the source of water proposed in the application to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available. The recommendation, if revised will not be public noticed again. This is the opportunity to intervene regarding this application.

The Water Management Board will consider this application at 1:00 p.m. on March 6, 2014 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave. Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support the application and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to 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 February 24, 2014. The petition may be informal, but shall be in writing and shall 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. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support the application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendation, application or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided

by publication, and the applicable date to give notice to the Chief Engineer is January 20, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

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

Published once at the total approximate cost of \$68.68

Published: January 10, 2014

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STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

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AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
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COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Application No. 7919-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 10th DAY OF January 2014
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$68.35 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 1/10/2014

FILED ON: 1/13/2014

SUBSCRIBED AND SWORN TO BEFORE ME THIS 13th DAY OF January

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

1+10
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APPLICATION NO. 7919-3 to
Appropriate Water

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends DEFERRAL of Application No. 7919-3 pending the completion of the study by South Dakota Geologic Survey that is currently ongoing in the area. The information from the study is necessary to determine the source of water proposed in the application to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available. The recommendation, if revised will not be public noticed again. This is the opportunity to intervene regarding this application.

The Water Management Board will consider this application at 1:00 p.m. on March 6, 2014 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave, Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

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

Published once at an approximate cost of \$68.35.



**DEPARTMENT of ENVIRONMENT
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December 30, 2013

Plain Talk
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Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7919-3 to Appropriate Water. Please publish the notice once on January 10, 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 Larry & Marlene Erickson, 29859 461st Ave; Centerville SD 57014 (Ph # 605-563-2467).

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

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

December 30, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

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

December 30, 2013

Larry & Marlene Erickson
29859 461st Ave
Centerville SD 57014

Dear Sir:

Water Permit Application No. 7919-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Plain Talk printed at Vermillion SD (Ph # 605-624-2695) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). 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 January 10, 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 HEARING on APPLICATION NO. 7919-3 to Appropriate Water

Notice is given that Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 has filed an application for a water permit to appropriate 1.83 cubic feet of water per second from one well to be completed to an approximate depth of 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit.

SDCL 46-2A-4(10) provides that “if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer’s recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board.” In this case, the Chief Engineer finds that this application presents important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends DEFERRAL of Application No. 7919-3 pending the completion of the study by South Dakota Geologic Survey that is currently ongoing in the area. The information from the study is necessary to determine the source of water proposed in the application to determine if there is reasonable probability that there is unappropriated water available for the applicant’s proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available. The recommendation, if revised will not be public noticed again. This is the opportunity to intervene regarding this application.

The Water Management Board will consider this application at 1:00 p.m. on March 6, 2014 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave. Pierre SD. The Chief Engineer’s recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support the application and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to 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 February 24, 2014. The petition may be informal, but shall be in writing and shall 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. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support the application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer’s address to request copies of the staff report, recommendation, application or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and

Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is January 20, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at an approximate cost of _____.



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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**REVISED RECOMMENDATION OF CHIEF ENGINEER
FOR WATER PERMIT
APPLICATION NO. 7919-3, Larry and Marlene Erickson**

Pursuant to SDCL 46-2A-2, the following is the revised recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 7919-3, Larry and Marlene Erickson, 29859 461st Avenue, Centerville SD 57014.

The Chief Engineer is recommending APPROVAL of Application No. 7919-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7919-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7919-3 authorizes a maximum diversion rate of 1.83 cubic feet of water per second for the irrigation of 83.83 acres with an annual volume not to exceed 3 acre feet of water per acre per year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
February 7, 2014

NOTE: The Chief Engineer has reviewed the application and determines the request is for the diversion rate needed to operate a standard quarter section center pivot and therefore the request for greater than the statutory limit is reasonable and may be granted.

REPORT TO THE CHIEF ENGINEER ON
21 WATER PERMIT APPLICATIONS
FROM THE UPPER VERMILLION MISSOURI AQUIFER
FEBRUARY 1, 2014

HISTORY

Twenty one water permit applications proposing to appropriate water from the Upper Vermillion Missouri (UVM) aquifer were filed with the DENR-Water Rights Program since the fall of 2012. The Chief Engineer recommended deferral of 18 of the applications because at the time it was not possible to conclude that unappropriated water was available from the aquifer to satisfy the appropriations. The Water Management Board considered the permit applications along with the Chief Engineer's recommendation and concluded that "In light of the evidence presented, it is not possible to conclude that unappropriated water is available from the UVM to satisfy the proposed appropriations. Significant portions of the aquifer have experienced long-term downward trending water levels. New appropriations from the aquifer should be deferred until it can be determined if water levels in these areas will stabilize under steady withdrawals" (Water Permit Application Nos. 7441-3, et al, Conclusion of Law 15). Three additional applications were filed after February 25, 2013 and were recommended for deferral.

UPPER VERMILLION MISSOURI AQUIFER (UVM)

The Upper Vermillion Missouri aquifer is located in portions of Lincoln, Turner and Clay Counties. An index map for the area is shown in Figure 1.

Previous Investigations

The Upper Vermillion Missouri aquifer consists of a glacial outwash deposit that generally occurs in bedrock low areas. As delineated by Hedges and others (1982), the aquifer extends over an area of approximately 132,900 acres in Clay, Lincoln and Turner Counties. Subsequent investigations for Lincoln, Turner, and Hutchinson Counties (Lindgren and Hansen, 1990; and Niehus, 1994) interpreted the area hydrogeology in a manner that resulted in the configuration of the Upper Vermillion Missouri aquifer encompassing over 204,800 acres (see Figure 2).

2014

A study of the Upper Vermillion Missouri aquifer conducted by the DENR-Geological Survey in 2013-2014 established new boundaries for the main body of the aquifer in Turner County (see Figure 3). Although the southern boundary has not been delineated at this time, data shows that it extends south several miles from the original border as it merges with or transitions into the Lower Vermillion Missouri aquifer. The areal extent of the main body of the Upper Vermillion Missouri aquifer defined by these new boundaries is at least 117,000 acres. A channel deposit extending to the northwest from the main body of the Upper Vermillion Missouri aquifer may be hydrologically connected to the aquifer.

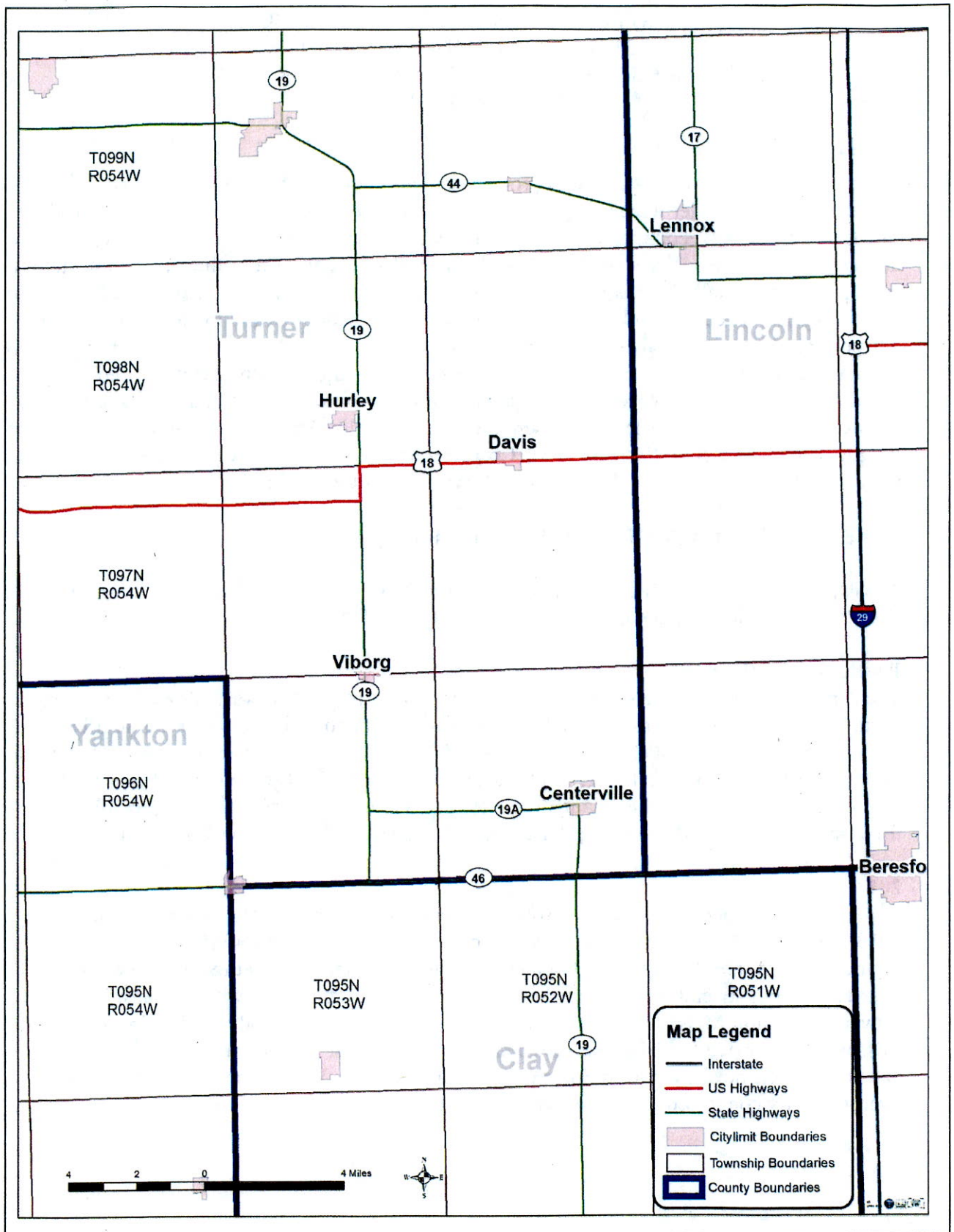


Figure 1. Index map for the area

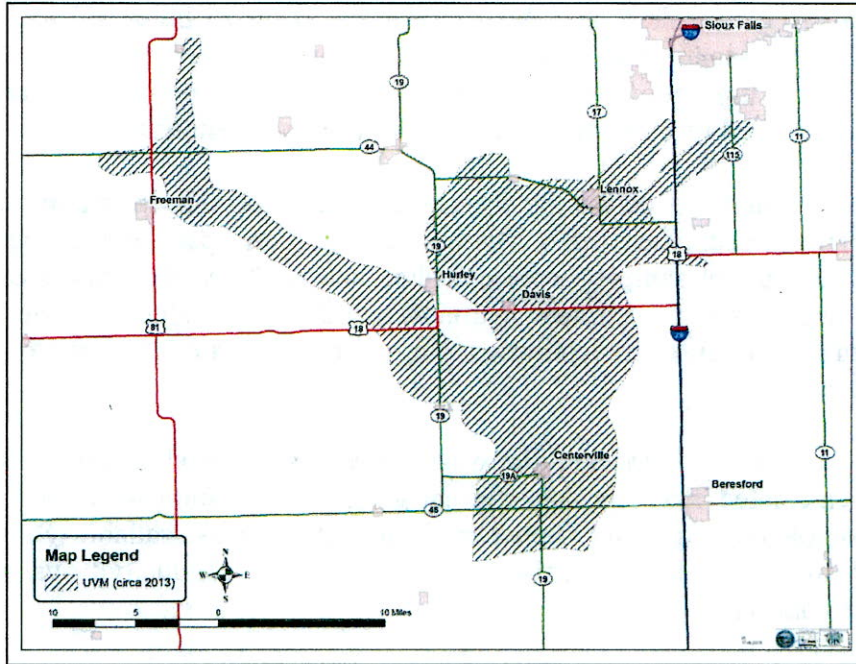


Figure 2. Areal extent of the Upper Vermillion Missouri aquifer considered in 2013 (Buhler, 2012)

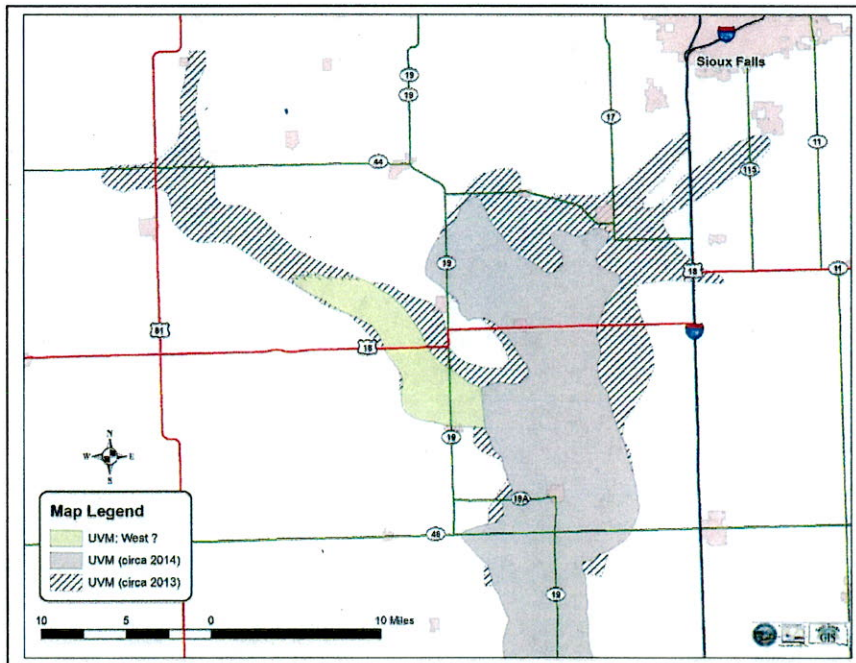


Figure 3. 2014 delineation of the Upper Vermillion Missouri aquifer with areal extent of the Upper Vermillion Missouri aquifer considered in 2013 (Buhler, 2012; modified from DENR-Geological Survey, in progress)

The Upper Vermillion Missouri aquifer occupies portions of a bedrock channel that generally trends north-south. The elevation of the aquifer varies along the length of the channel, but it is primarily below 1,200 feet mean sea level elevation (msl) and above 975 feet msl. The aquifer is

primarily buried by glacial drift, and the top of the aquifer can be over 150 feet below grade. The aquifer is predominantly under confined conditions, and the static water levels of wells in the aquifer typically range from 10-90 feet below grade. The potentiometric surface of the main body of the aquifer (see Figure 4) indicates a north to south groundwater flow direction.

Limited data is available to determine the aquifer characteristics (hydraulic conductivity and storativity) for the Upper Vermillion Missouri aquifer. As part of the ongoing Geological Survey study, sand/gravel samples were collected and analyzed for grain size. Results of the sieve analyses were used to estimate hydraulic conductivity values for the sieved samples. Reported hydraulic conductivity estimates range from 592 to 2,657 ft/day (SD-Geological Survey, in progress).

The hydraulic conductivity for the aquifer was also estimated based on aquifer thickness and the transmissivity calculated from the specific capacities of irrigation wells and two rural water system wells completed into the aquifer where sufficient data was available (Buhler, 2012; Water Rights, 2014b; and Water Rights, 2014c). These hydraulic conductivity values are shown in Table 1, Figure 5 and Figure 6.

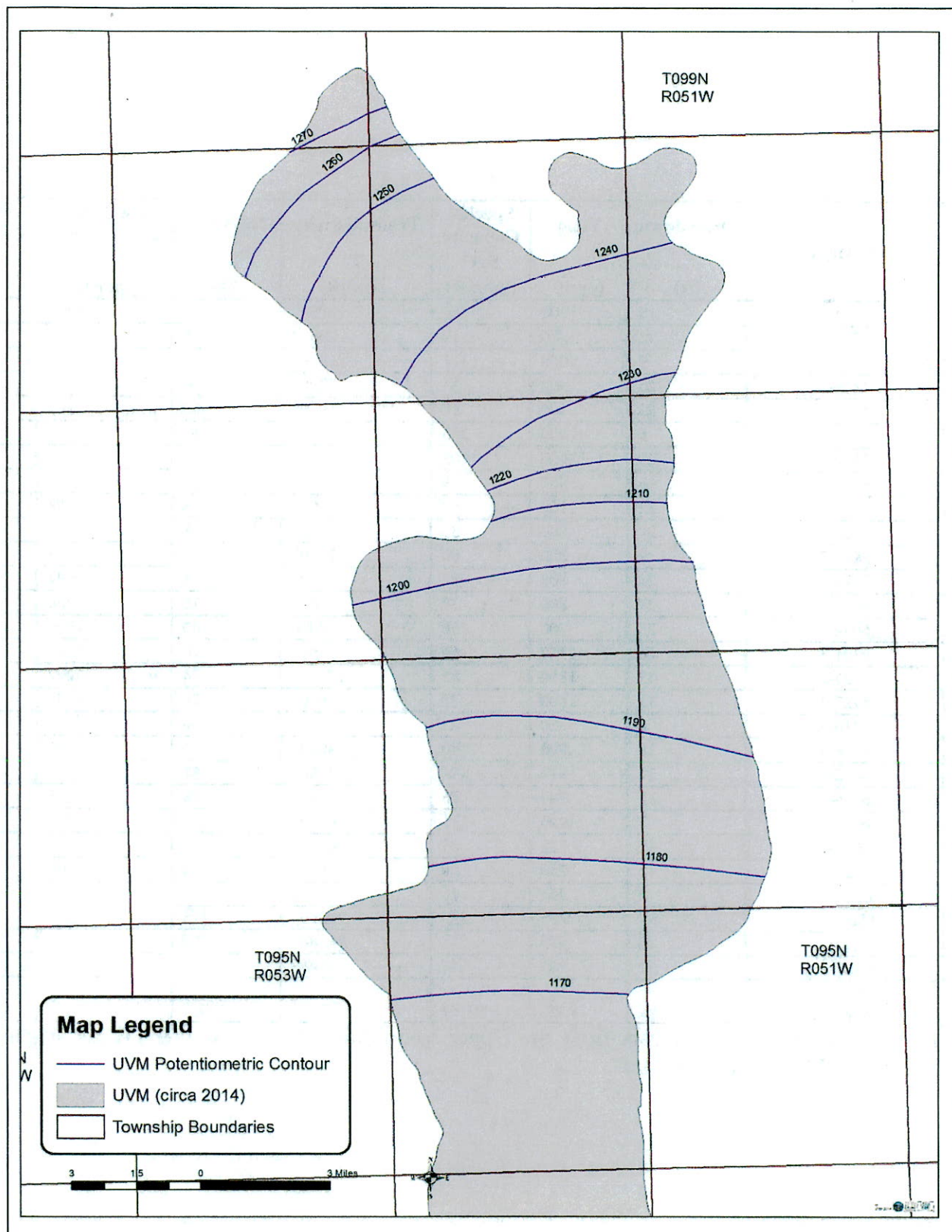


Figure 4. January 21, 2014, potentiometric surface of the main body of Upper Vermillion Missouri aquifer in feet above mean sea level (SD-Geological Survey, in progress)

Permit/Right No.	Drawdown (ft)	Yield (gpm)	Specific Capacity SpC (gpm/ft)	Transmissivity T (gpd/ft)	Thickness b (ft)	Hydraulic Conductivity k (gpd/ft ²)	Hydraulic Conductivity k (ft/d)
1930-3	15	1200	80	160000	65	2462	329
3784-3	92	900	10	19600	45	436	58
3901-3	9	1000	111	222200	70	3174	424
4265-3	25	900	36	72000	40	1800	241
4560-3	83	800	10	19200	50	384	51
5259-3	6	1400	233	466600	116	4022	538
5352-3	20	2100	105	157500	178	885	118
5371-3	45	860	19	38200	28	1364	182
5425-3	22	1100	50	100000	48	2083	279
5632-3	24	800	33	66600	48	1388	185
5886-3	9	800	89	177800	55	3233	432
5899-3	25	800	32	106600	63	1692	226
5982-3	27	800	30	92400	73	1266	169
6054-3	25	900	36	72000	40	1800	241
6301-3	16	1100	69	137600	70	1966	263
6727-3	13	1100	85	170000	74	2297	307
6727-3	15	1100	73	146667	74	1982	265
6810-3	6	750	125	250000	66	3788	506
6868-3	10	900	90	180000	36	5000	668
6922-3	11	810	74	147200	87	1692	226
6968-3	11	840	76	152800	88	1736	232
6984-3	7	1200	171	342800	101	3394	454
7002-3	11	720	69	102900	115	895	120
7128-3	15	750	50	100000	94	1064	142
<i>Min</i>	6	720	10	19200	28	384	51
<i>Max</i>	92	2100	233	466600	178	5000	668
<i>Average</i>	23	985	73	145861	72	2075	277
<i>Std Dev</i>	22	289	50	98483	32	1143	153
<i>Std Dev/Average</i>	98.4%	29.4%	69.0%	67.5%	44.9%	55.1%	55.1%

Table 1. Production well data from the Upper Vermillion Missouri aquifer (Water Rights, 2014b; and Water Rights 2014c)

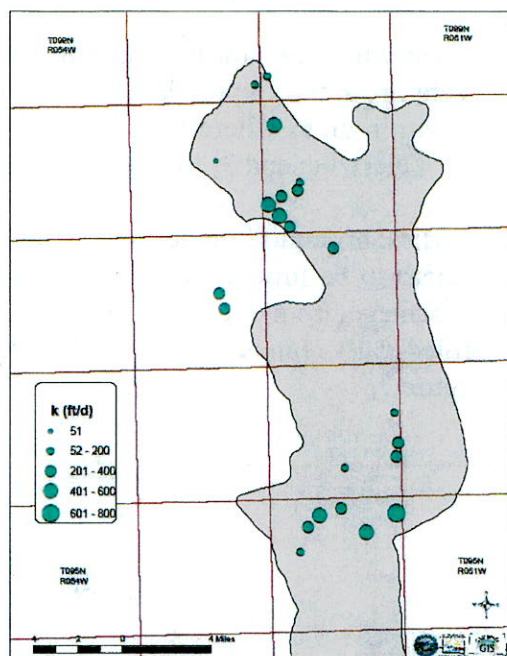


Figure 5. Location of production wells used to calculate hydraulic conductivity

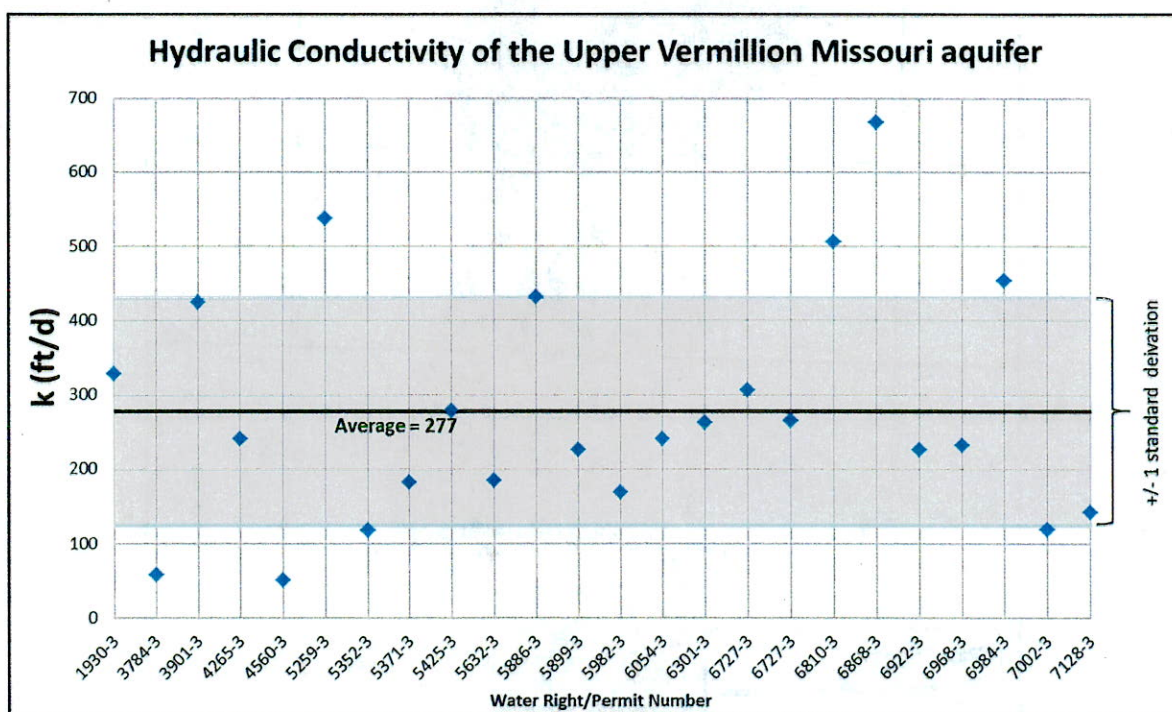


Figure 6. Chart showing the hydraulic conductivities, average hydraulic conductivity and one standard deviation of the Upper Vermillion Missouri aquifer at production wells where data is available (Water Rights, 2014b; and Water Rights 2014c).

Recharge:

Recharge to the Upper Vermillion Missouri aquifer has not been quantified. Lindgren and Hansen (1990) postulated that recharge to the Upper Vermillion Missouri aquifer occurs through: 1) direct infiltration of precipitation in areas where the aquifer is at or near ground surface; 2) inflow from fractures in the Sioux Quartzite; and 3) inflow from the Niobrara aquifer.

Although the Upper Vermillion Missouri aquifer appears to be in contact with the quartzite and Niobrara aquifer, these areas appear to be limited. The likely source of recharge to the Upper Vermillion Missouri aquifer is leakage from the overlying Parker Centerville aquifer (PAC) where the two aquifers are hydrologically connected. Areas of potential interconnection between the two aquifers are shown in Figure 7.

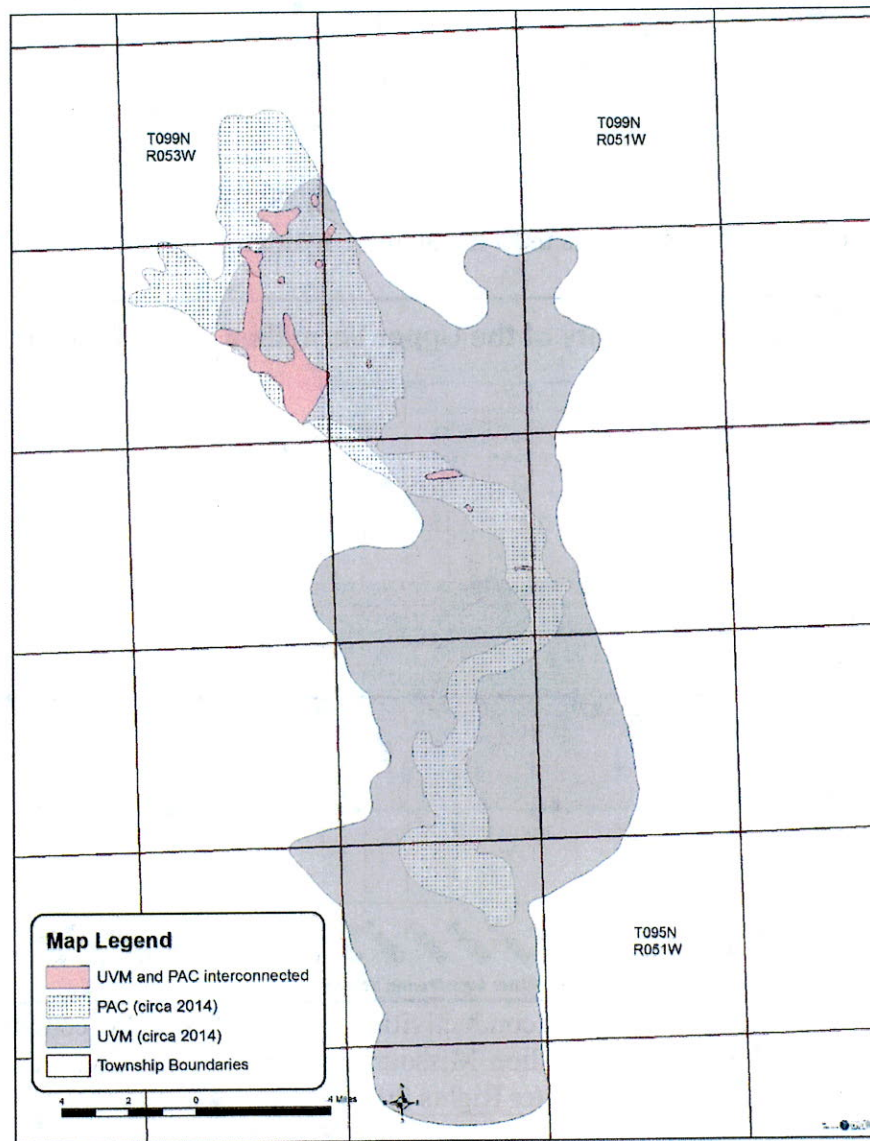


Figure 7. Areal extent of the Upper Vermillion Missouri (UVM) aquifer, the Parker Centerville (PAC) aquifer, and areas where the two aquifers are potentially interconnected (SD-Geological Survey, in progress).

MANAGEMENT UNITS

A system of aquifer and management unit designations for South Dakota was designed to establish a bookkeeping framework of hydrologic data (Hedges and others, 1982). The aquifer and management unit boundaries were chosen to coincide with hydrogeologic boundaries that are “identifiable and which can be documented.” Actual boundaries between units were based on one or more of the following criteria:

1. Thinning and/or constriction of the aquifer or management unit.
2. Facies change from high to low permeability of aquifer material.
3. Change from water-table to artesian conditions and vice versa.
4. Ground-water divide.
5. Ground-water discharge point such as stream or lake.
6. Presence of streamflow gaging station.

Although previous aquifer delineations (Hedges and others, 1982; and Lindgren and Hansen, 1990) both identified areas with anomalous gradients of the potentiometric surfaces, they considered the Upper Vermillion Missouri aquifer a single unit.

As the result of work done by the DENR- Geological Survey in 2013-2014, identifiable geologic and hydrologic data suggests two boundaries establishing three management units within the Upper Vermillion Missouri aquifer. Proposed management units are shown in Figure 8.

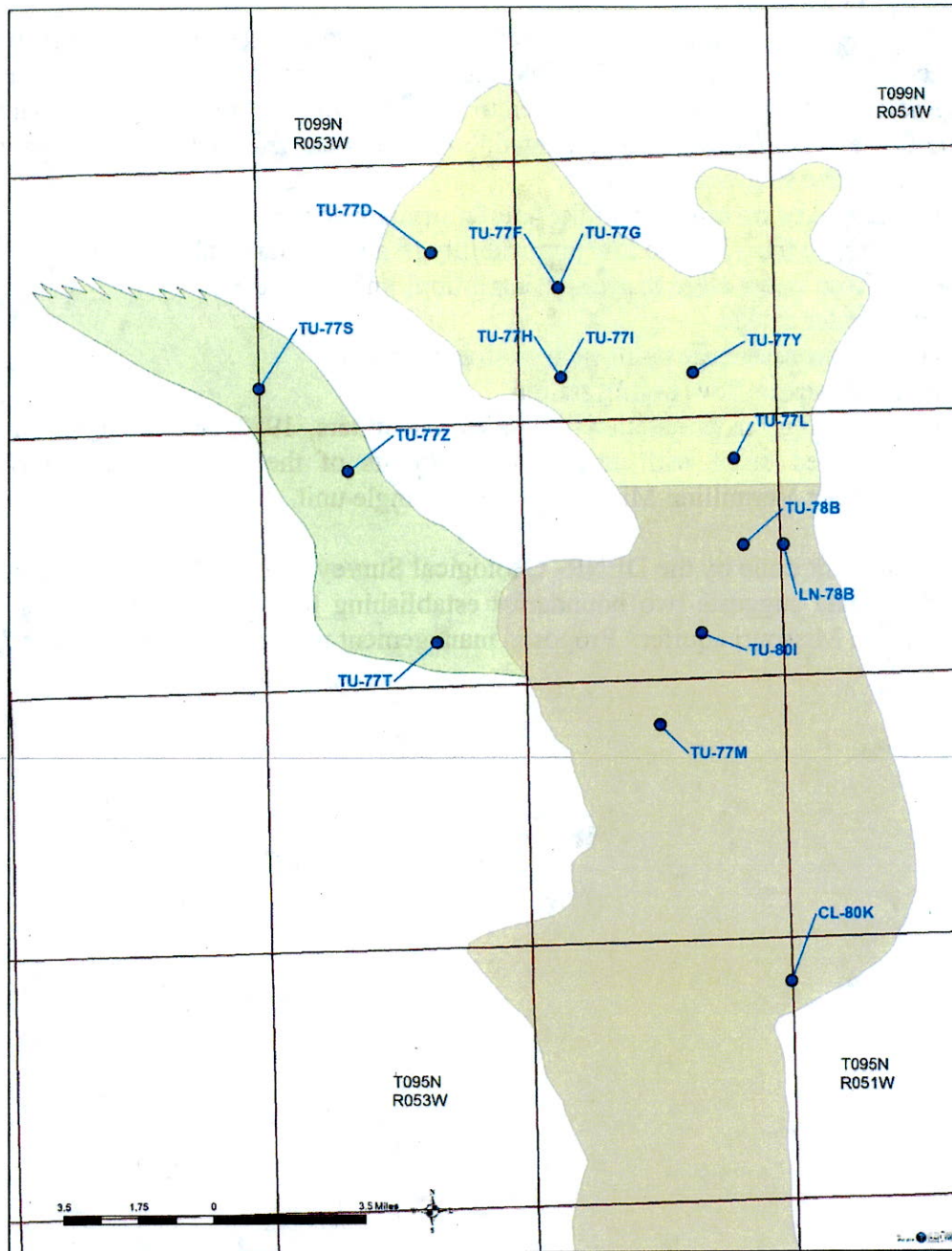


Figure 8. Proposed management units for the Upper Vermillion Missouri aquifer

South Management Unit/West Management Unit Boundary:

In the southeastern portion of T097N-R053W or the southwestern portion of T097N-R052W, three sets of data (i.e. bedrock topography, outwash lithology and aquifer potentiometric surface) identify a boundary between the West management unit and the South management unit of the aquifer.

Bedrock Topography:

Near the confluence of the bedrock channel that enters from the west with the channel that contains the main body of the Upper Vermillion Missouri aquifer, the western channel below 1,100 feet msl constricts by over 20% within three miles (see Figures 9, 10 and 11).

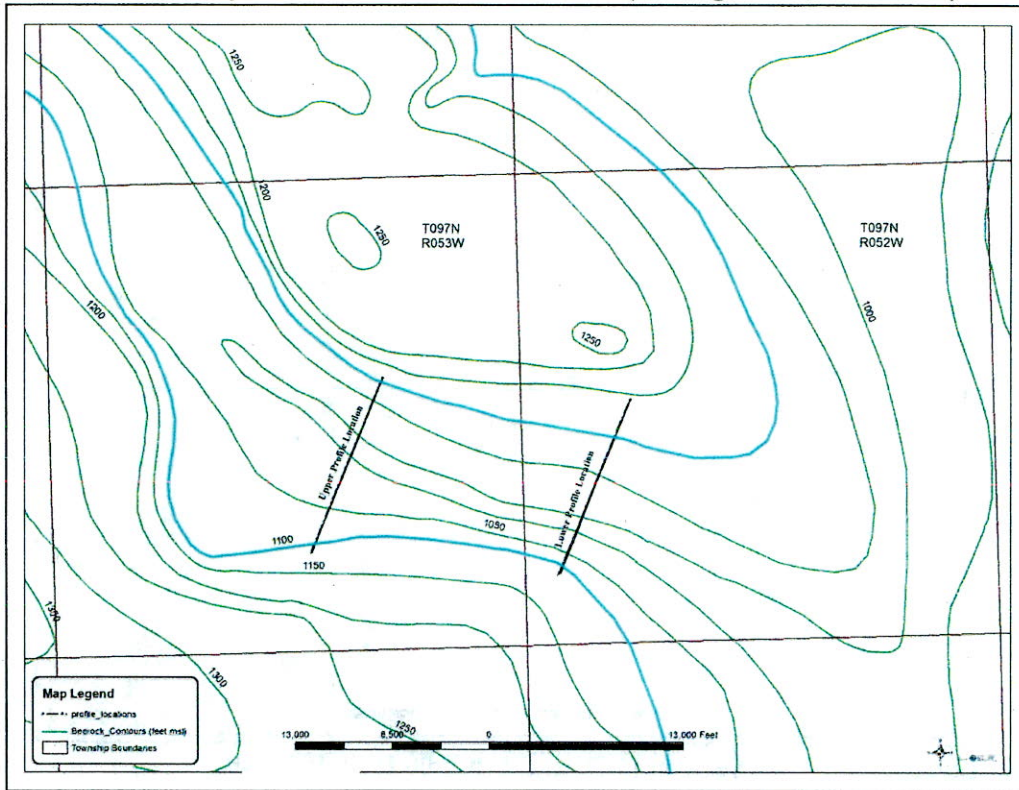


Figure 9. Location of bedrock channel profiles (modified from SD-Geological Survey, in progress)

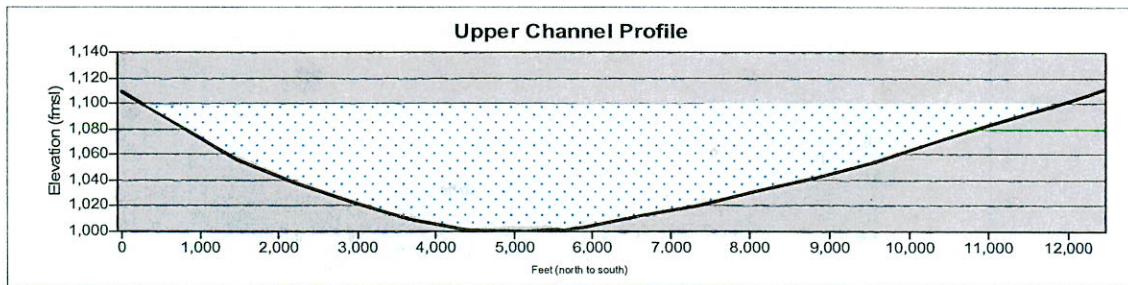


Figure 10. Upper Channel Profile

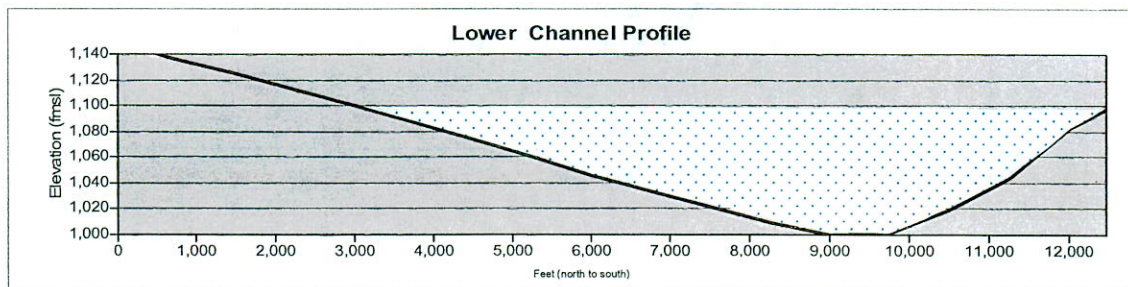


Figure 11. Lower Channel Profile

Lithology:

A west to east cross section through this area indicates the outwash in the western channel thins from approximately 100 feet thick to approximately 50 feet thick across this confluence area. In addition, geologists' logs identify the outwash as "very clayey" in the vicinity of a test hole drilled in the SE¼ of Section 24, T97N-R53W (see Figures 12 and 13).

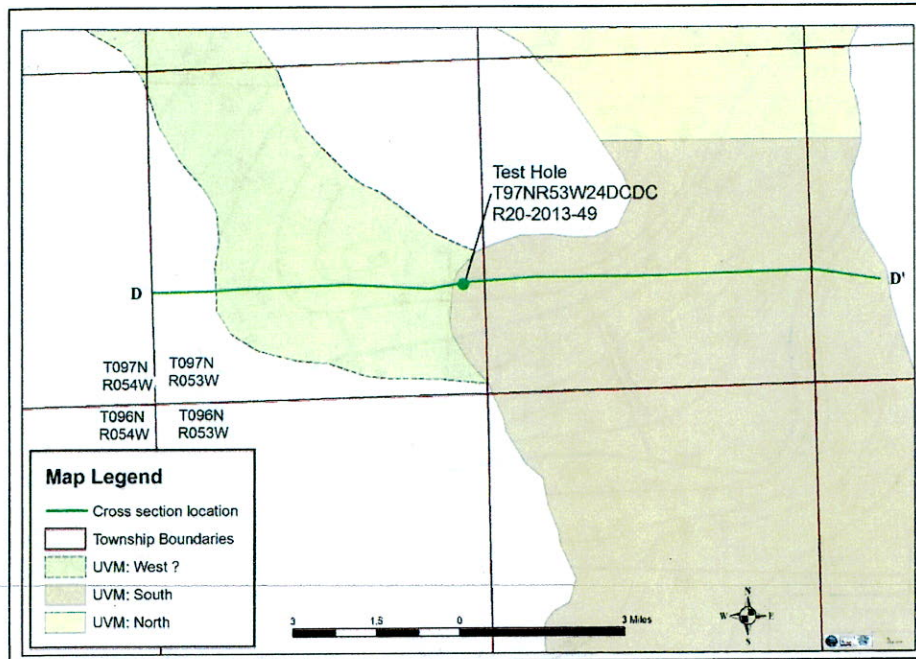


Figure 12. Location of cross Section D-D' and test hole R20-2013-49

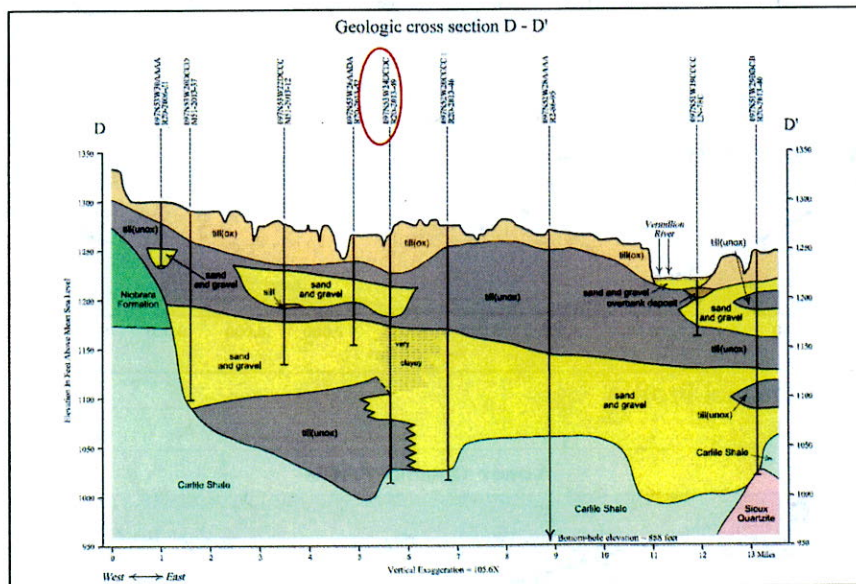


Figure 13. Cross section D-D' (modified from SD-Geological Survey, in progress)

Potentiometric Surface:

A profile of the potentiometric surface near the confluence of the west bedrock channel with the main bedrock channel containing the Upper Vermillion Missouri aquifer identifies a change in the gradient in the area (see Figures 14 and 15). This suggests a lower permeability area that would create a boundary condition.

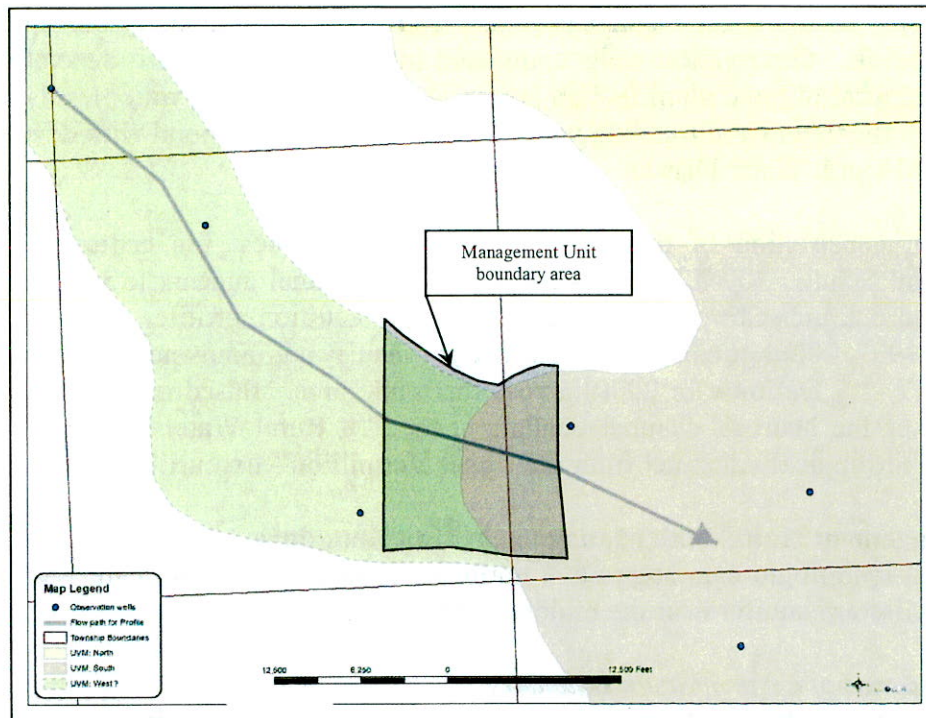


Figure 14. Location of Flow path for Potentiometric Surface Profile

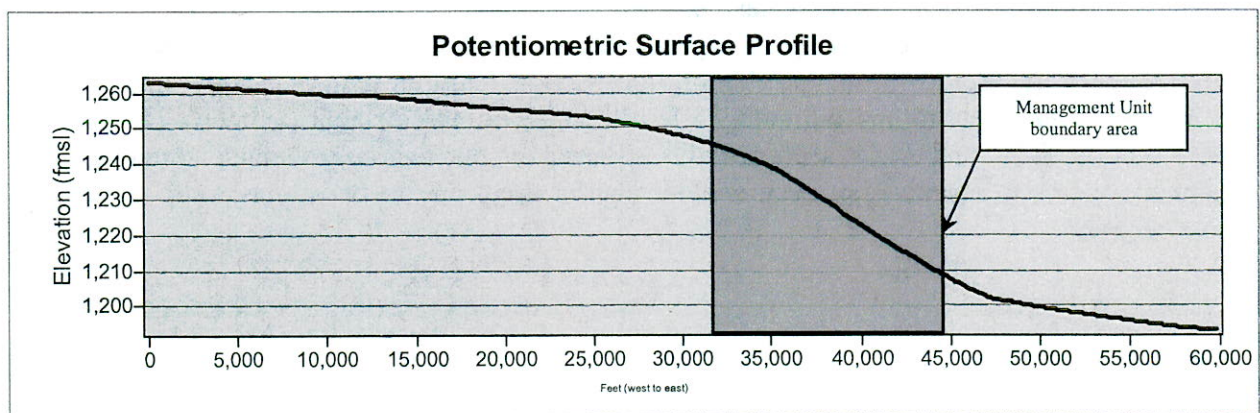


Figure 15. Potentiometric surface profile showing the boundary between the west and south management units of the Upper Vermillion Missouri aquifer

West Management Unit/Northwest Management Unit Boundary:

The West management unit of the Upper Vermillion Missouri aquifer appears to extend northwest beyond the limit used for this report. Data is not available to determine the areal extent of this management unit.

A basal outwash deposit occupies a southeast trending bedrock channel that originates approximately 30 miles northwest of the minimal northwest limit of the proposed West management unit (Tomhave and Schulz, 2004). Past delineations of the Upper Vermillion Missouri aquifer included this outwash deposit as part of the aquifer beginning approximately 18 miles beyond the known northwest limit of the proposed West management unit (see Figures 2 and 8). Water levels of observation wells completed into this basal outwash approximately 15 miles northwest of the West management unit appear to approximately correspond to UVM: West water levels. Observation wells completed into the basal outwash deposit approximately 15 miles northwest of have identified an area of downward trending water levels. The area and chronology of the downward trending water levels appear to correspond with development of the aquifer by TM Rural Water District.

A significant constriction of this bedrock channel exists near the center of T100N-R55W (Tomhave and Schulz, 2004). The narrowing of the channel appears to be located in an area where the bedrock incised by the channel changes. In addition, profiles of the pre-development (circa 1990, 1995, 2000) potentiometric surface all identify a groundwater flow gradient decrease from (e.g. 3.7 -1.5 feet/mile in 2000) across this same area. Based on this available data, the northern tip of the bedrock channel containing the TM Rural Water District wells should be considered hydrologically distinct from the Upper Vermillion Missouri: West aquifer.

South Management Unit/North Management Unit Boundary:

Geologic and hydrologic data suggests a north/south boundary in the main body of the Upper Vermillion Missouri aquifer near the middle of T97N-R52W.

Geologic evidence of a North/South Boundary:

The bedrock topography identifies a narrowing of the channel containing the Upper Vermillion Missouri aquifer near the middle of T97N-R052W. Geologic cross sections constructed near this area and their location are shown in Figures 16, 17, and 18. The cross sectional area of the Upper Vermillion Missouri aquifer has been outlined in blue in Figures 17 and 18, and the area reported by the DENR-Geological Survey (in progress) is labeled for each cross section. The data indicates the area of the Upper Vermillion Missouri aquifer contracts from approximately 3.3 million square feet to approximately 2.8 million square feet or approximately 15% between cross section B-B' and cross section C-C'. Based on the bedrock channel topography, the channel appears to narrow (i.e. even smaller aquifer area) one to two miles south of the C-C' cross section.

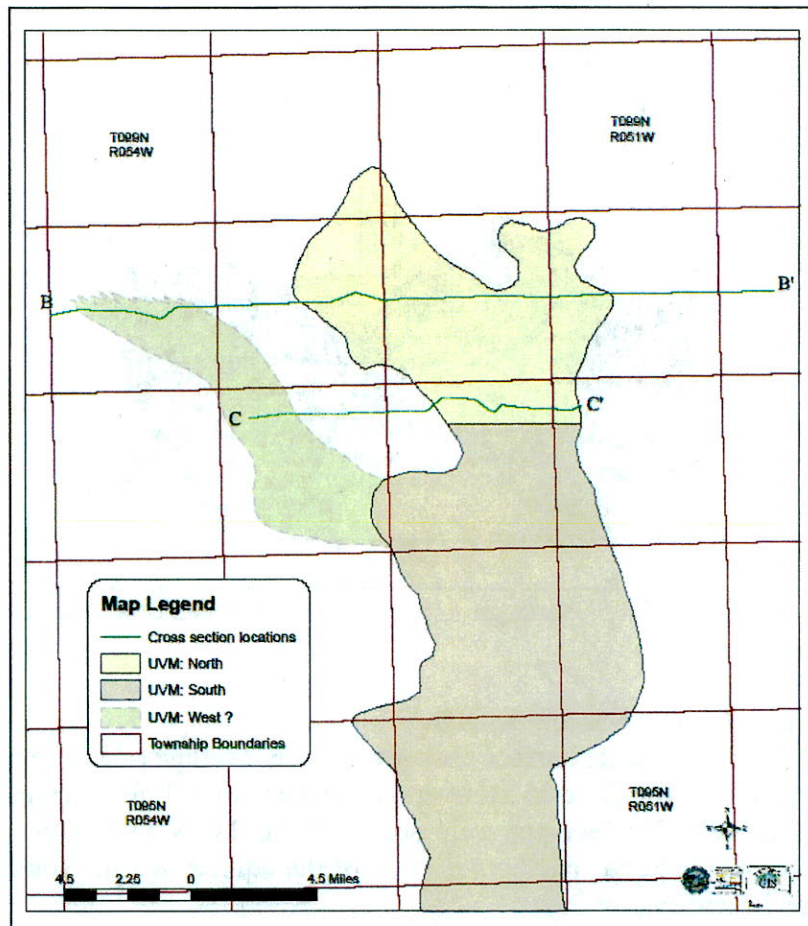


Figure 16. Cross section locations for Figures 17 and 18.

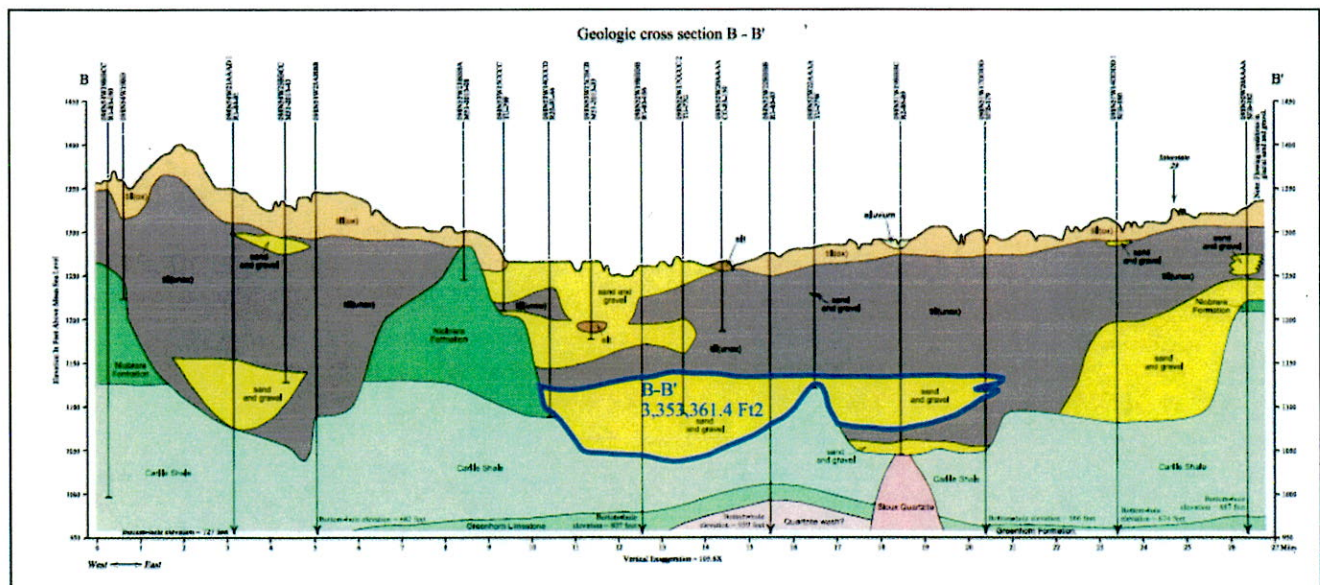


Figure 17. Cross section B-B' through Upper Vermillion Missouri aquifer (SD-Geological Survey, in progress)

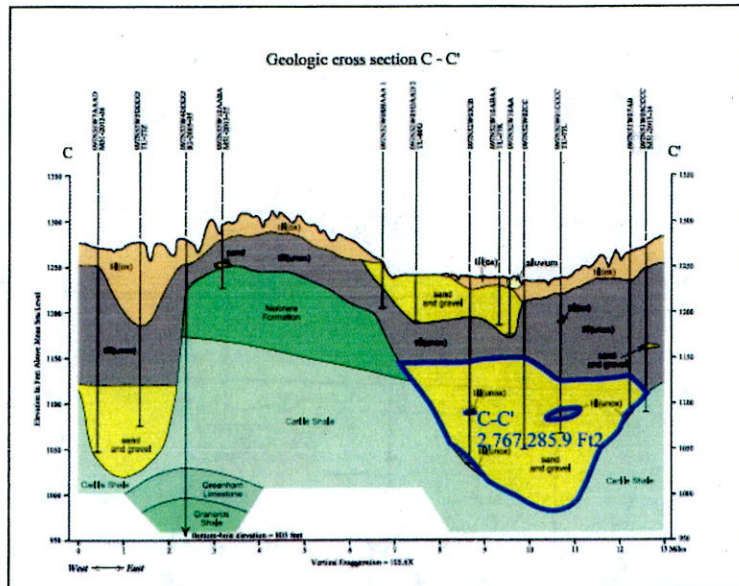


Figure 18. Cross Section C-C' through Upper Vermillion Missouri aquifer (SD-Geological Survey, in progress)

Hydrologic evidence of a North/South Boundary:

The gradient of the potentiometric surface changes from an average of approximately 4.2 feet per mile north of the T97N-T98N line to an average gradient of 9.1 feet per mile in T97N to an average of approximately 3.0 feet per mile south of the T97N-T98N line. This suggests a hydrologic boundary between the northern portion of the aquifer and the southern portion of the aquifer (see Figure 19 and Figure 20).

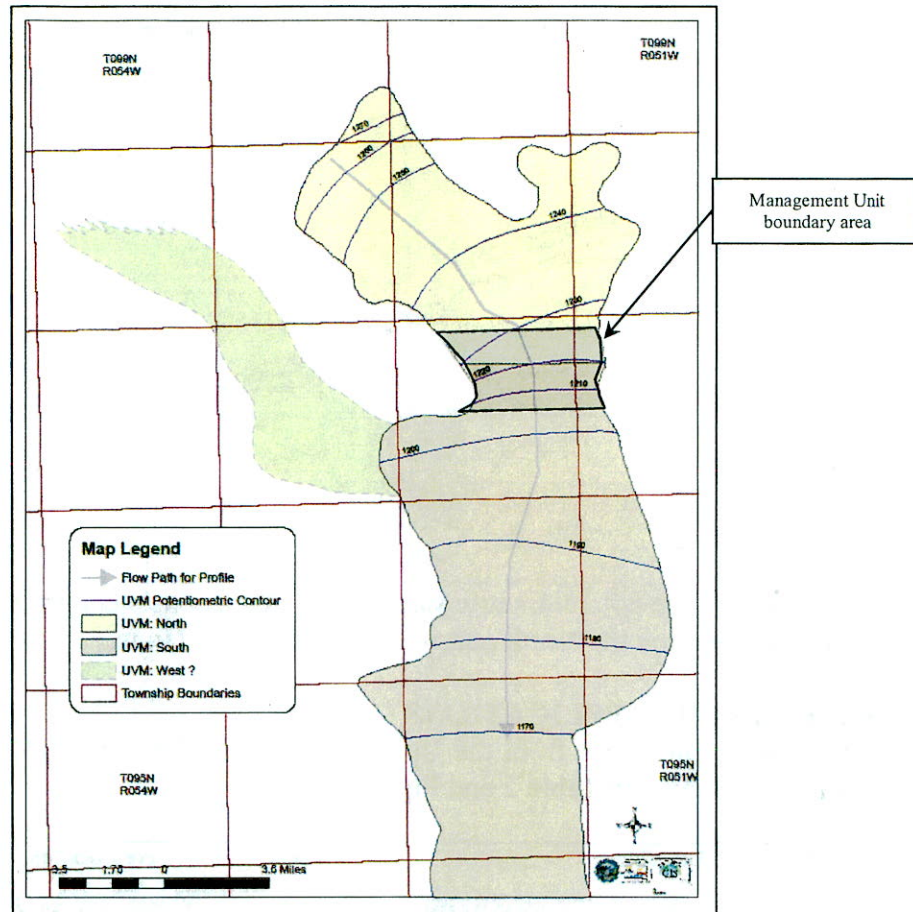


Figure 19. Location of Flow path for potentiometric surface profile

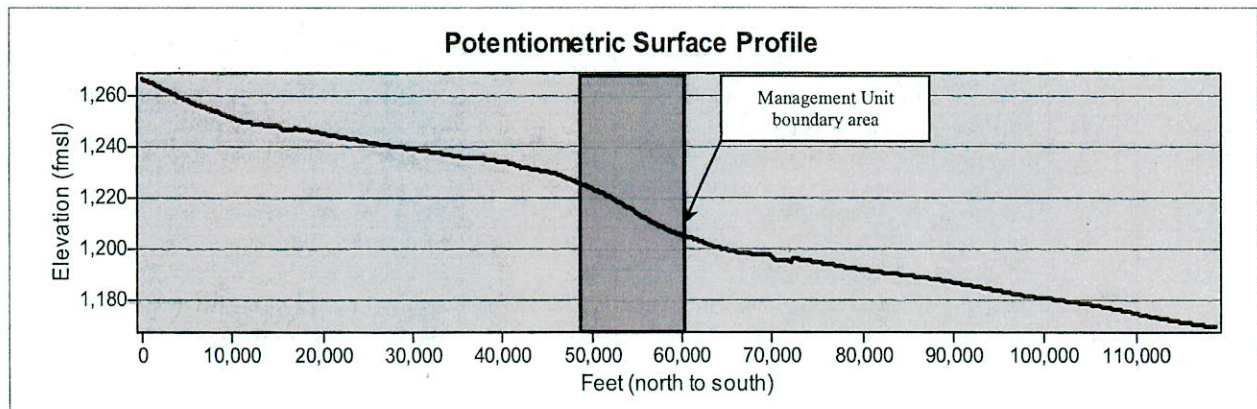


Figure 20. Potentiometric surface profile showing boundary between the north and south management units of the Upper Vermillion Missouri aquifer

The gradient change appears to exist regardless of the climatic conditions or variations in recharge and withdrawal from the aquifer (see Figure 21).

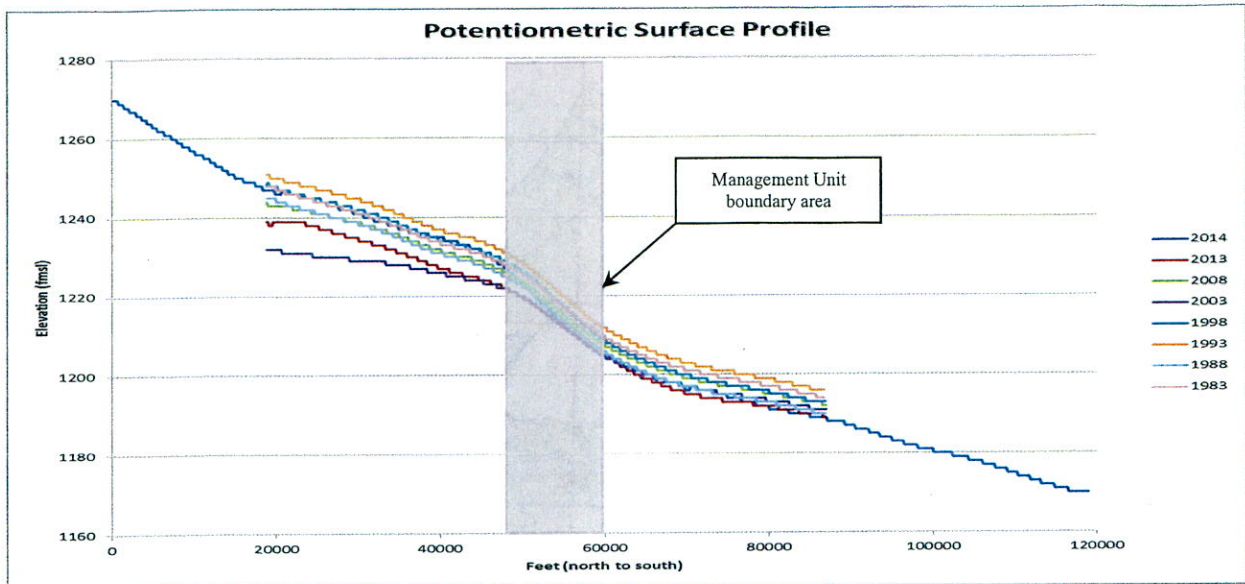


Figure 21. Profile of the potentiometric surface showing a consistent gradient change at the boundary between the North and South Management Units.

DEFERRED PERMIT APPLICATIONS

The water permit applications from the Upper Vermillion Missouri aquifer that are currently in deferred status are shown in Table 2 and Figure 22.

Permit No.	CFS	Well Location	Acres	Acre Location
7535-3	1.78	SW¼ NW¼ Sec. 30, T98N-R53W	65	NW¼ Sec. 30, T98N-R53W
7588-3	1.78	SW¼ Sec. 19, T98N-R53W	160	SW¼ Sec. 19, T98N-R53W
7602-3	1.89	Between NW¼ & NE¼ Sec. 34, T97N-R53W	132	E½NW¼, W½NE¼ Sec. 34, T97N-R53W
7633-3	1.78	SW¼ Sec. 32, T98N-R53W	152	SW¼ of Sec. 32, T98N-R53W
7715-3	2.22	SW¼ Sec. 16, T97N-R53W	156	SW¼ Sec. 16, T97N-R53W
7452-3	1.78	SW¼NE¼ Sec. 32, T98N-R52W	110	W½NE¼, SE¼NE¼ Sec. 32, T98N-R52W
7468-3	1.78	NE¼ Sec. 26, T96N-R51W	152	NE¼ Sec. 26, T96N-R51W
7558-3	1.78	Between NW¼ & SW¼ Sec. 1, T98N-R52W	120	N½SW¼, S½NW¼ Sec. 1, T98N-R52W
7587-3	1.78	SE¼ Sec. 10, T98N-R53W	160	SW¼ Sec. 10, T98N-R53W
7441-3	1.79	SE¼ Sec. 8, T95N-R52W	140	SE¼ Sec. 8, T95N-R52W
7442-3	No add'l	NW¼ Sec. 17, T95N-R52W	40	W½ NE¼ Sec. 17, T95N-R52W
7466-3	1.78	NE¼ Sec. 5, T96N-R51W	152	NE¼ Sec. 5, T96N-R51W
7467-3	1.78	NW¼ Sec. 13, T97N-R52W	152	NW¼ Sec. 13, T97N-R52W
7600-3	3.56	NE¼NW¼ & SW¼ Sec. 12, T96N-R52W (2 wells)	180	NW¼, N½SW¼ Sec. 12, T96N-R52W
7601-3	1.89	NE¼ Sec. 25, T-97N-R53W	132	NE¼ Sec. 25, T97N-R53W
7603-3	1.78	NE¼ Sec. 33, T97N-R52W	120	NE¼ Sec. 33, T97N-R52W
7623-3	1.89	SE¼NW¼ Sec. 24, T97N-R52W	140	NW¼, W½NE¼ Sec 24, T97N-R52W
7653-3	1.67	SW¼ Sec. 8, T96N-R52W	85	W½SW¼, NE¼SW¼ Sec. 8, T96N-R52W
7690-3	1.78	NE¼ Sec. 29, T96N-R52W	160	NE¼ Sec. 29, T95N-R52W
7900-3	1.89	NW¼NE¼ Sec.6, T95N-R51W	136	NE¼ Sec. 6, T95N-R51W
7919-3	1.83	NE¼ Sec. 9, T95N-R52W	83.83	NE¼ Sec. 9, T95N-R52W

Table 2. Deferred Water Permit Applications from the Upper Vermillion Missouri aquifer

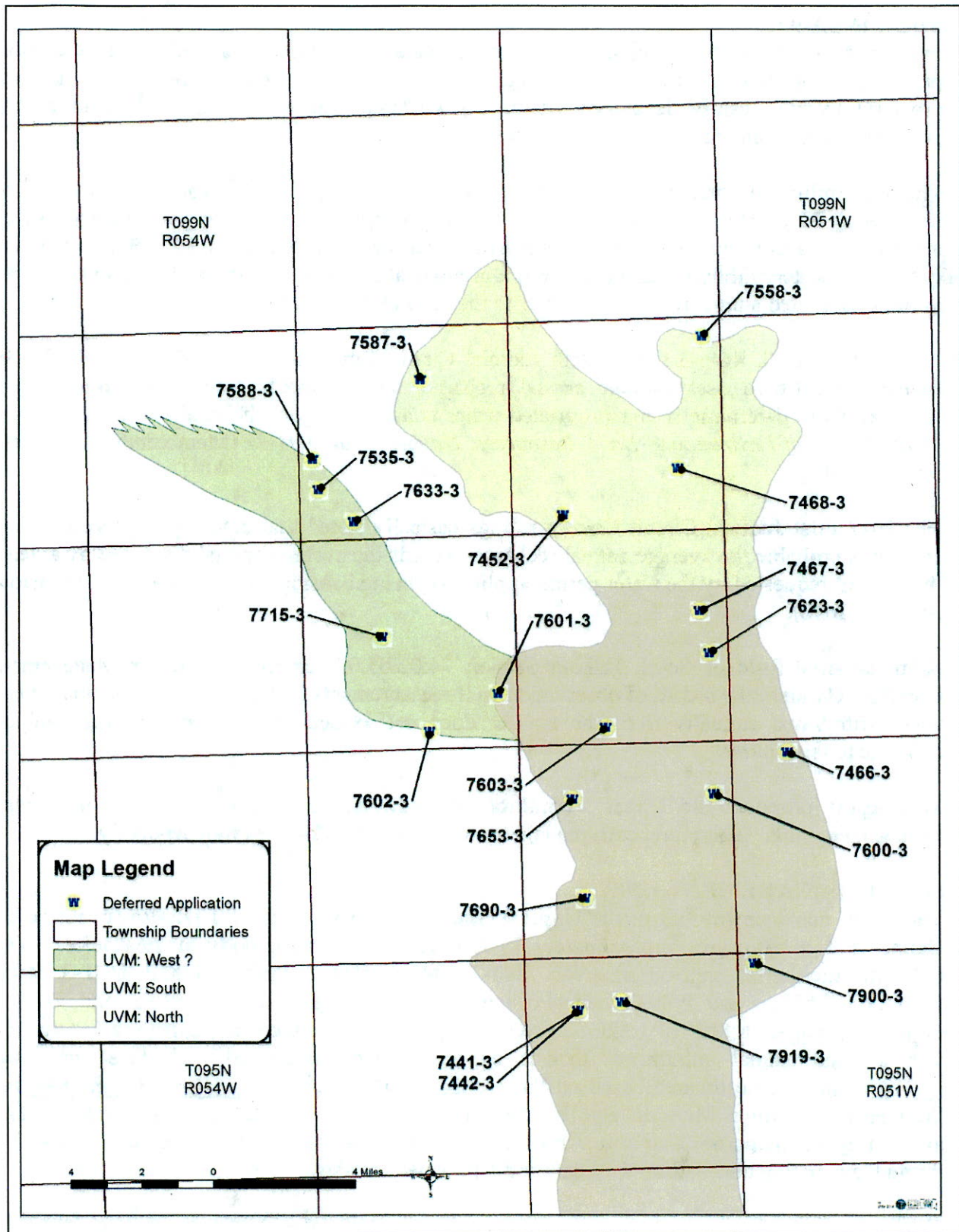


Figure 22. Location of deferred water permit applications and suggested management units of the Upper Vermillion Missouri aquifer

SDCL 46-2A-9

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

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."

In applying SDCL 46-6-3.1, the Sixth Judicial Circuit Court ruled in 2005 that if the Water Management Board uses average annual recharge, then it should also use average annual withdrawals to determine if unappropriated water is available from the aquifer (*Hines v. South Dakota Dept. of Environ. and Nat'l. Resources, Hughes County 04-37* (Memorandum Decision, April 29, 2005)).

The 2012 First Judicial Circuit Court's rulings basically stated that data must be presented to show it is probable the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (Memorandum Decision, April 11, 2012).

Administrative Rule of South Dakota Section 74:02:05:07 requires the Water Management Board to 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 to the aquifer.

This report proposes the Upper Vermillion Missouri aquifer can be separated into three management units. Therefore, each management unit will be addressed independently.

SOUTH MANAGEMENT UNIT:

The South management unit of the Upper Vermillion extends south of T97N-R52W into Clay County and encompasses approximately 78,820 acres of the main body of the aquifer. Ten deferred water permit applications (Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, and 7900-3) and two new permit applications (Nos. 7690-3, and 7919-3) propose to irrigate a total of 1,520.83 acres from the South management unit (See Figure 22). The average annual withdrawal that is expected to be associated with these proposed appropriations was estimated based on the *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer (from Table 3) to be 760.4 acre-feet per year. The availability of unappropriated water from this unit was assessed in terms of SDCL 46-6-3.1 through evaluating observation well data and a flow net analysis.

Year	Permitted Acres	Pumpage (ac-ft)	Rate (in/ac)
1979	10350.3	3247	3.764529
1980	9550.3	5082	6.385559
1981	9954.3	4159	5.013713
1982	9878.2	3778.57	4.590193
1983	9815.2	2983.12	3.647143
1984	9815.2	2791	3.412259
1985	9935.2	2479	2.994202
1986	9935.2	3544	4.280538
1987	9848.2	3781	4.607136
1988	9854.2	6753.1	8.22362
1989	10157.2	5758.6	6.803371
1990	10828.7	6626.2	7.342931
1991	10725.7	6220	6.958986
1992	10807.9	1793.2	1.990988
1993	9677.9	534.5	0.662747
1994	9284.9	4313.79	5.575233
1995	9704.9	4484.34	5.544836
1996	9820.2	4672.19	5.709281
1997	9755.2	5408	6.652452
1998	9855.2	5343.85	6.506839
1999	9863.2	5056.06	6.151423
2000	9863.2	6181.55	7.520744
2001	9863.2	6195.66	7.537911
2002	10143.2	7169.69	8.482163
2003	10143.2	5930.9	7.016602
2004	9823.2	7414.06	9.057
2005	9981.2	6856.39	8.243165
2006	10139.2	7906.32	9.35733
2007	10482.5	6983.2	7.994124
2008	11224.5	7467.98	7.983942
2009	11319.6	3878.92	4.112075
2010	11399.3	150.49	0.15842
2011	11399.3	5615.12	5.911016
2012	11458.3	13229.64	13.85508
Min	9284.9	150.49	0.15842
Max	11458.3	13229.64	13.85508
Avg	10195.8	5111.4	6.0

Table 3. Irrigation application rate **per permitted acre** for the Upper Vermillion Missouri aquifer (Water Rights, 1980-2013)

Observation well Data:

The DENR-Water Rights Program monitors five observation wells completed into the South management unit of the Upper Vermillion Missouri aquifer (see Figure 8 for locations). Hydrographs for the observation wells (Figures 23-27) all show upward trending water levels over their periods of record. Hydrographs for the observation wells document changes in climatic conditions along with temporal impacts of pumping. Since climatic conditions mask temporal impacts, well withdrawals from this management unit are not stressing the system to the extent where natural discharge is impacted. Therefore, groundwater outflow is available for “capture.” The observation wells in this management unit document unappropriated water is available for appropriation.

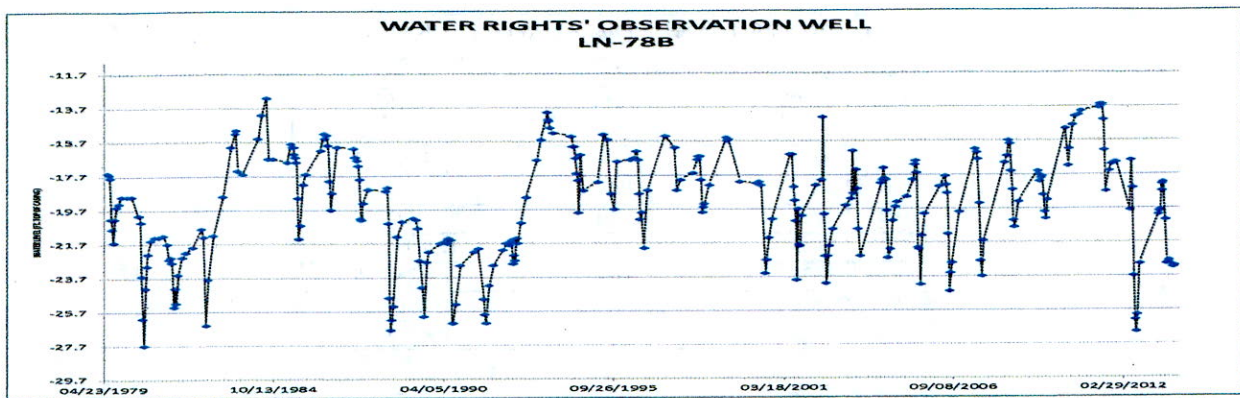


Figure 23. Hydrograph for an observation well completed into the UVM: South (Water Rights, 2014a)

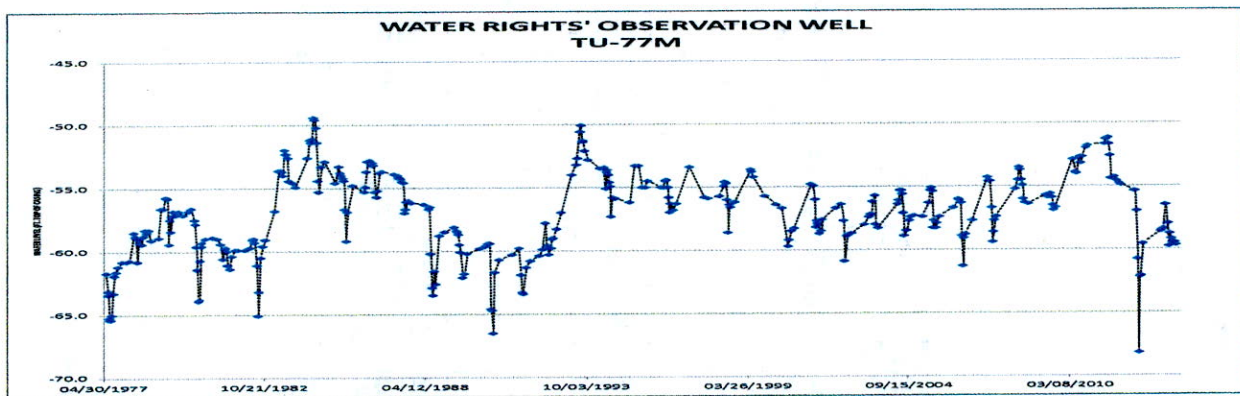


Figure 24. Hydrograph for an observation well completed into the UVM: South (Water Rights, 2014a)

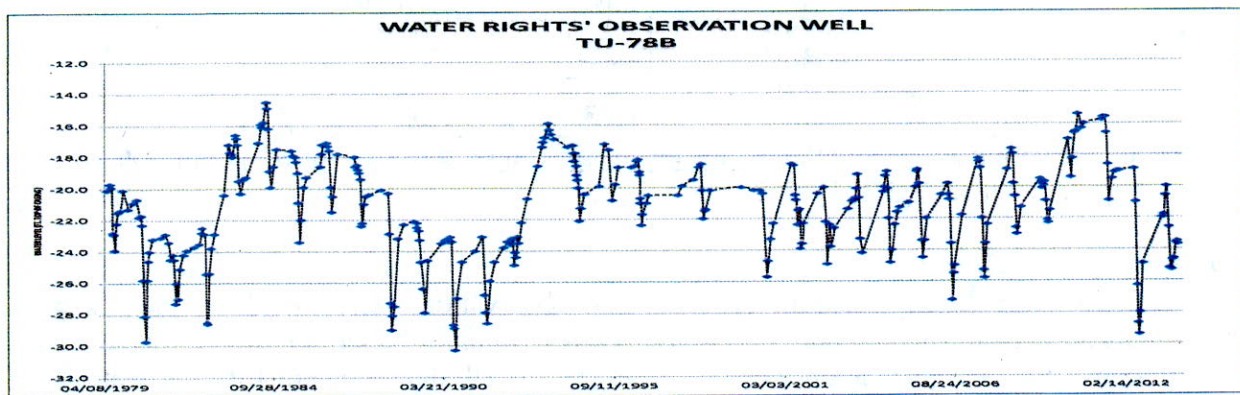


Figure 25. Hydrograph for an observation well completed into the UVM: South (Water Rights, 2014a)

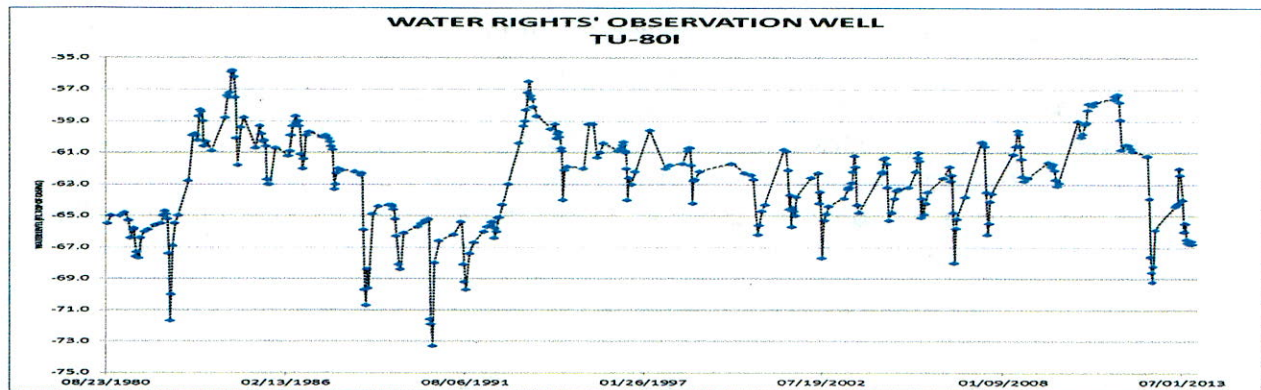


Figure 26. Hydrograph for an observation well completed into the UVM: South (Water Rights, 2014a)

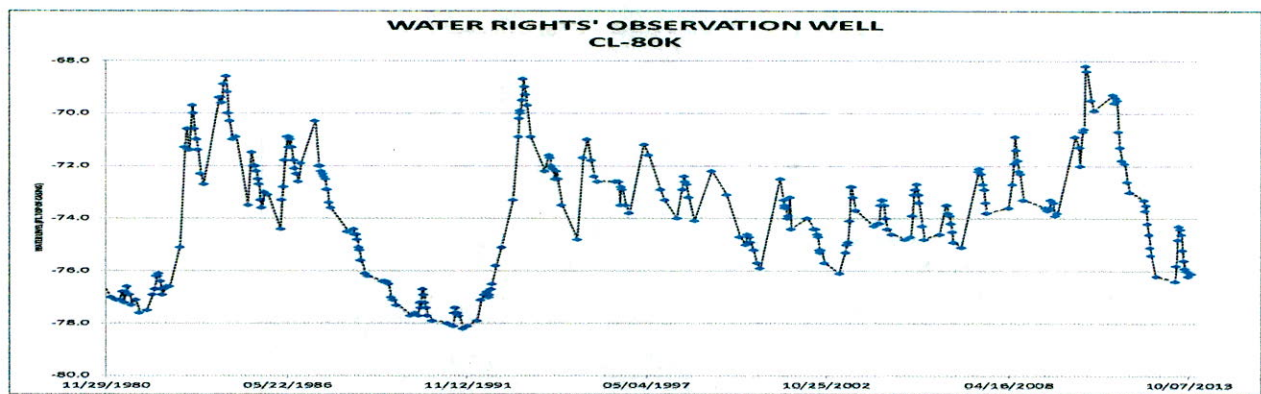


Figure 27. Hydrograph for an observation well completed into the UVM: South (Water Rights, 2014a)

2014 Flow Net Analysis:

Inflows to and outflows from the South management unit of the Upper Vermillion Missouri aquifer were evaluated by interpreting a regional flow net analysis based on the January 21, 2014, water level data from the aquifer. A flow net analysis is a calculation of the amount of water flowing through the aquifer according to the equation:

$$Q = kAI \cdot .0084$$

Where:

Q= flow (ac-ft/yr)

k= Hydraulic Conductivity (ft/d)

A= Area (ft²)

I= Hydraulic gradient (ft/ft)

.0084= conversion constant

The average hydraulic conductivity from Table 1 (277 ft/d) was applied over the entire aquifer. The cross sectional area reported by the DENR-Geological Survey (in progress) for each cross section (see values in blue on the cross sections) was used in the calculations. The gradient of the potentiometric surface on January 21, 2014, at each cross section was used for the hydraulic gradient. The amount of groundwater outflow from a management unit represents the volume of

water recharging the unit that exceeds discharges from the unit. Groundwater flow was calculated at two locations near the southern extent of the South management unit at cross sections F-F' and G-G' (see Figures 28, 29, 30). The flow calculation data is shown in Table 4. The flow net analysis indicates that there is at least 5,673 acre-feet of water leaving this management unit through groundwater outflow. Therefore, there is a reasonable probability that unappropriated water is available to supply the 760.4 acre-feet per year expected to be used by these twelve applications.

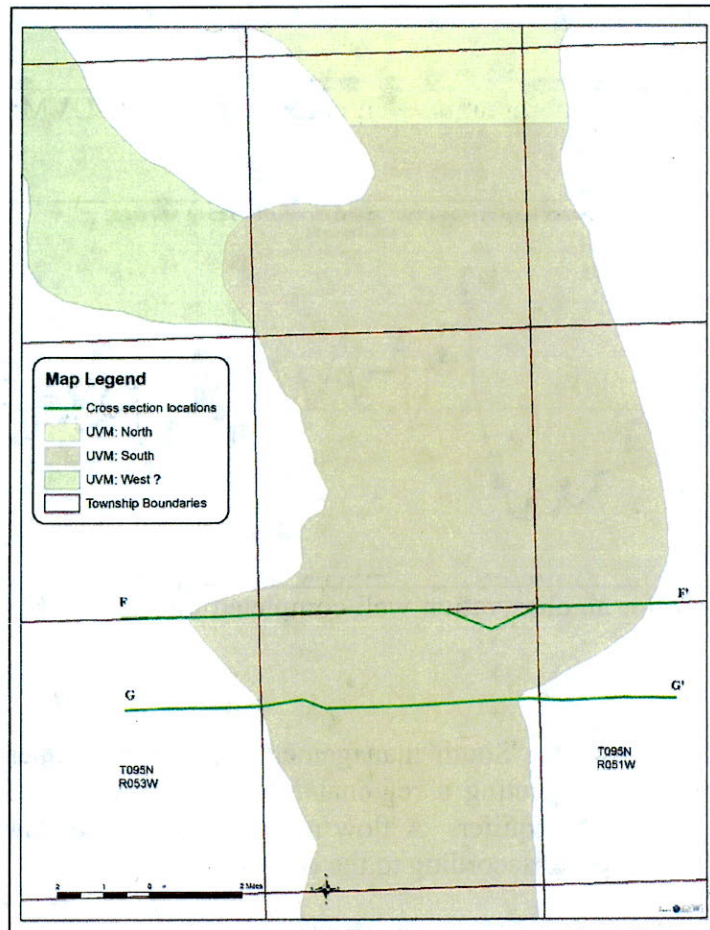


Figure 28. Map showing the location of cross Sections F-F' and G-G'

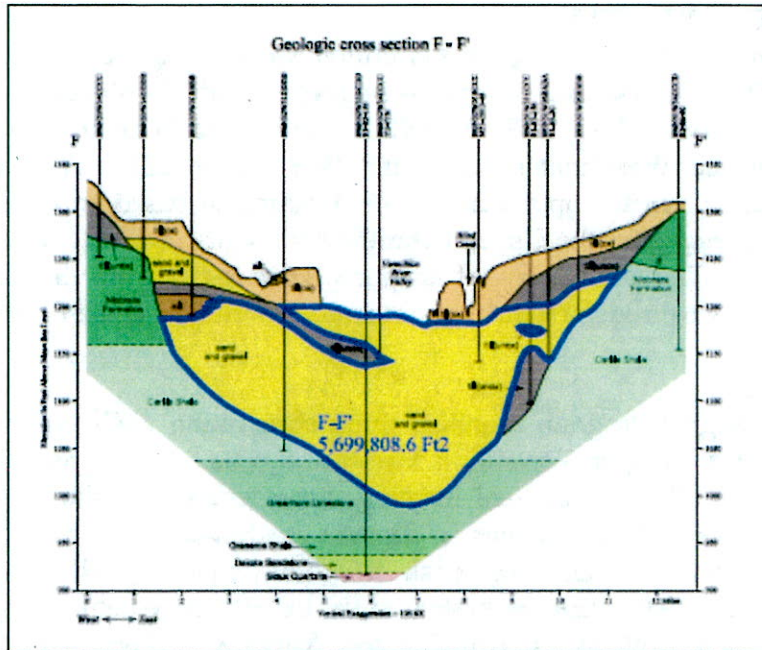


Figure 29. Geologic cross section at F-F' (SD-Geological Survey, in progress)

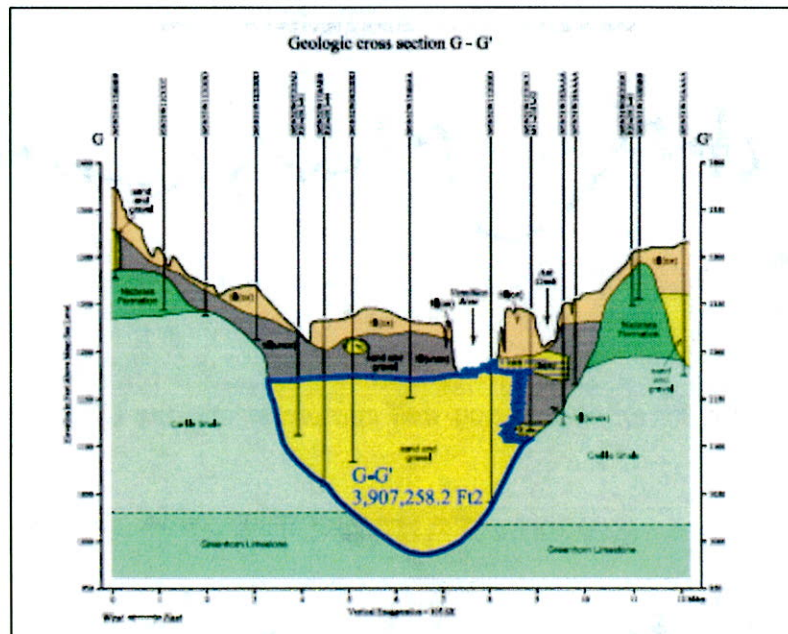


Figure 30. Geologic cross section at G-G' (SD-Geological Survey, in progress)

Cross Section	Area (ft2)	Hydraulic Gradient (ft/ft)	K (ft/day)	Q (ft3/day)	Q (ac-ft/yr)
F-F'	5,699,809	0.00062	277	978,885	<u>8,223</u>
G-G'	3907258	0.00062	277	671,033	<u>5,637</u>

Table 4. Groundwater flow at southern portion of the South management unit

WEST MANAGEMENT UNIT:

The West management unit of the Upper Vermillion Missouri aquifer extends west from T97N-R53W to at least T98N-R54W and encompasses an estimated 22,750 acres. Five deferred water permit applications (Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7433-3) propose to irrigate a total of 665 acres from the West management unit (see Figure 22). The expected withdrawal associated with these proposed appropriations was estimated based on the *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer (from Table 3) to be 332.5 acre-feet per year. The availability of unappropriated water from this unit was assessed in terms of SDCL 46-6-3.1 through evaluating observation well data and a flow net analysis.

Observation well data

The DENR-Water Rights Program monitors three observation wells completed into the West management unit of the Upper Vermillion Missouri aquifer. Hydrographs for the observation wells (Figures 31-33) all show upward trending water levels over the period of record. The observation wells clearly show changes in climatic conditions along with temporal impacts of pumping. Since climatic conditions mask temporal impacts, well withdrawals from this management unit are not stressing the system to the extent where natural discharge is impacted. Therefore groundwater outflow is available for “capture”. The observation wells in this management unit document that unappropriated water is available for appropriation.

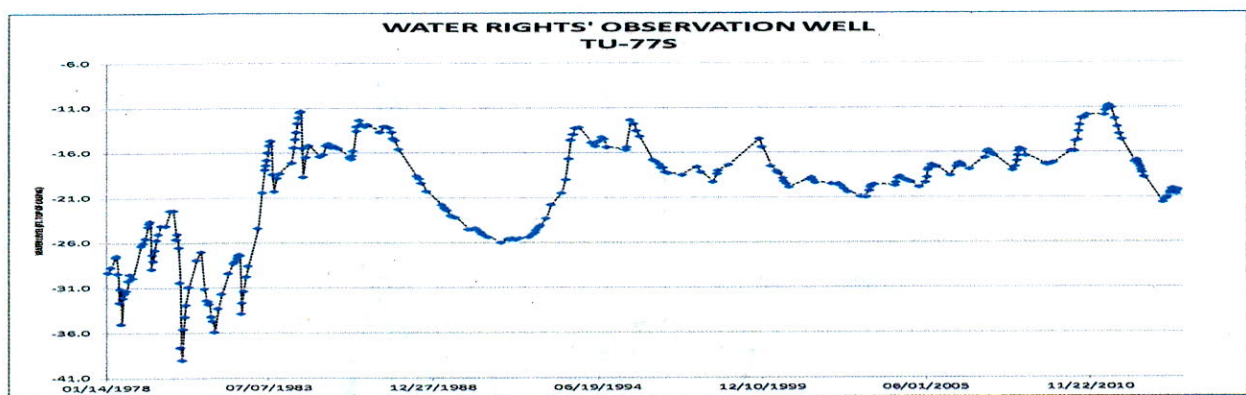


Figure 31. Hydrograph for an observation well completed into the UVM: West (Water Rights, 2014a)

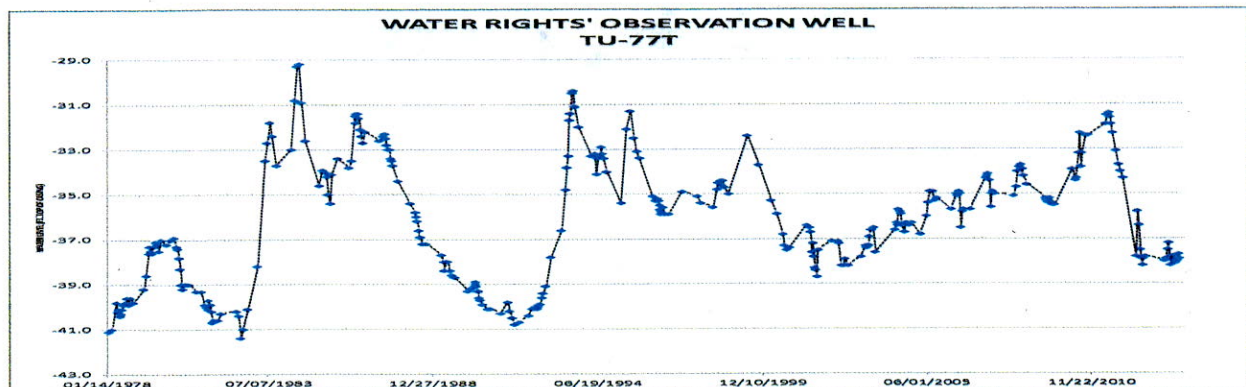


Figure 32. Hydrograph for an observation well completed into the UVM: West (Water Rights, 2014a)

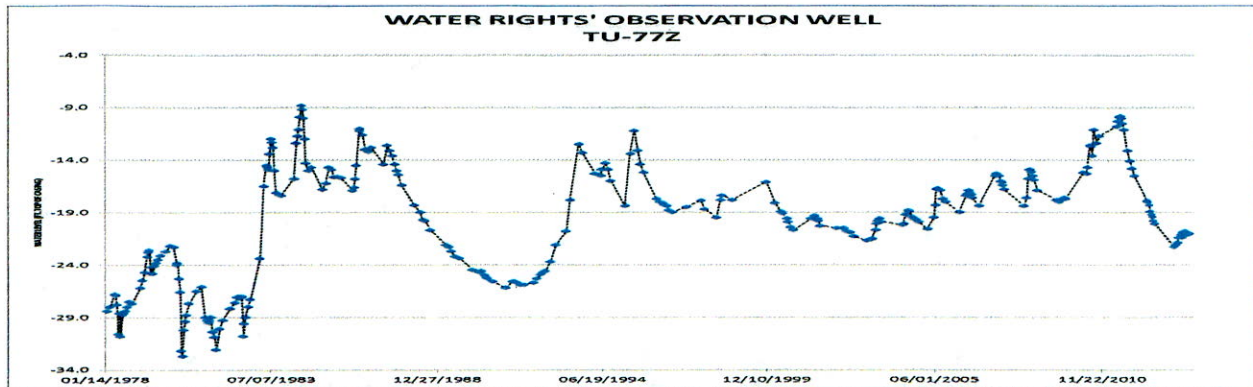


Figure 33. Hydrograph for an observation well completed into the UVM: West (Water Rights, 2014a)

2014 Flow Net Analysis:

The amount of groundwater outflow from the management unit represents the volume of recharge water exceeding withdrawals. Flow was calculated at the location where cross section AA-AA' bisects outwash (See Figures 34 and 35). The calculated flow, using the same equation discussed earlier for the South management unit, is shown in Table 5. The flow net analysis indicates that there is at least 2,681 acre-feet of water leaving this management unit through groundwater outflow. Therefore, there is a reasonable probability that unappropriated water is available to supply the 332.5 acre-feet per year expected to be used by these five applications.

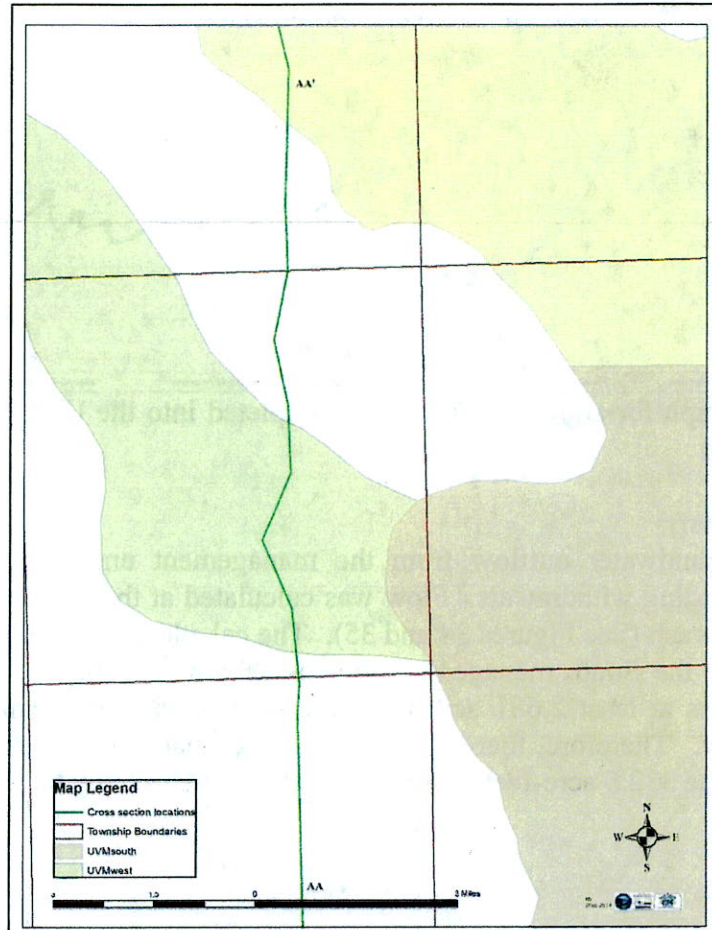


Figure 34. Map showing the location of cross section AA-AA'

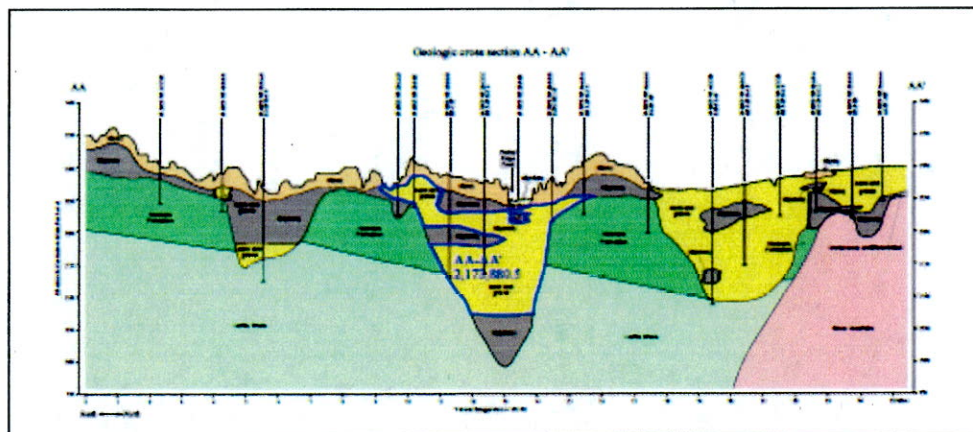


Figure 35. Geologic Cross Section at AA-AA' (SD-Geological Survey, in progress)

Cross Section	Area (ft ²)	Hydraulic Gradient (ft/ft)	K (ft/day)	Q (ft ³ /day)	Q (ac-ft/yr)
AA-AA'	2,173,880	0.00053	277	319,147	2,681

Table 5. Groundwater flow at eastern portion of the West management unit

NORTH MANAGEMENT UNIT:

The North management unit of the Upper Vermillion Missouri aquifer extends north of T97N-R52W and encompasses an estimated 38,110 acres. Four deferred water permit applications (Nos. 7452-3, 7468-3, 7558-3, 7587-3) propose to irrigate a total of 542 acres from the West management unit (See Figure 22). The expected withdrawal associated with these proposed appropriations was estimated based on the *average application rate per permitted acreage* for the Upper Vermillion Missouri aquifer (from Table 3) to be 271 acre-feet per year. The availability of unappropriated water from this unit was assessed in terms of SDCL 46-6-3.1 through evaluating observation well data.

Observation well Data:

The DENR-Water Rights Program monitors seven observation wells completed into the North management unit of the Upper Vermillion Missouri aquifer (see Figure 8 for locations). Hydrographs for the observation wells (see Figures 36-42) all show downward trending water levels (blue trend line on hydrographs) over the period of record. Trend lines for the minimum annual water levels (green trend lines on hydrographs) are also all trending downward. Except for observation well TU-77F, the maximum annual water level trend (red line on hydrographs) has shown an upward trend.

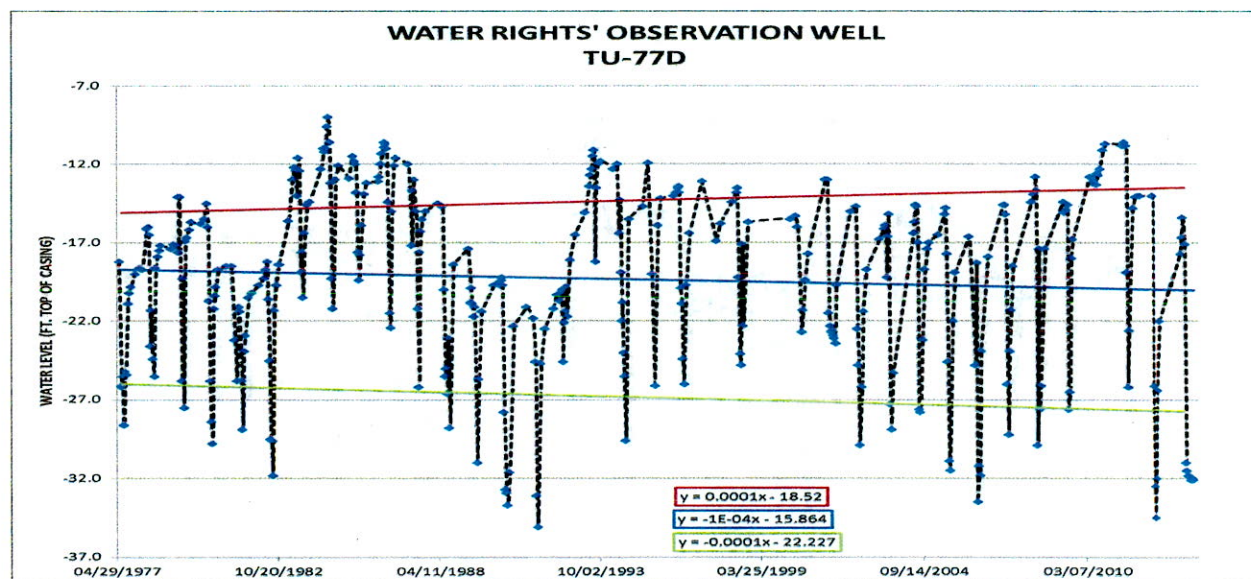


Figure 36. Hydrograph of an observation well completed into the North management unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and maximum annual overall water level trend line (red) (Water Rights, 2014a).

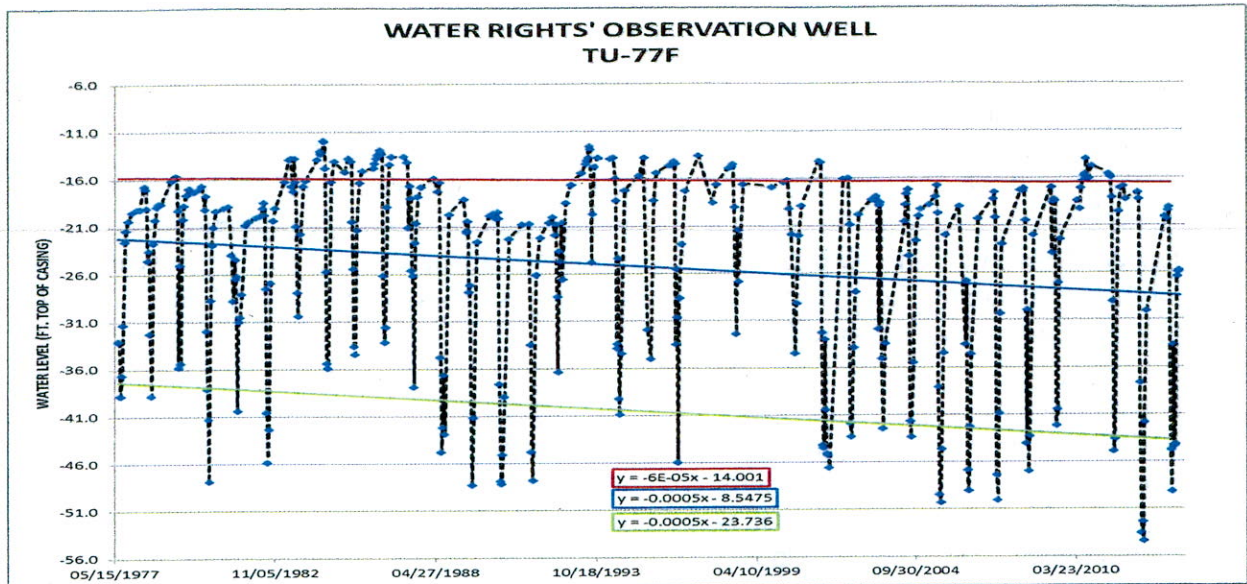


Figure 37. Hydrograph of an observation well completed into the North management unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and maximum annual overall water level trend line (red) (Water Rights, 2014a).

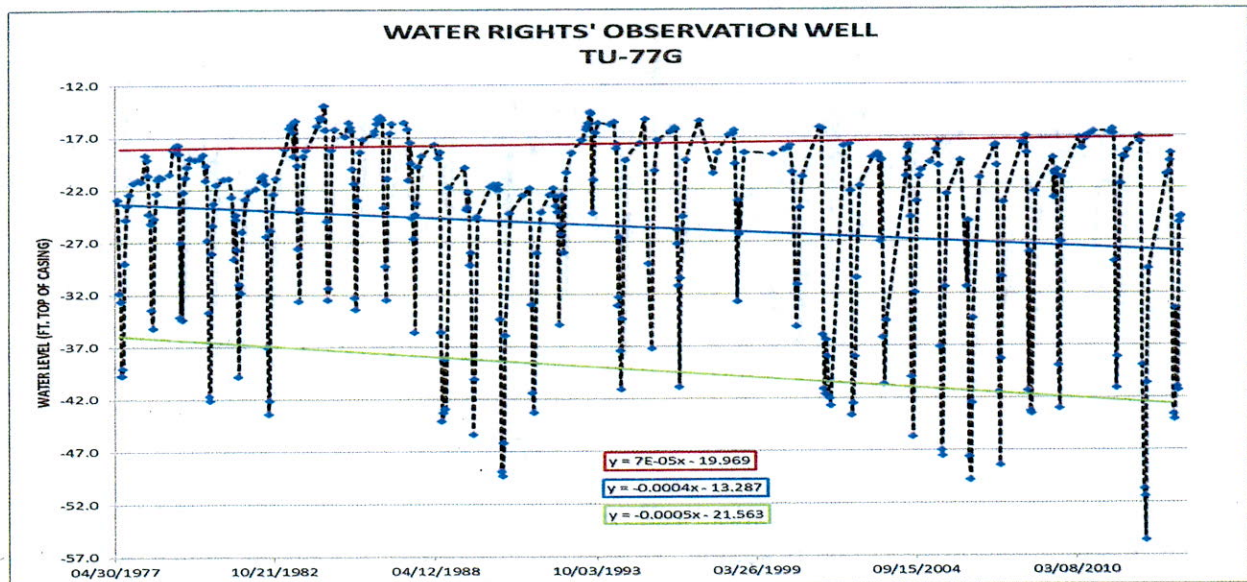


Figure 38. Hydrograph of an observation well completed into the North management unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and maximum annual overall water level trend line (red) (Water Rights, 2014a).

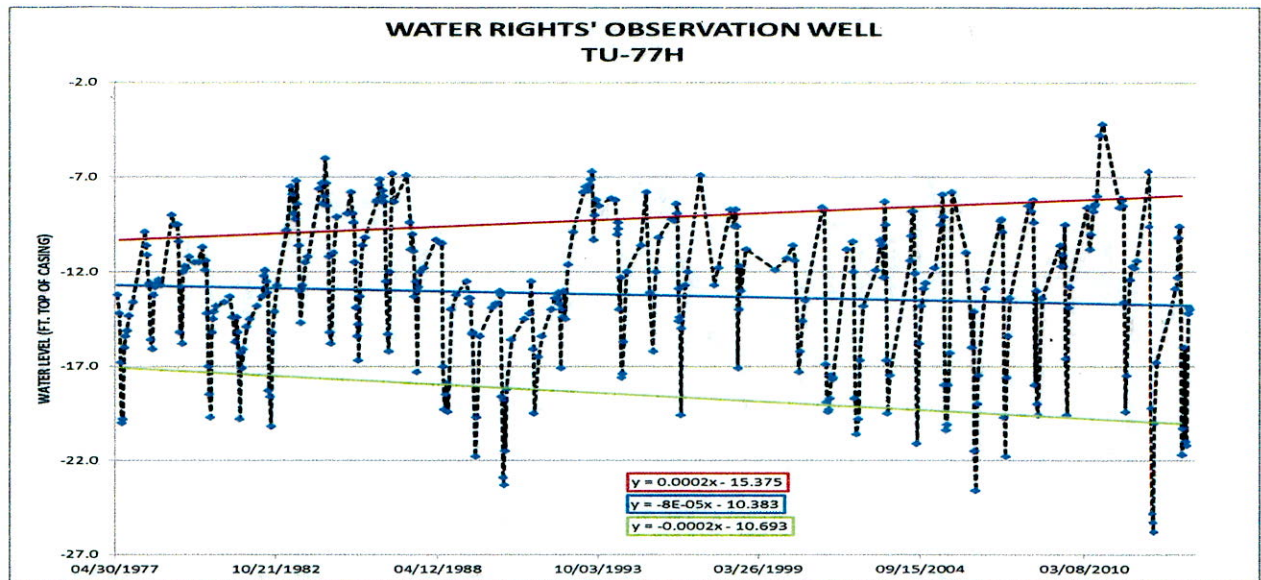


Figure 39. Hydrograph of an observation well completed into the North management unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and maximum annual water level trend line (red) (Water Rights, 2014a).

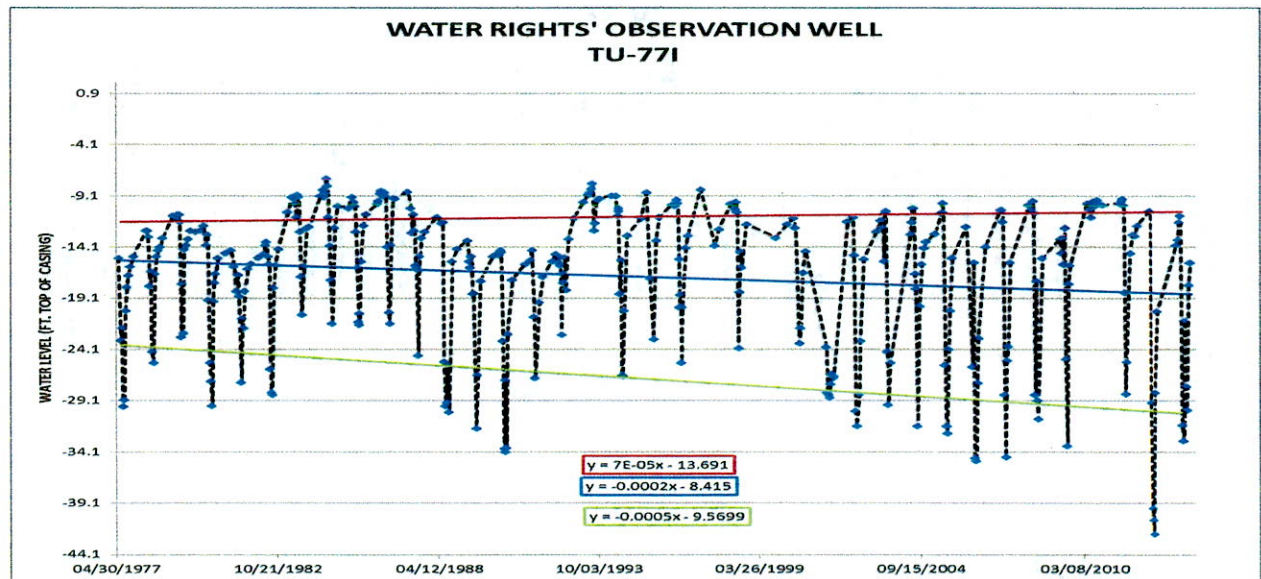


Figure 40. Hydrograph of an observation well completed into the North management unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and maximum annual water level trend line (red) (Water Rights, 2014a).

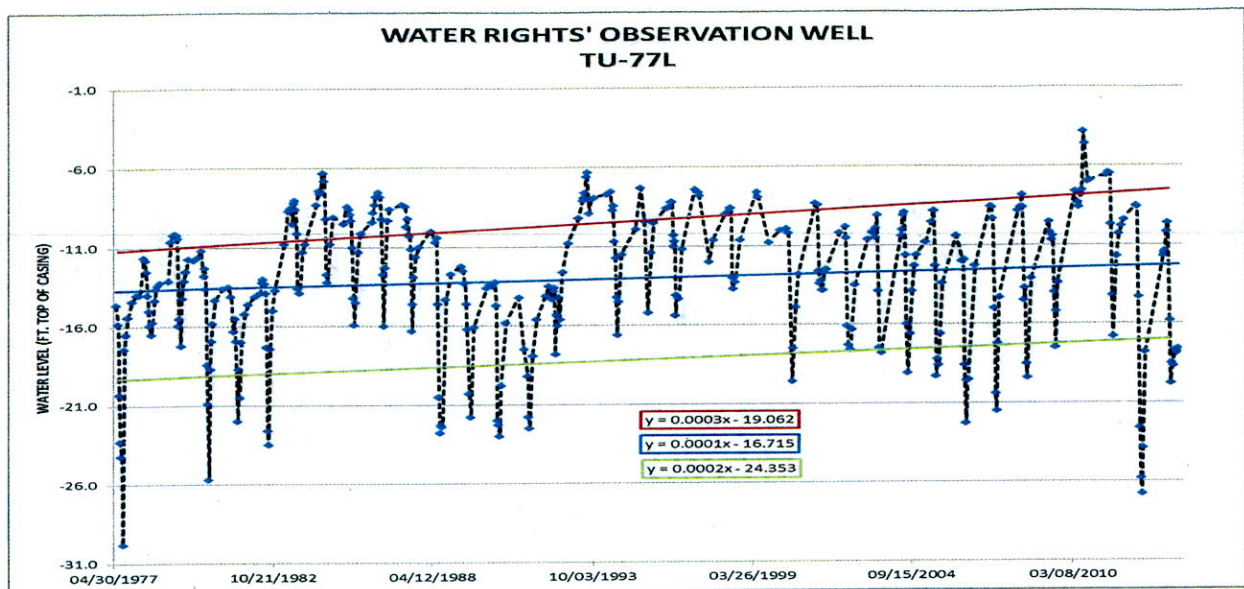


Figure 41. Hydrograph of an observation well completed into the North management unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and maximum annual water level trend line (red) (Water Rights, 2014a).

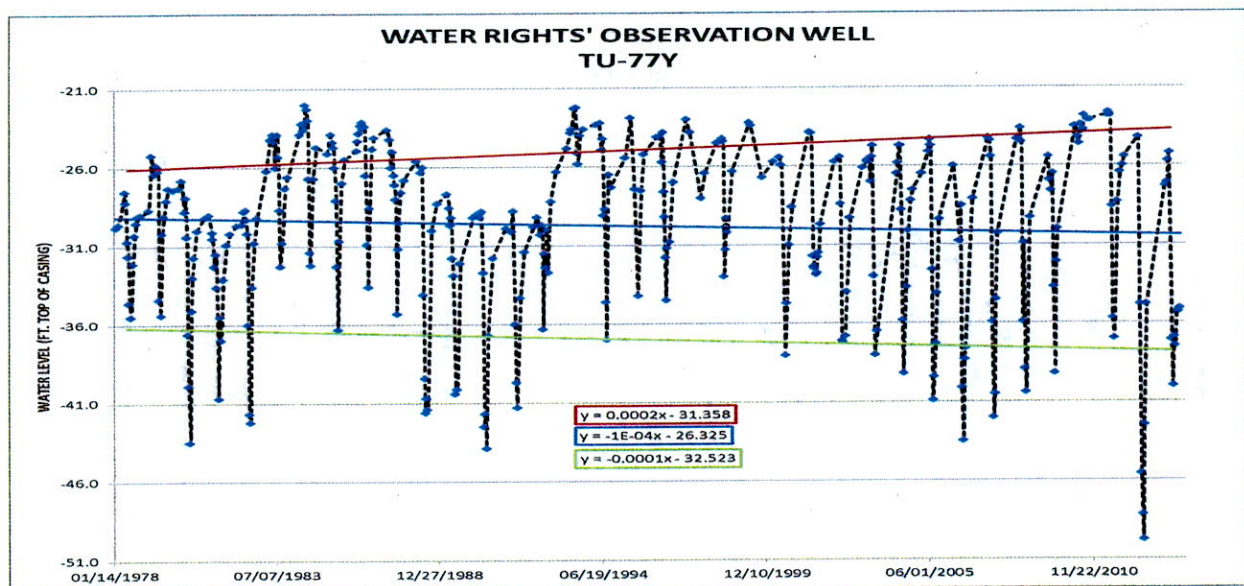


Figure 42. Hydrograph of observation well completed into the North Management Unit of the Upper Vermillion Missouri aquifer with trend line (blue), minimum annual water level trend line (green), and Maximum annual water level trend line (red) (Water Rights, 2014a).

Profiles of the potentiometric surface along a flow path crossing the southern boundary of the North management unit of the Upper Vermillion Missouri aquifer (see Figures 43 and 44) documents that the gradient of the potentiometric surface decreases from 0.000459 ft/ft (2.42 ft/mile) to 0.000228 ft/ft (1.20 ft/mile) when pumping is at a maximum.

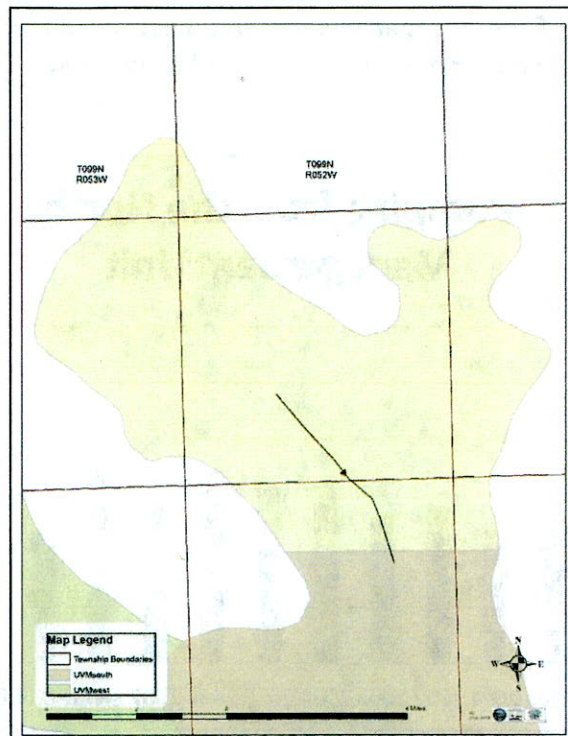


Figure 43. Map showing location of potentiometric surface profile.

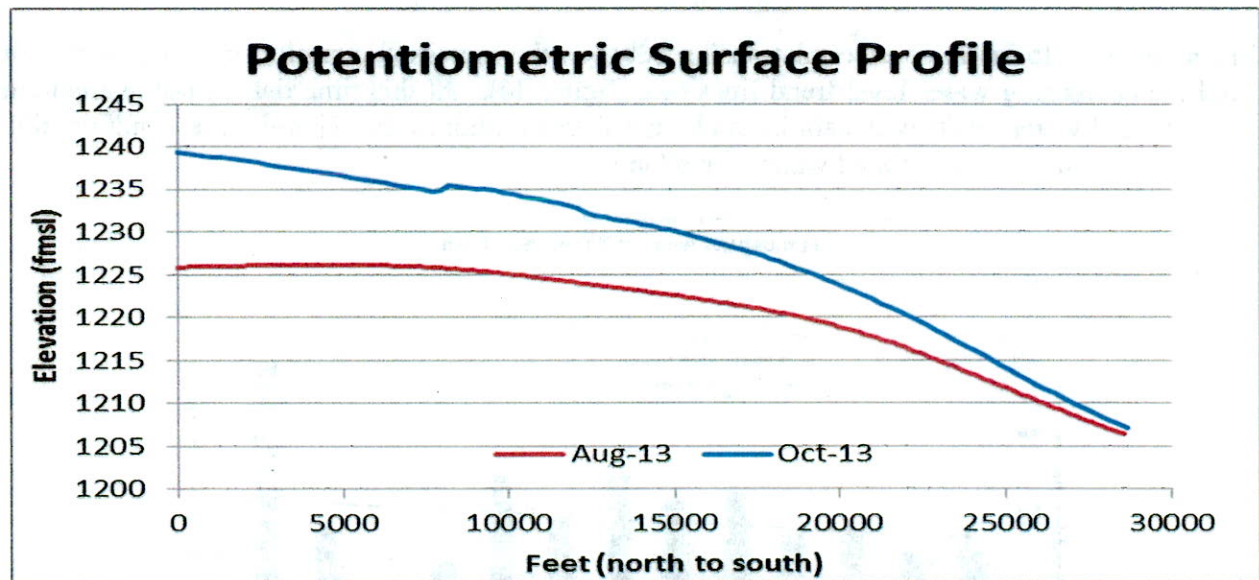


Figure 44. Profile of the potentiometric surface showing stress in North management unit.

The change in slope demonstrates that this portion of the aquifer is being stressed by well withdrawals to the extent that temporal effects are no longer masked by climatic conditions. Unlike the other management units of the Upper Vermillion Missouri aquifer, it is not possible to conclude that unappropriated water is available from this area based on observation well data.

Reported well withdrawals from this management unit have steadily increased in recent years (see Figure 45). The reported pumping from this unit has increased at an average of 80 ac-ft/yr since 2000.

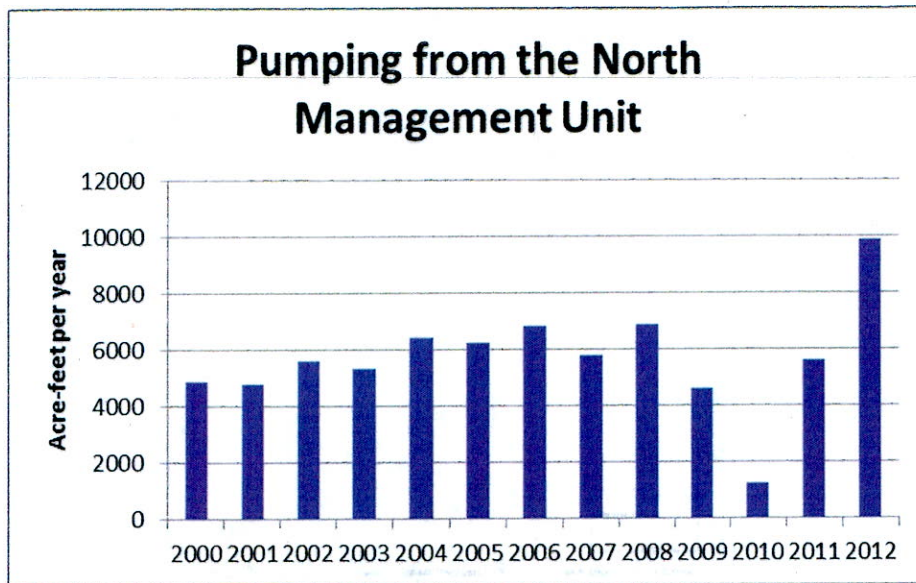


Figure 45. Pumping from the North management unit of the Upper Vermillion Missouri aquifer (Water Rights 1980-2013; Water Rights 2000-2013).

There appears to be an inverse relationship between the increased pumping from the north unit and the decreasing water level trend lines (see Figure 46). At this time data is not available to determine if water levels will stabilize under consistent withdrawals. Therefore, it is not possible to conclude that unappropriated water is available.

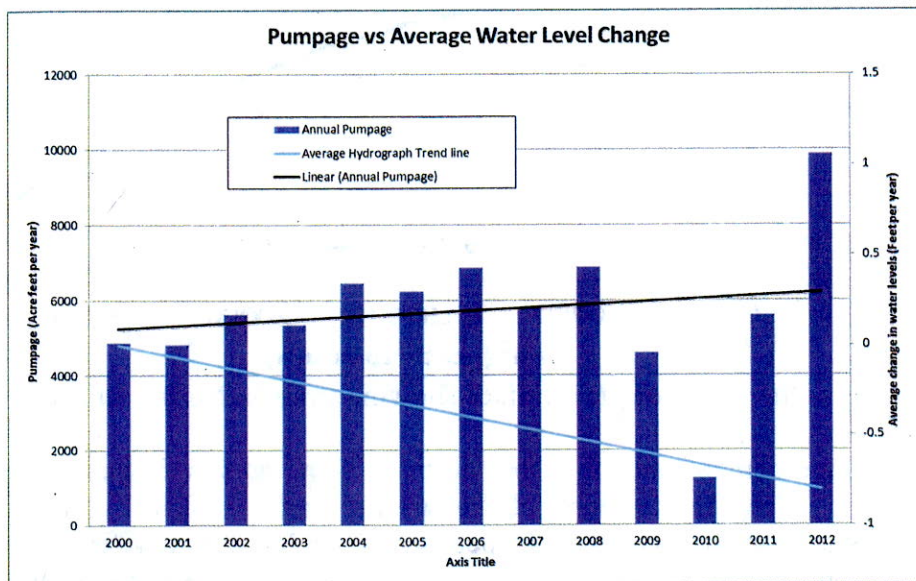


Figure 46. Pumping from the North management unit of the Upper Vermillion Missouri aquifer with trend line plotted with observation well water level trend line data. (Water Rights 1980-2013; Water Rights 2000-2013 and Water Rights 2014a)

Since the observation well data does not support “that the quantity of water withdrawn annually from the aquifer does not exceed average annual recharge to the aquifer” as required by ARSD 74:02:05:07 further evaluation of water availability from North management unit, including a flow net analysis was not performed.

IMPAIRMENT OF EXISTING RIGHTS

Since the Upper Vermillion Missouri aquifer is primarily under artesian conditions, drawdown due to pumping may be fairly large near an individual production well. Drawdown measured in pumping tests of irrigation wells (see Table 1) ranged from 6-92 feet. Well interference has historically not been a problem from the aquifer. Figures 47 and 48 show the location of selected DENR-Water Rights observation wells in relation to concentrations of irrigation wells. Hydrographs for the observation wells (Figures 37, 38, 39, 40 and 24) document drawdown of 5-25 feet. Considering the artesian pressure of the aquifer and natural water level fluctuations, drawdown of that magnitude should not be considered significant.

The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. However, reasonable domestic use must be assured before irrigation use is allowed. Therefore, when considering irrigation projects, the Water Management Board must give consideration to maintaining artesian head pressure as a method of delivery for domestic wells. To balance interests between irrigation use and delivery of groundwater by artesian pressure, ARSD 74:02:04:20(7) defines an adversely impacted domestic well as:

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

Depending on the specific characteristics of the Upper Vermillion Missouri aquifer at the proposed well sites, some existing well owners may need to lower their pumps to accommodate possible reduction of head pressure. Therefore, there is a reasonable probability that any well interference from the proposed appropriation will not adversely or unlawfully impair existing nearby wells.

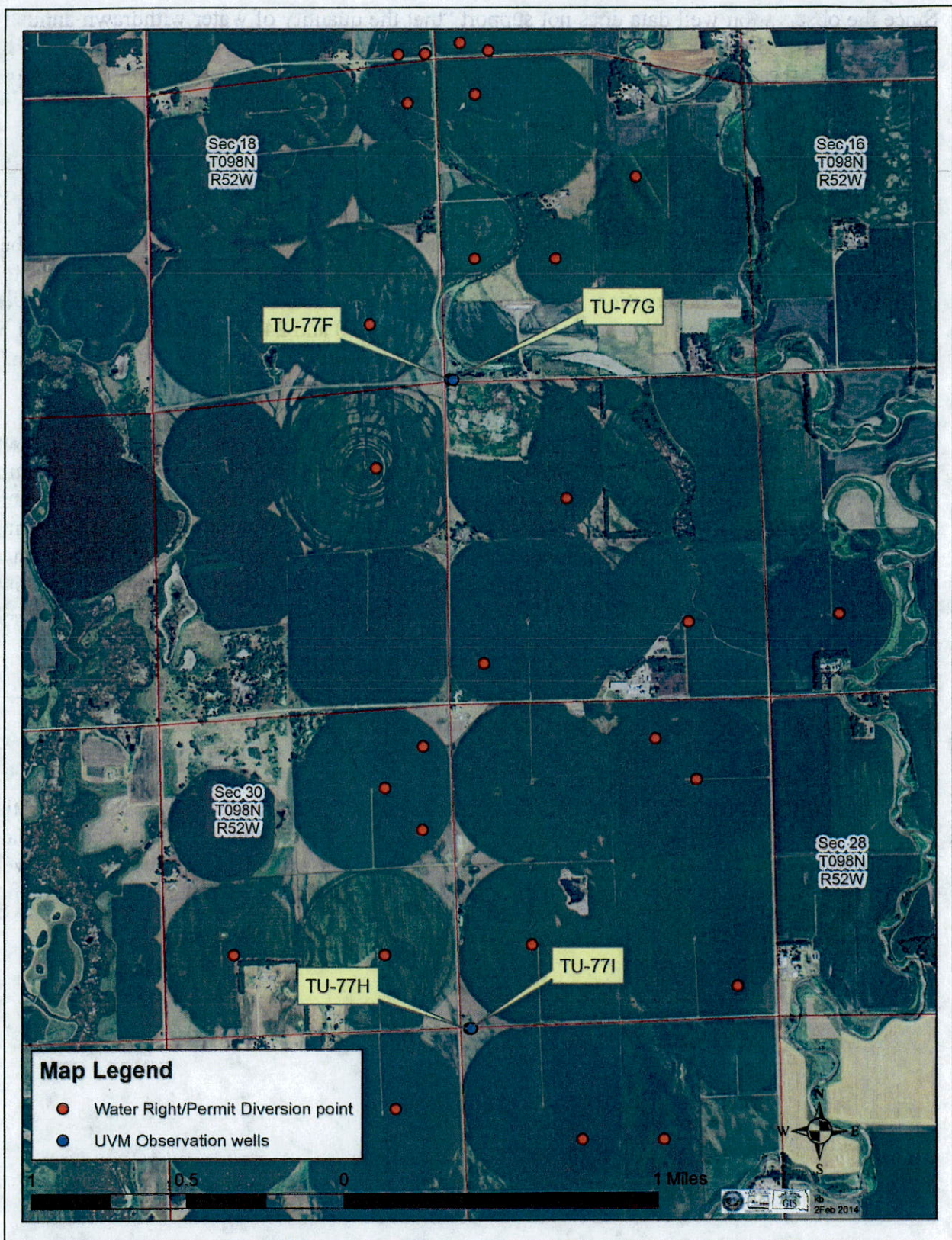


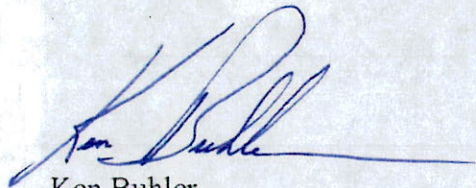
Figure 47. Location of DENR-Water Rights' observation wells TU-77F, G, H, I in relation to irrigation diversion points.



Figure 48. Location of DENR-Water Rights' observation well TU-77M in relation to irrigation diversion points.

CONCLUSIONS:

1. The Water Management Board deferred 18 water permit applications from the Upper Vermillion Missouri aquifer in 2013, because portions of the aquifer have experienced long-term downward trending water levels.
2. Since the Board's initial action to defer the original applications for further study, one additional application has been deferred and two applications are public noticed for deferral.
3. At the time the Board considered the applications, information was not available to distinguish management units within the aquifer.
4. Data is now available to consider three management units of the Upper Vermillion Missouri aquifer.
5. There is a reasonable probability that unappropriated water is available to accommodate the appropriations proposed from the South and West management units of the Upper Vermillion Missouri aquifer (Water Permit Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7609-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3; and Water Permit Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3.)
6. There is a reasonable probability that the proposed appropriations from the South and West management units can be made without adversely impacting existing water rights.
7. Data is not available at this time to conclude that unappropriated water is available from the North management unit of the Upper Vermillion Missouri aquifer.



Ken Buhler
DENR-Water Rights Program

REFERENCES

Buhler, K.A., 2012, Report to the Chief Engineer on Water Permit Application No. 7441-3 & 7442-3, Gary or Julie Peterson; Water Permit Application No. 7452-3, Jerome Hult; Water Permit Application No. 7466-3, Bethel Hagen Trust; Water Permit Application No. 7467-3 & 7468-3, Cleland Hagen Trust; and Water Permit Application No. 7535-3 Donald D Benson, December 11, 2012: SD DENR- Water Rights Program

Circuit Court of South Dakota, Sixth Judicial Circuit, 2005, April 29, 2005 Memorandum Decision re: HU04-37 Hines v. SD Department of Environment and Natural Resources

Circuit Court of South Dakota, First Judicial Circuit, 2012, April 12, 2012 Memorandum Decision re: Hanson County Dairy v. Robert Bender and Stace Nelson

Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185

In the Matter of Water Permit Application Nos. 7441-3, et al (South Dakota Water Management Board, Findings of Fact issued May 2, 2013) (Conclusion of Law 15)

Lindgren, R.J., Hansen, D.S., 1990, Water Resources of Hutchinson and Turner Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 90-4093, 100 p.

Niehus, C.A., 1994, Water Resources of Lincoln and Union counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 93-4195, 57 p.

SD Geological Survey, in progress, Hydrogeologic study of the Upper Vermillion Missouri aquifer

Tomhave, D.W., Schulz, L.D., 2004, Bedrock Geologic Map Showing Configuration of the Bedrock Surface in South Dakota East of the Missouri River, DENR-Geological Survey General Map 9, Scale 1:500,000

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Water Rights, 2014a, Observation Well Data, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

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

Water Rights, 2014c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



February 7, 2014

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM
MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER.

Please publish the notice once on February 13, 2014.

The text of the notice has been emailed to your paper. If you have questions, please contact Karen Schlaak at
(605) 773-3352.

The Water Rights Program will pay the cost of this publication.

Please return an affidavit or the enclosed Proof of Publication form immediately following publication.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

Enclosure



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



February 7, 2014

Argus Leader
PO Box 5034
Sioux Falls SD 57117

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Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosure



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
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February 7, 2014

Plain Talk
201 W Cherry St
Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM
MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER.

Please publish the notice once on February 14, 2014.

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(605) 773-3352.

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosure



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



February 7, 2014

Lennox Independent
PO Box 76
Lennox SD 57039

ATTENTION: Legal Public Notice

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MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER.

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosure



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



February 7, 2014

Viborg Enterprise/Hurley Leader
PO Box H
Centerville SD 57014

ATTENTION: Legal Public Notice

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MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER.

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(605) 773-3352.

The Water Rights Program will pay the cost of this publication.

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosure



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



February 7, 2014

Centerville Journal
PO Box H
Centerville SD 57014

ATTENTION: Legal Public Notice

Enclosed is a NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER.

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The Water Rights Program will pay the cost of this publication.

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosure



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
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February 7, 2014

The New Era
PO Box 579
Parker SD 57053

ATTENTION: Legal Public Notice

Enclosed is a NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER.

Please publish the notice once on February 13, 2014.

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The Water Rights Program will pay the cost of this publication.

Please return an affidavit or the enclosed Proof of Publication form immediately following publication.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosure

NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM
MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed in 2012 and 2013. The Chief Engineer recommended deferral because at the time it was not possible to conclude that unappropriated water was available from the aquifer. Nineteen of the applications were formally deferred by the Water Management Board pending study of the UVM aquifer. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

The South Dakota Geologic Survey (SDGS) conducted work in 2013 - 2014 which established new boundaries for the main body of the aquifer. This work done by the SDGS has been analyzed by the Water Rights Program and provides identifiable geologic and hydrologic data documenting two boundaries establishing three management units within the UVM aquifer. The Water Rights Program is proposing designating North, South and West management units of the UVM aquifer. Observation well data and a flow net analysis has been conducted on each management unit to determine whether unappropriated water is available.

All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at <http://denr.sd.gov/des/wr/pubnotice.aspx> or by contacting the Water Rights Program at (605) 773-3352.

This notice schedules a hearing before the Water Management Board beginning at 10:30 AM, on Thursday, March 6, 2014, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. Listed below is a description of each application, the Chief Engineer's recommendation, and the procedure to file a petition to intervene in the hearing process.

South Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7441-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be approximately 175 feet deep located in the center of the SE 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4 Section 8; all in T95N-R52W.

Application No. 7442-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to irrigate 40 additional acres. Water Right No. 5982-3 authorizes 1.64 cubic feet of water per second (cfs) from one well that is 165 feet deep located in the SE 1/4 NW 1/4 Section 17 to irrigate 115 acres located in the NW 1/4 Section 17; all in T95N-R52W. The application is proposing to irrigate an additional 40 acres located in the W 1/2 NE 1/4 Section 17-T95N-R52W from the existing well. This application, if approved does not authorize any increase in the developed diversion rate. The Water Management Board did authorize a change in the location of acres without an increase in the diversion rate authority or acres authorized by Water Right No. 5982-3.

Application No. 7466-3 filed by Bethel Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 169 feet deep located in approximate center of the NE 1/4 Section 5 for irrigation of 152 acres located in the NE 1/4 Section 5; all in T96N-R51W.

Application No. 7467-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 134 feet deep located in the

approximate center of the NW 1/4 Section 13 for irrigation of 152 acres located in the NW 1/4 Section 13; all in T97N-R52W.

Application No. 7600-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 3.56 cfs from two wells to be approximately 200 feet deep located in the NE 1/4 NW 1/4 and the approximate center of the SW 1/4 Section 12 for irrigation of 180 acres located in the NW 1/4, N 1/2 SW 1/4 Section 12; all in T96N-R52W. The applicant is proposing to locate a pivot in the center of SW 1/4 Section 12 to irrigate the entire SW 1/4. A portion of Water Permit No. 7128-3 held by Paul Shubeck authorizes irrigation of the S 1/2 SW 1/4 Section 12-T96N-R52W.

Application No. 7601-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 200 feet deep located in the approximate center of the NE 1/4 Section 25 to irrigate 132 acres located in the NE 1/4 Section 25; all in T97N-R53W.

Application No. 7603-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 150 feet deep located in the approximate center of the NE 1/4 Section 33 to irrigate 120 acres located in the NE 1/4 Section 33; all in T97N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7623-3 filed by Darrell Osborn, 28838 463rd Ave, Centerville SD 57014 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the SE 1/4 NW 1/4 Section 24 for irrigation of 140 acres located in the NW 1/4, W 1/2 NE 1/4 Section 24; all in T97N-R52W.

Application No. 7653-3 filed by Jeremiah Welsh, 29217 460th Ave, Centerville SD 57014 proposes to appropriate 1.67 cfs from one well to be approximately 180 feet deep located in the approximate center of the SW 1/4 Section 8 for irrigation of 85 acres located in the W 1/2 SW 1/4, NE 1/4 SW 1/4 Section 8; all in T96N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7690-3 filed by Tim or David Ostrem, 45924 300 St, Wakonda SD 57073 proposes to appropriate 1.78 cfs from one well to be approximately 50 - 90 feet deep located in the center of the NE 1/4 Section 29 for irrigation of 160 acres located in the NE 1/4, E 1/2 NW 1/4 Section 29; all in T96N-R52W.

Application No. 7900-3 filed by Leon Thompson, 401 S 11th St, Beresford SD 57004 proposes to appropriate 1.89 cfs from one well to be approximately 151 feet deep located in the NW 1/4 NE 1/4 Section 6 for irrigation of 136 acres located in the NE 1/4 Section 6; all in T95N-R51W.

Application No. 7919-3 filed by Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 proposes to appropriate 1.83 cfs from one well to be approximately 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3 from the South Management Unit of the Upper Vermillion Missouri Aquifer 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.

North Management Unit of the Upper Vermillion Missouri Aquifer (Deferral Recommendation)

Application No. 7452-3 filed by Jerome Hult, 45958 Hwy 18, Davis SD 57021 proposes to appropriate 1.78 cfs from one well to be approximately 190 feet deep located in SW 1/4 NE 1/4 Section 32 for irrigation of 110 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7468-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well approximately 134 feet deep located in the approximate center of the NE 1/4 Section 26 for irrigation of 152 acres located in the NE 1/4 Section 26; all in T98N-R52W.

Application No. 7558-3 filed by Cleland Trust, 38736 Nasturtium Way, Palm Desert CA 92211 has filed an application for a water permit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

Application No. 7587-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 100 feet deep located in the approximate center of the SE 1/4 Section 10 for irrigation of 160 acres located in the SW 1/4 Section 10; all in T98N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends continuing DEFERRAL of Application Nos. 7452-3, 7468-3, 7558-3 and 7587-3 from the North Management Unit of the Upper Vermillion Missouri Aquifer until information is available to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

West Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7535-3 filed by Donald D Benson, 45067 284th St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 220 feet deep located in the SW 1/4 NW 1/4 Section 30 for irrigation of 65 acres located in the NW 1/4 Section 30; all in T98N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7588-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 145 feet deep located in the approximate center of the SW 1/4 Section 19 to irrigate 160 acres located in the SW 1/4 Section 19; all in T98N-R53W.

Application No. 7602-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the approximate center between the NW 1/4 and the NE 1/4 Section 34 for irrigation of 132 acres located in the E 1/2 NW 1/4 and the W 1/2 NE 1/4 Section 34; all in T97N-R53W.

Application No. 7633-3 filed by Brad Farrar, 28795 452nd Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 205 feet deep located in the center of the SW 1/4 Section 32 for irrigation of 152 acres located in the SW 1/4 Section 32; all in T98N-R53W.

Application No. 7715-3 filed by Allen Vannorsdel, 45515 288th St, Viborg SD 57070 proposes to appropriate 2.22 cfs from one well to be approximately 160 feet deep located in the center of the SW 1/4 Section 16 for irrigation of 156 acres located in the SW 1/4 Section 16; all in T97N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3 from the West Management Unit of the Upper Vermillion Missouri Aquifer 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.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose a specific application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public

policy or public interest that should be heard by the board.” In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 AM. on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave. Pierre SD. The agenda time is an estimate. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support specific applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation on their applications. 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 are given above. A petition filed by either an interested person or the applicant must be filed by February 24, 2014. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in any of the applications, the petitioner's reasons for opposing or supporting specific applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervenor retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that “if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17.” This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at an approximate cost of _____.

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Water Rights Program
523 E Capitol Ave., Joe Foss Building
Pierre, SD 57501

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Department of Environment and Natural Resources

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STATE OF SOUTH DAKOTA

COUNTY OF MINNEHAHA } ss

Linda Schulte being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper as defined by SDCL 17-2-21, as amended published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper upon

Thursday, the 13 day of February 2014,
_____, the _____ day of _____ 2014,
_____, the _____ day of _____ 2014,
_____, the _____ day of _____ 2014,
_____, the _____ day of _____ 2014,
_____, the _____ day of _____ 2014,
_____, the _____ day of _____ 2014,

and that \$392.57 was charged for publishing the same

Linda Schulte

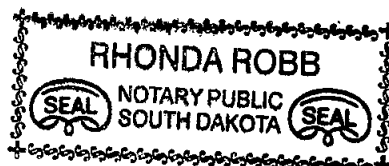
Subscribed and sworn to before me 2/13/2014

[Signature]

Notary Public, South Dakota

My Commission expires December 22, 2015

12/20



aquifer. Nineteen of the applications were formally deferred by the Water Management Board pending study of the UVM aquifer. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

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All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has reviewed the recommendations to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at sds.dakota.gov/dea/waterboards/2014 or by contacting the Water Rights Program at (605) 773-3352.

This notice schedules a hearing before the Water Management Board beginning at 10:30 AM, on Thursday, March 6, 2014, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. Listed below is a description of each application, the Chief Engineer's recommendation, and the procedure to file a petition to intervene in the hearing process.

South Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7441-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be approximately 175 feet deep located in the center of the SE 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4 Section 8; all in T95N-R52W.

Application No. 7442-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to appropriate additional acres. Water Right No. 5982-3 authorizes 1.64 cubic feet of water per second (cfs) from one well that is 165 feet deep located in the SE 1/4 NW 1/4 Section 17 to irrigate 115 acres located in the NW 1/4 Section 17; all in T95N-R52W. The application is pro-

posing to irrigate an additional 40 acres located in the W 1/2 NE 1/4 Section 17-T95N-R52W from the existing well. This application, if approved does not authorize any increase in the developed diversion rate. The Water Management Board did authorize a change in the location of acres without an increase in the diversion rate authority or acres authorized by Water Right No. 5982-3. Application No. 7466-3 filed by Bethel Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr, Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 168 feet deep located in the approximate center of the NE 1/4 Section 5 for irrigation of 152 acres located in the NE 1/4 Section 5; all in T96N-R51W.

Application No. 7467-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr, Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 134 feet deep located in the approximate center of the NW 1/4 Section 13 for irrigation of 152 acres located in the NW 1/4 Section 13; all in T97N-R52W.

Application No. 7600-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 3.56 cfs from two wells to be approximately 200 feet deep located in the NE 1/4 NW 1/4 and the approximate center of the SW 1/4 Section 12 for irrigation of 180 acres located in the NW 1/4, N 1/2 SW 1/4 Section 12; all in T96N-R52W. The applicant is requesting to locate a pivot in the center of SW 1/4 Section 12 to irrigate the entire SW 1/4. A portion of Water Permit No. 7128-3 held by Paul Shuebeck authorizes irrigation of the S 1/2 SW 1/4 Section 12-T96N-R52W.

Application No. 7601-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 200 feet deep located in the approximate center of the NE 1/4 Section 25 to irrigate 132 acres located in the NE 1/4 Section 25; all in T97N-R53W.

Application No. 7603-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 150 feet deep located in the approximate center of the NE 1/4 Section 33 to irrigate 120 acres located in the NE 1/4 Section 33; all in T97N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7623-3 filed by Darrell Osborn, 28838 463rd Ave, Centerville SD 57014 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the SE 1/4 NW 1/4 Section 24 for irrigation of 140 acres located in the NW 1/4, 1/2 NE 1/4 Section 24; all in T97N-R52W.

Application No. 7653-3 filed by Jeremiah Welsh, 29217 460th Ave, Centerville SD 57014 proposes to appropriate 1.67 cfs from one well to be approximately 180 feet deep located in the approximate center of the SW 1/4 Section 8 for irrigation of 85 acres located in the W 1/2 SW 1/4, NE 1/4 SW 1/4 Section 8; all in T96N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7690-3 filed by Tim or David Ostrom, 45924 300 St, Wakonda SD 57073 proposes to appropriate 1.78 cfs from one well to be approximately 50 - 90 feet deep located in the center of the NE 1/4 Section 29 for irrigation of 160 acres located in the NE 1/4, E 1/2 NW 1/4 Section 29; all in T96N-R52W.

Application No. 7900-3 filed by Leon Thompson, 401 S 11th St, Beresford SD 57004 proposes to appropriate 1.89 cfs from one well to be approximately 151 feet deep located in the NW 1/4 NE 1/4 Section 6 for irrigation of 136 acres located in the NE 1/4 Section 6; all in T95N-R51W.

Application No. 7919-3 filed by Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 proposes to appropriate 1.83 cfs from one well to be approximately 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3 from the South Management Unit of the Upper Vermillion Missouri Aquifer 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.

North Management Unit of the Upper Vermillion Missouri Aquifer (Deferral Recommendation)

Application No. 7452-3 filed by Jerome Hult, 45958 Hwy 18, Davis SD 57021 proposes to appropriate 1.78 cfs from one well to be approximately 190 feet deep located in SW 1/4 NE 1/4 Section 32 for irrigation of 110 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7468-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr, Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well approximately 134 feet deep located in the approximate center of the NE 1/4 Section 26 for irrigation of 152 acres located in the NE

1/4 Section 26; all in T98N-R52W.

Application No. 7558-3 filed by Cleland Trust, 38736 Nasurtium Way, Palm Desert CA 92211 has filed an application for a water permit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

Application No. 7587-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 100 feet deep located in the approximate center of the SE 1/4 Section 10 for irrigation of 160 acres located in the SW 1/4 Section 10; all in T98N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends continuing DEFERRAL of Application Nos. 7452-3, 7468-3, 7558-3 and 7587-3 from the North Management Unit of the Upper Vermillion Missouri Aquifer until information is available to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

West Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7535-3 filed by Donald D Benson, 45067 284th St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 220 feet deep located in the SW 1/4 NW 1/4 Section 30 for irrigation of 65 acres located in the NW 1/4 Section 30; all in T98N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7588-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 145 feet deep located in the approximate center of the SW 1/4 Section 19 to irrigate 180 acres located in the SW 1/4 Section 19; all in T98N-R53W.

Application No. 7602-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the approximate center between the NW 1/4 and the NE 1/4 Section 34 for irrigation of 132 acres located in the E 1/2 NW 1/4 and the W 1/2 NE 1/4 Section 34; all in T97N-R53W.

Application No. 7633-3 filed by Brad Farrar, 28795 452nd Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 205 feet deep located in the center of the SW 1/4 Section

32 for irrigation of 152 acres located in the SW 1/4 Section 32; all in T98N-R53W.

Application No. 7715-3 filed by Allen Vannorsdel, 45515 288th St, Viborg SD 57070 proposes to appropriate 2.22 cfs from one well to be approximately 160 feet deep located in the center of the SW 1/4 Section 16 for irrigation of 156 acres located in the SW 1/4 Section 16; all in T97N-R53W. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3 from the West Management Unit of the Upper Vermillion Missouri Aquifer 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.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose a specific application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 AM, on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E Capitol Ave, Pierre SD. The agenda time is an estimate. The \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17. This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2, 46-5-26, 46-5-30.2 thru 46-5-

gal counsel is obtained. The party that previously petitioned as an intervenor retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notice must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17. This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

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30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49, 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:02.

Steven M. Pinner, Secretary, Department of Environment and Natural Resources. Published once at an approximate cost of \$392.57. 1435497 Feb. 13, 2014

NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed in 2012 and 2013. The Chief Engineer recommended deferral because at the time it was not possible to conclude that unappropriated water was available from the

RECEIVED

FEB 18 2014

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
Water Rights Program - Joe Foss Building
523 East Capitol
Pierre, SD 57501

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Hearing on Applications

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 13th DAY OF February 2014
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$190.99 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 2/13/2014

FILED ON: 2/13/2014

2+13

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tions were formally deferred by
the Water Management Board
pending study of the UVM aquif-
er. Two other applications
(Nos. 7690-3 and 7919-3) are cur-
rently public noticed for a March
6, 2014, hearing with a recom-
mendation of deferral.

The South Dakota Geologic Sur-
vey (SDGS) conducted work in
2013 - 2014 which established
new boundaries for the main body
of the aquifer. This work done by
the SDGS has been analyzed by

SUBSCRIBED AND SWORN TO BEFORE ME THIS 13th DAY OF February

2014

Murrel R. Platt
NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 6/11/2019

the Water Rights Program and provides identifiable geologic and hydrologic data documenting two boundaries establishing three management units within the UVM aquifer. The Water Rights Program is proposing designating North, South and West management units of the UVM aquifer. Observation well data and a flow net analysis has been conducted on each management unit to determine whether unappropriated water is available.

All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at <http://denr.sd.gov/des/wr/pubnotice.aspx> or by contacting the Water Rights Program at (605) 773-3352.

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Engineer and no petition to oppose a specific application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board. In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 AM on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave, Pierre SD. The agenda time is an estimate. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny these applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support specific applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation on their applications. 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 are given above. A petition filed by either an interested person or the applicant must be filed by February 24, 2014. The petition may be informal but shall be in writing and shall include a statement describing the petitioner's interest in any of the applications, the petitioner's reasons for opposing or supporting specific applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervenor retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date

will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7), notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9; 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31, 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49, 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01 thru 74:02:01:35.01, 74:02:01:25.02, 74:02:01:35.01.

Steven M. Pimer, Secretary, Department of Environment and Natural Resources
Published once at an approximate cost of \$190.99.

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WATER RIGHTS
PROGRAM

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PLAIN TALK

DENR
Joe Foss Building
523 East Capitol
Pierre, SD 57501

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

*Plain Talk
201 W Cherry St
Vermillion 57069*

TERA SCHMIDT BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT SHE IS THE CLASSIFIED MANAGER OF YANKTON
MEDIA INC., A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED AND CIRCULATED
IN THE CITY OF VERMILLION, SAID COUNTY AND STATE, AND ONE OF THE
OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS STATED IN THIS
AFFIDAVIT; THAT THE ANNEXED
Applications to Appropriate Water

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 14 DAY OF February 2014
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$190.99 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 2/14/14

FILED ON: 2/13/14

Tera A Schmidt

SUBSCRIBED AND SWORN TO BEFORE ME THIS 18th DAY OF February

[Signature]
NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 8/19/2015

**NOTICE OF HEARING ON
APPLICATIONS TO
APPROPRIATE WATER FROM
MANAGEMENT UNITS OF
THE UPPER VERMILLION
MISSOURI AQUIFER**

Twenty one applications propos-
ing to appropriate water for irriga-
tion from the Upper Vermillion
Missouri (UVM) aquifer were
filed in 2012 and 2013. The Chief
Engineer recommended deferral
because at the time it was not pos-
sible to conclude that unappropri-
ated water was available from the
aquifer. Nineteen of the applica-
tions were formally deferred by
the Water Management Board
pending study of the UVM aquifer.
Two other applications
(Nos. 7690-3 and 7919-3) are cur-
rently public noticed for a March
6, 2014, hearing with a recom-
mendation of deferral.

The South Dakota Geologic Sur-
vey (SDGS) conducted work in
2013 - 2014 which established
new boundaries for the main body
of the aquifer. This work done by
the SDGS has been analyzed by
the Water Rights Program and
provides identifiable geologic and
hydrologic data documenting two
boundaries establishing three
management units within the
UVM aquifer. The Water Rights
Program is proposing designating
North, South and West manage-
ment units of the UVM aquifer.
Observation well data and a flow
net analysis has been conducted
on each management unit to deter-
mine whether unappropriated wa-
ter is available.

All UVM applications are now
scheduled before the Water Man-
agement Board for consideration.
The Chief Engineer has revised
the recommendation to approval
for those applications within the
boundary of the South Manage-
ment Unit and the West Manage-
ment Unit. The Chief Engineer
recommends that applications
within the North Management
Unit remain deferred. The report
to the Chief Engineer and the rec-
ommendations are available at
[http://denr.sd.gov/des/wr/pubno-
tice.aspx](http://denr.sd.gov/des/wr/pubnotice.aspx) or by contacting the Wa-
ter Rights Program at (605)
773-3352.

This notice schedules a hearing
before the Water Management
Board beginning at 10:30 AM, on
Thursday, March 6, 2014, in the
Floyd Matthew Training Center,
Joe Foss Building, 523 E Capitol
Avenue, Pierre SD. Listed below
is a description of each applica-
tion, the Chief Engineer's recom-
mendation, and the procedure to
file a petition to intervene in the
hearing process.

South Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7441-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be approximately 175 feet deep located in the center of the SE 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4 Section 8; all in T95N-R52W.

Application No. 7442-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to irrigate 40 additional acres. Water Right No. 5982-3 authorizes 1.64 cubic feet of water per second (cfs) from one well that is 165 feet deep located in the SE 1/4 NW 1/4 Section 17 to irrigate 115 acres located in the NW 1/4 Section 17; all in T95N-R52W. The application is proposing to irrigate an additional 40 acres located in the W 1/2 NE 1/4 Section 17-T95N-R52W from the existing well. This application, if approved does not author-

ize any increase in the developed diversion rate. The Water Management Board did authorize a change in the location of acres without an increase in the diversion rate authority or acres authorized by Water Right No. 5982-3.

Application No. 7466-3 filed by Bethel Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD. 57108 proposes to appropriate 1.78 cfs from one well to be approximately 169 feet deep located in approximate center of the NE 1/4 Section 5 for irrigation of 152 acres located in the NE 1/4 Section 5; all in T96N-R51W.

Application No. 7467-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 134 feet deep located in the approximate center of the NW 1/4 Section 13 for irrigation of 152 acres located in the NW 1/4 Section 13; all in T97N-R52W.

Application No. 7600-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 3.56 cfs from two wells to be approximately 200 feet deep located in the NE 1/4 NW 1/4 and the approximate center of the SW 1/4 Section 12 for irrigation of 180 acres located in the NW 1/4, N 1/2 SW 1/4 Section 12; all in T96N-R52W. The applicant is proposing to locate a pivot in the center of SW 1/4 Section 12 to irrigate the entire SW 1/4. A portion of Water Permit No. 7128-3 held by Paul Shubeck authorizes irrigation of the S 1/2 SW 1/4 Section 12-T96N-R52W.

Application No. 7601-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 200 feet deep located in the approximate center of the NE 1/4 Section 25 to irrigate 132 acres located in the NE 1/4 Section 25; all in T97N-R53W.

Application No. 7603-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 150 feet deep located in the approximate center of the NE 1/4 Section 33 to irrigate 120 acres located in the NE 1/4 Section 33; all in T97N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7623-3 filed by Darrell Osborn, 28838 463rd Ave, Centerville SD 57014 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the SE 1/4 NW 1/4 Section 24 for irrigation of 140 acres located in the NW 1/4, W 1/2 NE 1/4 Section 24; all in T97N-R52W.

Application No. 7653-3 filed by Jeremiah Welsh, 29217 460th Ave, Centerville SD 57014 proposes to appropriate 1.67 cfs from one well to be approximately 180 feet deep located in the approximate center of the SW 1/4 Section 8 for irrigation of 85 acres located in the W 1/2 SW 1/4, NE 1/4 SW 1/4 Section 8; all in T96N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7690-3 filed by Tim or David Ostrem, 45924 300 St, Wakonda SD 57073 proposes to appropriate 1.78 cfs from one well to be approximately 50 - 90 feet deep located in the center of the NE 1/4 Section 29 for irrigation of 160 acres located in the NE 1/4, E 1/2 NW 1/4 Section 29; all in T96N-R52W.

Application No. 7900-3 filed by Leon Thompson, 401 S 11th St, Beresford SD 57004 proposes to appropriate 1.89 cfs from one well to be approximately 151 feet deep located in the NW 1/4 NE 1/4 Section 6 for irrigation of 136 acres located in the NE 1/4 Section 6; all in T95N-R51W.

Application No. 7919-3 filed by Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 proposes to appropriate 1.83 cfs from one well to be approximately 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3 from the South Management Unit of the Upper Vermillion Missouri Aquifer 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.

North Management Unit of the Upper Vermillion Missouri Aquifer (Deferral Recommendation)

Application No. 7452-3 filed by Jerome Hult, 45958 Hwy 18, Davis SD 57021 proposes to appropriate 1.78 cfs from one well to be approximately 190 feet deep located in SW 1/4 NE 1/4 Section 32 for irrigation of 110 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7468-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well approximately 134 feet deep located in the approximate center of the NE 1/4 Section 26 for irrigation of 152 acres located in the NE 1/4 Section 26; all in T98N-R52W.

Application No. 7558-3 filed by Cleland Trust, 38736 Nasturtium Way, Palm Desert CA 92211 has filed an application for a water permit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

Application No. 7587-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 100 feet deep located in the approximate center of the SE 1/4 Section 10 for irrigation of 160 acres located in the SW 1/4 Section 10; all in T98N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends continuing DEFERRAL of Application Nos. 7452-3, 7468-3, 7558-3 and 7587-3 from the North Management Unit of the Upper Vermillion Missouri Aquifer until information is available to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

West Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7535-3 filed by Donald D Benson, 45067 284th St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 220 feet deep located in the SW 1/4 NW 1/4 Section 30 for irrigation of 65 acres located in the NW 1/4 Section 30; all in T98N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7588-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 145 feet deep located in the approximate center of the SW 1/4 Section 19 to irrigate 160 acres located in the SW 1/4 Section 19; all in T98N-R53W.

Application No. 7602-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the approximate center between the NW 1/4 and the NE 1/4 Section 34 for irrigation of 132 acres located in the E 1/2 NW 1/4 and the W 1/2 NE 1/4 Section 34; all in T97N-R53W.

Application No. 7633-3 filed by Brad Farrar, 28795 452nd Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 205 feet deep located in the center of the SW 1/4 Section 32 for irrigation of 152 acres located in the SW 1/4 Section 32; all in T98N-R53W.

Application No. 7715-3 filed by Allen Vannorsdel, 45515 288th St, Viborg SD 57070 proposes to appropriate 2.22 cfs from one well to be approximately 160 feet deep located in the center of the SW 1/4 Section 16 for irrigation of 156 acres located in the SW 1/4 Section 16; all in T97N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3 from the West Management Unit of the Upper Vermillion Missouri Aquifer 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.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose a specific application is re-

ceived, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 AM. on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave. Pierre SD. The agenda time is an estimate. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support specific applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation on their applications. 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 are given above. A petition filed by either an interested person or the applicant must be filed by February 24, 2014. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in any of the applications, the petitioner's reasons for opposing or supporting specific applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervener retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

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

Board Rules ARSD 74:02:01:01 thru 74:02:01:25:02; 74:02:01:35:01.

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

Published once at an approximate cost of \$190.99.

Published February 14, 2014.

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WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Lincoln) SS

I, Rebecca Schmitt

certify that the attached printed Notice was taken

from the Lennox

Independent

printed and published in Lennox

County of Lincoln and

state of South Dakota. The notice was published

in the newspaper on the following date:

2-13-14

Cost of Printing \$159.25

Rebecca Schmitt
(Signature)

Publisher
(Title)

2-18-14
(Date Signed)

NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed in 2012 and 2013. The Chief Engineer recommended deferral because at the time it was not possible to conclude that unappropriated water was available from the aquifer. Nineteen of the applications were formally deferred by the Water Management Board pending study of the UVM aquifer. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

The South Dakota Geologic Survey (SDGS) conducted work in 2013 and 2014 which established new boundaries for the main body of the aquifer. This work done by the SDGS has been analyzed by the Water Rights Program and provides identifiable geologic and hydrologic data documenting two boundaries establishing three management units within the UVM aquifer. The Water Rights Program is proposing designating North, South and West management units of the UVM aquifer. Observation well data and a flow net analysis has been conducted on each management unit to determine whether unappropriated water is available.

All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at <http://dwd.sd.gov/des/wr/pubnotice.aspx> or by contacting the Water Rights Program at (605) 773-3352.

This notice schedules a hearing before the Water Management Board beginning at 10:30 AM, on Thursday, March 6, 2014, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. Listed below is a description of each application, the Chief Engineer's recommendation, and the procedure to file a petition to intervene in the hearing process.

South Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7441-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be approximately 175 feet deep located in the center of the SE 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4 Section 8; all in T95N-R52W.

Application No. 7442-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to irrigate 40 additional acres. Water Right No. 5982-3 authorizes 1.64 cubic feet of water per second (cfs) from one well that is 165 feet deep located in the SE 1/4 NW 1/4 Section 17 to irrigate 115 acres located in the NW 1/4 Section 17; all in T95N-R52W. The application is proposing to irrigate an additional 40 acres located in the W 1/2 NE 1/4 Section 17-T95N-R52W from the existing well. This application, if approved does not authorize any increase in the developed diversion rate. The Water Management Board did authorize a change in the location of acres without an increase in the diversion rate authority or acres authorized by Water Right No. 5982-3.

Application No. 7466-3 filed by Bethel Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 169 feet deep located in approximate center of the NE 1/4 Section 5 for irrigation of 152 acres located in the NE 1/4 Section 5; all in T96N-R51W.

Application No. 7467-3 filed by Oeland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 134 feet deep located in the approximate center of the NW 1/4 Section 13 for irrigation of 152 acres located in the NW 1/4 Section 13; all in T97N-R52W.

Application No. 7600-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 3.56 cfs from two wells to be approximately 200 feet deep located in the NE 1/4 NW 1/4 and the approximate center of the SW 1/4 Section 12 for irrigation of 180 acres located in the NW 1/4, N 1/2 SW 1/4 Section 12; all in T96N-R52W. The applicant is proposing to locate a pivot in the center of SW 1/4 Section 12 to irrigate the entire SW 1/4. A portion of Water Permit No. 7128-3 held by Paul Shubeck authorizes irrigation of the SW 1/2 SW 1/4 Section 12-T96N-R52W.

Application No. 7601-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 200 feet deep located in the approximate center of the NE 1/4 Section 25 to irrigate 132 acres located in the NE 1/4 Section 25; all in T97N-R53W.

Application No. 7603-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 150 feet deep located in the approximate center of the NE 1/4 Section 33 to irrigate 120 acres located in the NE 1/4 Section 33; all in T97N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7623-3 filed by Darrell Osborn, 28838 463rd Ave, Centerville SD 57014 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the SE 1/4 NW 1/4 Section 24 for irrigation of 140 acres located in the NW 1/4, W 1/2 NE 1/4 Section 24; all in T97N-R52W.

Application No. 7653-3 filed by Jeremiah Welsh, 29217 460th Ave, Centerville SD 57014 proposes to appropriate 1.67 cfs from one well to be approximately 180 feet deep located in the approximate center of

85 acres located in the W 1/2 SW 1/4, NE 1/4 SW 1/4 Section 8; all in T96N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7690-3 filed by Tim or David Ostrem, 45924 300 St, Wakonda SD 57073 proposes to appropriate 1.78 cfs from one well to be approximately 50 - 90 feet deep located in the center of the NE 1/4 Section 29 for irrigation of 160 acres located in the NE 1/4; E 1/2 NW 1/4 Section 29; all in T96N-R52W.

Application No. 7900-3 filed by Leon Thompson, 401 S 11th St, Beresford SD 57004 proposes to appropriate 1.89 cfs from one well to be approximately 151 feet deep located in the NW 1/4 NE 1/4 Section 6 for irrigation of 136 acres located in the NE 1/4 Section 6; all in T95N-R51W.

Application No. 7919-3 filed by Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 proposes to appropriate 1.83 cfs from one well to be approximately 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3 from the South Management Unit of the Upper Vermillion Missouri Aquifer 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.

North Management Unit of the Upper Vermillion Missouri Aquifer (Deferral Recommendation)

Application No. 7452-3 filed by Jerome Hult, 45958 Hwy 18, Davis SD 57021 proposes to appropriate 1.78 cfs from one well to be approximately 190 feet deep located in SW 1/4 NE 1/4 Section 32 for irrigation of 110 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7468-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well approximately 134 feet deep located in the approximate center of the NE 1/4 Section 26 for irrigation of 152 acres located in the NE 1/4 Section 26; all in T98N-R52W.

Application No. 7558-3 filed by Cleland Trust, 38736 Nasturtium Way, Palm Desert CA 92211 has filed an application for a water permit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

Application No. 7587-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 100 feet deep located in the approximate center of the SE 1/4 Section 10 for irrigation of 160 acres located in the SW 1/4 Section 10; all in T98N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends continuing DEFERRAL of Application Nos. 7452-3, 7468-3, 7558-3 and 7587-3 from the North Management Unit of the Upper Vermillion Missouri Aquifer until information is available to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

West Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7535-3 filed by Donald D Benson, 45067 284th St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 220 feet deep located in the SW 1/4 NW 1/4 Section 30 for irrigation of 65 acres located in the NW 1/4 Section 30; all in T98N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7588-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 145 feet deep located in the approximate center of the SW 1/4 Section 19 to irrigate 160 acres located in the SW 1/4 Section 19; all in T98N-R53W.

Application No. 7602-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the approximate center between the NW 1/4 and the NE 1/4 Section 34 for irrigation of 132 acres located in the E 1/2 NW 1/4 and the W 1/2 NE 1/4 Section 34; all in T97N-R53W.

Application No. 7633-3 filed by Brad Farrar, 28795 452nd Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 205 feet deep located in the center of the SW 1/4 Section 32 for irrigation of 152 acres located in the SW 1/4 Section 32; all in T98N-R53W.

Application No. 7715-3 filed by Allen Vannorsdel, 45515 288th St, Viborg SD 57070 proposes to appropriate 2.22 cfs from one well to be approximately 160 feet deep located in the center of the SW 1/4 Section 16 for irrigation of 156 acres located in the SW 1/4 Section 16; all in T97N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3 from the West Management Unit of the Upper Vermillion Missouri Aquifer 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.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose a specific application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of

public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 A.M. on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave. Pierre SD. The agenda time is an estimate. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support specific applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation on their applications. 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 are given above. A petition filed by either an interested person or the applicant must be filed by February 24, 2014. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in any of the applications, the petitioner's reasons for opposing or supporting specific applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervenor retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

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

Published once at an approximate cost of \$159.25.

RECEIVED

FEB 24 2014

WATER RIGHTS
PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF TURNER

I, Robin Schneider of the City of Parker, County of Turner, State of South Dakota being first duly sworn on oath, deposes and says: The New Era is a weekly legal newspaper of general circulation, printed and published in the City of Parker, in said County of Turner, by The New Era, New Century Press, publishers, and has been such legal newspaper during the times hereinafter mentioned; that the said newspaper has been in existence as such legal newspaper for more than one year prior to the publication of the notice hereunto attached, and has during all of said publication of the notice hereunto attached, and has during all of said time had, and now has, more than 200 bona fide subscribers; that the undersigned, The affiant, is the Office Manager of the said newspaper, in charge of the advertisement department thereof and has personal knowledge of all the facts stated in this affidavit and the advertisement headed:

#5760 Notice of Hearing on Applications to Appropriate Water From
Management Units of the Upper Vermillion Missouri Aquifer

_____ printed copy of hereto attached, is printed and published in the said newspaper for one successive weeks, one each week and on the same day of the week, on the following dates, to wit:

On Thursday, the 13th day of Feb. , 2013

That \$160.53 being the full amount of the fees for publication of the attached notices insures solely for the benefits of the publishers of the said newspaper, that no arrangement or understanding for a division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

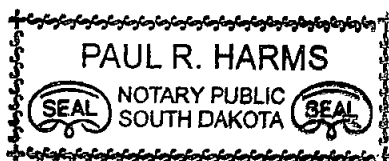
see attached

Robin Schneider
Subscribed and sworn to before me this 19th

Day of February 2014
Paul R. Harms
Notary Public, Turner County, South Dakota

My Commission Expires: March 20, 2018

Publication Fee \$
Notary Fees \$
Total \$160.53



**NOTICE OF HEARING ON
APPLICATIONS
TO APPROPRIATE WATER FROM
MANAGEMENT UNITS OF THE
UPPER VERMILLION MISSOURI
AQUIFER**

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed in 2012 and 2013. The Chief

Engineer recommended deferral because at the time it was not possible to conclude that unappropriated water was available from the aquifer. Nineteen of the applications were formally deferred by the Water Management Board pending study of the UVM aquifer. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

The South Dakota Geologic Survey (SDGS) conducted work in 2013 - 2014, which established new boundaries for the main body of the aquifer. This work done by the SDGS has been analyzed by the Water Rights Program and provides identifiable geologic and hydrologic data, documenting two boundaries establishing three management units within the UVM aquifer. The Water Rights Program is proposing designating North, South and West management units of the UVM aquifer. Observation well data and a flow net analysis has been conducted on each management unit to determine whether unappropriated water is available.

All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at <http://denr.sd.gov/des/wr/pubnotice.aspx> or by contacting the Water Rights Program at (605) 773-3352.

This notice schedules a hearing before the Water Management Board beginning at 10:30 a.m., on Thursday, March 6, 2014, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD. Listed below is a description of each application, the Chief Engineer's recommendation, and the procedure to file a petition to intervene in the hearing process.

South Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7441-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville, SD 57014 proposes to appropriate 1.78 cu-

bic feet of water per second (cfs) from one well to be approximately 175 feet deep located in the center of the SE 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4 Section 8; all in T95N-R52W.

Application No. 7442-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville, SD 57014 proposes to irrigate 40 additional acres. Water Right No. 5982-3 authorizes 1.64 cubic feet of water per second (cfs) from one well that is 165 feet deep located in the SE 1/4 NW 1/4 Section 17 to irrigate 115 acres located in the NW 1/4 Section 17; all in T95N-R52W. The application is proposing to irrigate an additional 40 acres located in the W 1/2 NE 1/4 Section 17-T95N-R52W from the existing well. This application, if approved does not authorize any increase in the developed diversion rate. The Water Management Board did authorize a change in the location of acres without an increase in the diversion rate authority or acres authorized by Water Right No. 5982-3.

Application No. 7466-3 filed by Bethel Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 169 feet deep located in approximate center of the NE 1/4 Section 5 for irrigation of 152 acres located in the NE 1/4 Section 5; all in T96N-R51W.

Application No. 7467-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls, SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 134 feet deep located in the approximate center of the NW 1/4 Section 13 for irrigation of 152 acres located in the NW 1/4 Section 13; all in T97N-R52W.

Application No. 7600-3 filed by Michael D Stevens, 28916 458th Ave, Viborg, SD 57070 proposes to appropriate 3.56 cfs from two wells to be approximately 200 feet deep located in the NE 1/4 NW 1/4 and the approximate center of the SW 1/4 Section 12 for irrigation of 180 acres located in the NW 1/4, N 1/2 SW 1/4 Section 12; all in T96N-R52W. The applicant is proposing to locate a pivot in the center of SW 1/4 Section 12 to irrigate the entire SW 1/4. A portion of Water Permit No. 7128-3 held by Paul Shubeck authorizes irrigation of the S 1/2 SW 1/4 Section 12-T96N-R52W.

Application No. 7601-3 filed by Michael D Stevens, 28916 458th Ave, Viborg, SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 200 feet deep located in the approximate center of the NE 1/4 Section 25 to irrigate 132 acres located in the NE 1/4 Section 25; all in T97N-R53W.

Application No. 7603-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 150 feet deep located in the approximate center of the NE 1/4 Section 33 to irrigate 120 acres located in the NE 1/4 Section 33; all in T97N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7623-3 filed by Darrell Osborn, 28838 463rd Ave, Centerville SD 57014 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the SE 1/4 NW 1/4 Section 24 for irrigation of 140 acres located in the NW 1/4, W 1/2 NE 1/4 Section 24; all in T97N-R52W.

Application No. 7653-3 filed by Jeremiah Welsh, 29217 460th Ave, Centerville SD 57014 proposes to appropriate 1.67 cfs from one well to be approximately 180 feet deep located in the approximate center of the SW 1/4 Section 8 for irrigation of 85 acres located in the W 1/2 SW 1/4, NE 1/4 SW 1/4 Section 8; all in T96N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7690-3 filed by Tim or David Ostrem, 45924 300 St, Wakonda SD 57073 proposes to appropriate 1.78 cfs from one well to be approximately 50 - 90 feet deep located in the center of the NE 1/4 Section 29 for irrigation of 160 acres located in the NE 1/4, E 1/2 NW 1/4 Section 29; all in T96N-R52W.

Application No. 7900-3 filed by Leon Thompson, 401 S 11th St, Beresford SD 57004 proposes to appropriate 1.89 cfs from one well to be approximately 151 feet deep located in the NW 1/4 NE 1/4 Section 6 for irrigation of 136 acres located in the NE 1/4 Section 6; all in T95N-R51W.

Application No. 7919-3 filed by Larry and Marlene Erickson, 29859 461st Ave, Centerville SD 57014 proposes to appropriate 1.83 cfs from one well to be approximately 75 feet deep located in the approximate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3 from the South Management Unit of the Upper Vermillion Missouri Aquifer 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.

North Management Unit of the Upper Vermillion Missouri Aquifer (Deferral Recommendation)

Application No. 7452-3 filed by Jerome Hult, 45958 Hwy 18, Davis, SD 57021 proposes to appropriate 1.78 cfs from one well to be approximately 190 feet deep located in SW 1/4 NE 1/4 Section 32 for irrigation of 110 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

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Application No. 7558-3 filed by Cleland Trust, 38736 Nasturtium Way, Palm Desert, CA 92211 has filed an application for a water permit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

Application No. 7587-3 filed by Paul Petersen, 45610 282nd St, Hurley, SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 100 feet deep located in the approximate center of the SE 1/4 Section 10 for irrigation of 160 acres located in the SW 1/4 Section 10; all in T98N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends continuing DEFERRAL of Application Nos. 7452-3, 7468-3, 7558-3 and 7587-3 from the North Management Unit of the Upper Vermillion Missouri Aquifer until information is available to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use.

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

West Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3 from the West Management Unit of the Upper Vermillion Missouri Aquifer

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.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose a specific application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 a.m. on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave. Pierre, SD. The agenda time is an estimate. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts presented at the public hearing.

Any interested person who in-

tends to participate in the hearing shall file a petition to oppose or support specific applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation on their applications. 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 are given above. A petition filed by either an interested person or the applicant must be filed by Feb. 24, 2014. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in any of the applications, the petitioner's reasons for opposing or supporting specific applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervener retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for

at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by Feb. 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by Feb. 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL

1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is Feb. 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1; 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

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

Published once at the total approximate cost of \$160.53.

(#5760,02/13/14, The New Era)

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)

:SS

COUNTY OF TURNER)

Allyson M. Hill, being first duly sworn, on oath says the CENTERVILLE JOURNAL is a WEEKLY newspaper published in CENTERVILLE in said county of TURNER, State of South Dakota; and that she is authorized to and does make this affidavit on behalf of said CENTERVILLE JOURNAL; that affiant has personal knowledge of all facts stated in this affidavit; that said newspaper is a legal newspaper as defined by SDCL 17-2-2.1 through 17-2-2.4 inclusive as amended, has a bona fide circulation of at least two hundred copies WEEKLY, has been published in the English language within said county and has been admitted to the United States mail under the second class mailing privilege, for at last one year continuously 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 said notice, a printed copy of which taken from the paper in which the same was published is hereto attached and is made part of this affidavit, was published in said newspaper

1 time(s) as follows: that the first publication of said

notice in said newspaper aforesaid was on Thursday

the 13 day of February, 2014,

and that the succeeding publications were severally

on Thursday, the ____ day of _____, 2014;

on Thursday, the ____ day of _____, 2014;

on Thursday, the ____ day of _____, 2014;

on Thursday, the ____ day of _____, 2014;

Affiant further says that the full amount of the fees charged for the publication of said notice inures to the benefit of the publishers of said newspaper; that no agreement of understanding for the division thereof has been made with any other person, that no part therefore has been agreed to be paid to any person whomsoever; and that the fees charged for the publication thereof are:

DOLLARS (\$) 147³⁸

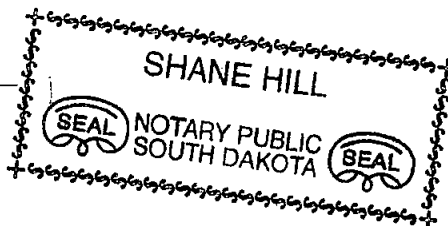
(x) Allyson M. Hill Allyson M. Hill

Subscribed and sworn to before me this 27 day of

February, 2014

Notary Public

My commission expires 11/14/2018.



NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed in 2012 and 2013. The Chief Engineer recommended deferral because at the time it was not possible to conclude that unappropriated water was available from the aquifer. Nineteen

of the applications were formally deferred by the Water Management Board pending study of the UVM aquifer. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

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All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at <http://lenr.sd.gov/des/wr/pubnotice.aspx> or by contacting the Water Rights Program at (605) 773-3352.

This notice schedules a hearing before the Water Management Board beginning at 10:30 AM, on Thursday,

March 6, 2014, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. Listed below is a description of each application, the Chief Engineer's recommendation, and the procedure to file a petition to intervene in the hearing process.

South Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7441-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be approximately 175 feet deep located in the center of the SE 1/4 Section 8 for irrigation of 140 acres located in the SE 1/4 Section 8; all in T95N-R52W.

Application No. 7442-3 filed by Gary E or Julie A Peterson, 45913 299th St, Centerville SD 57014 proposes to irrigate 40 additional acres. Water Right No. 5982-3 authorizes 1.64 cubic feet of water per second (cfs) from one well that is 165 feet deep located in the SE 1/4 NW 1/4 Section 17 to irrigate 115 acres located in the NW 1/4 Section 17; all in T95N-R52W. The application is proposing to irrigate an additional 40 acres located in the W 1/2 NE 1/4 Section 17-T95N-R52W from the existing well. This application, if approved does not authorize any increase in the developed diversion rate. The Water Management Board did authorize a change in the location of acres without an increase in the diversion rate authority or acres authorized by Water Right No. 5982-3.

Application No. 7466-3 filed by Bethel Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 169 feet deep located in approximate center of the NE 1/4 Section 5 for irrigation of 152 acres located in the NE 1/4 Section 5; all in T96N-R51W.

Application No. 7467-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well to be approximately 134 feet deep located in the approximate center of the NW 1/4 Section 13 for irrigation of 152 acres located in the NW 1/4 Section 13; all in T97N-R52W.

Application No. 7600-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 3.56 cfs from two wells to be approximately 200 feet deep located in the NE 1/4 NW 1/4 and the approximate center of the

SW 1/4 Section 12 for irrigation of 180 acres located in the NW 1/4, N 1/2 SW 1/4 Section 12; all in T96N-R52W. The applicant is proposing to locate a pivot in the center of SW 1/4 Section 12 to irrigate the entire SW 1/4. A portion of Water Permit No. 7128-3 held by Paul Shubeck authorizes irrigation of the S 1/2 SW 1/4 Section 12-T96N-R52W.

Application No. 7601-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 200 feet deep located in the approximate center of the NE 1/4 Section 25 to irrigate 132 acres located in the NE 1/4 Section 25; all in T97N-R53W.

Application No. 7603-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 150 feet deep located in the approximate center of the NE 1/4 Section 33 to irrigate 120 acres located in the NE 1/4 Section 33; all in T97N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7623-3 filed by Darrell Osborn, 28838 463rd Ave, Centerville SD 57014 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the SE 1/4 NW 1/4 Section 24 for irrigation of 140 acres located in the NW 1/4, W 1/2 NE 1/4 Section 24; all in T97N-R52W.

Application No. 7653-3 filed by Jeremiah Welsh, 29217 460th Ave, Centerville SD 57014 proposes to appropriate 1.67 cfs from one well to be approximately 180 feet deep located in the approximate center of the SW 1/4 Section 8 for irrigation of 85 acres located in the W 1/2 SW 1/4, NE 1/4 SW 1/4 Section 8; all in T96N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7690-3 filed by Tim or David Ostrem, 45924 300 St, Wakonda SD 57073 proposes to appropriate 1.78 cfs from one well to be approximately 50 - 90 feet deep located in the center of the NE 1/4 Section 29 for irrigation of 160 acres located in the NE 1/4, E 1/2 NW 1/4 Section 29; all in T96N-R52W.

Application No. 7900-3 filed by Leon Thompson, 401 S 11th St, Beresford SD 57004 proposes to appropriate 1.89 cfs from one well to be approximately 151 feet deep located in the NW 1/4 NE 1/4 Section 6 for irrigation of 136 acres located in the NE 1/4 Section 6; all in T95N-R51W

Application No. 7919-3 filed by Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014 proposes to appropriate 1.83 cfs from one well to be approximately 75 feet deep located in the approxi-

mate center of the NE 1/4 Section 9 for irrigation of 83.83 acres located in the NE 1/4 Section 9; all in T95N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7441-3, 7442-3, 7466-3, 7467-3, 7600-3, 7601-3, 7603-3, 7623-3, 7653-3, 7690-3, 7900-3 and 7919-3 from the South Management Unit of the Upper Vermillion Missouri Aquifer 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.

North Management Unit of the Upper Vermillion Missouri Aquifer (Deferral Recommendation)

Application No. 7452-3 filed by Jerome Hult, 45958 Hwy 18, Davis SD 57021 proposes to appropriate 1.78 cfs from one well to be approximately 190 feet deep located in SW 1/4 NE 1/4 Section 32 for irrigation of 110 acres located in the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 32; all in T98N-R52W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7468-3 filed by Cleland Hagen Trust, c/o Bruce Hagen, 1300 W Murphy Dr. Sioux Falls SD 57108 proposes to appropriate 1.78 cfs from one well approximately 134 feet deep located in the approximate center of the NE 1/4 Section 26 for irrigation of 152 acres located in the NE 1/4 Section 26; all in T98N-R52W.

Application No. 7558-3 filed by Cleland Trust, 38736 Nasturtium Way, Palm Desert CA 92211 has filed an application for a water permit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

Application No. 7587-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 100 feet deep located in the approximate center of the SE 1/4 Section 10 for irrigation of 160 acres

located in the SW 1/4 Section 10; all in T98N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends continuing DEFERRAL of Application Nos. 7452-3, 7468-3, 7558-3 and 7587-3 from the North Management Unit of the Upper Vermillion Missouri Aquifer until information is available to determine if there is reasonable probability that there is unappropriated water available for the applicant's proposed use. Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available.

West Management Unit of the Upper Vermillion Missouri Aquifer (Approval Recommendation)

Application No. 7535-3 filed by Donald D Benson, 45067 284th St, Hurley SD 57036 proposes to appropriate 1.78 cfs from one well to be approximately 220 feet deep located in the SW 1/4 NW 1/4 Section 30 for irrigation of 65 acres located in the NW 1/4 Section 30; all in T98N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 7588-3 filed by Paul Petersen, 45610 282nd St, Hurley SD 57036 proposes to appropriate

1.78 cfs from one well to be approximately 145 feet deep located in the approximate center of the SW 1/4 Section 19 to irrigate 160 acres located in the SW 1/4 Section 19; all in T98N-R53W.

Application No. 7602-3 filed by Michael D Stevens, 28916 458th Ave, Viborg SD 57070 proposes to appropriate 1.89 cfs from one well to be approximately 140 feet deep located in the approximate center between the NW 1/4 and the NE 1/4 Section 34 for irrigation of 132 acres located in the E 1/2 NW 1/4 and the W 1/2 NE 1/4 Section 34; all in T97N-R53W.

Application No. 7633-3 filed by Brad Farrar, 28795 452nd Ave, Viborg SD 57070 proposes to appropriate 1.78 cfs from one well to be approximately 205 feet deep located in the center of the SW 1/4 Section 32 for irrigation of 152 acres located in the SW 1/4 Section 32; all in T98N-R53W.

Application No. 7715-3 filed by Allen Vannorsdel, 45515 288th St, Viborg SD 57070 proposes to appropriate 2.22 cfs from one well to be approximately 160 feet deep located in the center of the SW 1/4 Section 16 for irrigation of 156 acres located in the SW 1/4 Section 16; all in T97N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7535-3, 7588-3, 7602-3, 7633-3 and 7715-3 from the West Management Unit of the Upper Vermillion Missouri Aquifer 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.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose a specific application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard.

The Water Management Board will consider these applications beginning at 10:30 AM. on Thursday, March 6, 2014, in the Matthew Training Center, Joe Foss Building, 523 E. Capitol Ave. Pierre SD. The agenda time is an estimate. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support specific applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation on their applications. 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 are given above. A petition filed by either an interested person or the applicant must be filed by February 24, 2014. The petition may be informal, but shall be in writing and shall include a state-

ment describing the petitioner's interest in any of the applications, the petitioner's reasons for opposing or supporting specific applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervener retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of

\$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

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

Published once at an approximate cost of \$147.38

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)

:SS

COUNTY OF TURNER)

Allyson M. Hill, being first duly sworn, on oath says the VIBORG ENTERPRISE is a WEEKLY newspaper published in VIBORG in said county of TURNER, State of South Dakota; and that she is authorized to and does make this affidavit on behalf of said VIBORG ENTERPRISE; that affiant has personal knowledge of all facts stated in this affidavit; that said newspaper is a legal newspaper as defined by SDCL 17-2-2.1 through 17-2-2.4 inclusive as amended, has a bona fide circulation of at least two hundred copies WEEKLY, has been published in the English language within said county and has been admitted to the United States mail under the second class mailing privilege, for at last one year continuously 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 said notice, a printed copy of which taken from the paper in which the same was published is hereto attached and is made part of this affidavit, was published in said newspaper

1 time(s) as follows: that the first publication of said

notice in said newspaper aforesaid was on Thursday

the 13 day of February, 2014,

and that the succeeding publications were severally

on Thursday, the ____ day of _____, 2014;

on Thursday, the ____ day of _____, 2014;

on Thursday, the ____ day of _____, 2014;

on Thursday, the ____ day of _____, 2014;

Affiant further says that the full amount of the fees charged for the publication of said notice inures to the benefit of the publishers of said newspaper; that no agreement of understanding for the division thereof has been made with any other person, that no part therefore has been agreed to be paid to any person whomsoever; and that the fees charged for the publication thereof are:

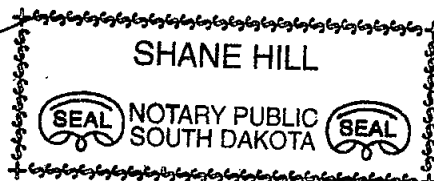
DOLLARS (\$) 147³⁸
(x) Allyson M. Hill, Allyson M. Hill

Subscribed and sworn to before me this 27 day of

February, 2014

Notary Public

My commission expires 11/14/2018



NOTICE OF HEARING ON APPLICATIONS TO APPROPRIATE WATER FROM MANAGEMENT UNITS OF THE UPPER VERMILLION MISSOURI AQUIFER

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed in 2012 and 2013. The Chief Engineer recommended deferral because at the time it was not possible to conclude that unappropriated water was available from the aquifer. Nineteen of the applications were formally deferred by the Water Management Board pending study of the UVM aquifer. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

The South Dakota Geologic Survey (SDGS) conducted work in 2013 - 2014 which established new boundaries for the main body of the aquifer. This work done by the SDGS has been analyzed by the Water Rights Program and provides identifiable geologic and hydrologic data documenting two boundaries establishing three management units within the UVM aquifer. The Water Rights Program is proposing designating North, South and West management units of the UVM aquifer. Observation well data and a flow net analysis has been conducted on each management unit to determine whether unappropriated water is available.

All UVM applications are now scheduled before the Water Management Board for consideration. The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and the West Management Unit. The Chief Engineer recommends that applications within the North Management Unit remain deferred. The report to the Chief Engineer and the recommendations are available at <http://denr.sd.gov/des/wr/pubnotice.aspx> or by contacting the Water Rights Program at (605) 773-3352.

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Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. Listed below is a description of each application, the Chief Engineer's recommendation, and the procedure to file a petition to intervene in the hearing process.

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mit to appropriate 1.78 cfs from one well to be approximately 275 feet deep located in the approximate center between the NW 1/4 and the SW 1/4 Section 1 for irrigation of 120 acres located in the N 1/2 SW 1/4, S 1/2 NW 1/4 Section 1; all in T98N-R52W.

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the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The party that previously petitioned as an intervener retains party status. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 6, 2014, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support of an above listed application. The request for an automatic delay must be filed by February 24, 2014. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to the applicants and to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 24, 2014 at the above Chief Engineer's address to request copies of the staff report, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 24, 2014. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to this application: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

*Steven M. Pirner, Secretary,
Department of Environment and
Natural Resources
Published once at an approximate
cost of \$147.38.*

February 18, 2014

PAYMENT REQUEST FORM

PAYEE: Argus Leader
PO Box 677349
Dallas TX 75267-7349

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Notice of Hearing for UVM Aquifer permits # 1435497

AMOUNT: \$392.57

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:

Nail Jackson 2-18-14

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

February 19, 2014

PAYMENT REQUEST FORM

PAYEE: Daily Press & Dakotan
319 Walnut
Yankton SD 57078

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Public notice for UVM hearing

AMOUNT: \$190.99

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:

Gail Jacobson 2-19-14

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

February 21, 2014

PAYMENT REQUEST FORM

PAYEE: Plain Talk
201 W Cherry St
Vermillion SD 57069

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Public notice for UVM hearing

AMOUNT: \$190.99

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:

Gail Jackson 2-21-14

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

February 21, 2014

PAYMENT REQUEST FORM

PAYEE: Lennox Independent
PO Box 76
Lennox SD 57039

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Public notice for UVM hearing #2286

AMOUNT: \$159.25

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:

Gail Jackson 2-21-14

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

February 24, 2014

PAYMENT REQUEST FORM

PAYEE: New Century Press (New Era)
PO Box 28
Rock Rapids IA 51246

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Public notice for UVM hearing # 5760

AMOUNT: \$160.53

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION: *Gail Jacobson - 2-24-14*

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

March 4, 2014

PAYMENT REQUEST FORM

PAYEE: Star Publishing
PO Box H
Centerville SD 57014

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Public notice for UVM hearing--Viborg & Centerville papers
#'s02132245 & 0212260 (\$147.38 each)

AMOUNT: \$294.76

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:

Gail Jackson 3-4-14

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

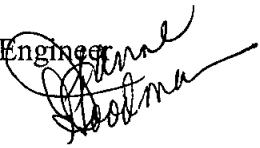
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



February 10, 2014

NOTICE

TO: A. Jason Rumpca, 103 N 3rd Street, Beresford SD 57004
Donald McCarty, PO Box 78, Brookings SD 57006
Gary or Julie Peterson, 45913 299th Street, Centerville SD 57014
Jerome Hult, 45958 Hwy 18, Davis SD 57021
Donald Benson, 45067 284th Street, Hurley SD 57036
Jeremiah Welsh, 29217 460th Avenue, Centerville SD 57014
Brad Farrar, 28795 452nd Avenue, Viborg SD 57070
Darrell Osborn, 28838 463rd Avenue, Centerville SD 57014
Michael D Stevens, 28916 458th Avenue, Viborg SD 57070
Paul Peterson, 45610 282nd Street, Hurley SD 57036
Dr Bruce Hagen, 1300 W Murphy Drive, Sioux Falls SD 57108
Dr Bruce Hagen, 38736 Nasturtium Way, Palm Desert, CA 92211
Allen Vannorsdel, 45515 288th Street, Viborg SD 57070
Leon Thompson, 401 S 11th Street, Beresford SD 57004
Tim or David Ostrem, 45924 300 St, Wakonda SD 57073
Larry and Marlene Erickson, 29859 461st Avenue, Centerville SD 57014

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program 

SUBJECT: Scheduling Hearing before Water Management Board on Deferred Applications for Irrigation from the Upper Vermillion Missouri Aquifer

Twenty one applications proposing to appropriate water for irrigation from the Upper Vermillion Missouri (UVM) aquifer were filed between the fall of 2012 through 2013. The Chief Engineer recommended deferral of the applications because at the time it was not possible to conclude that unappropriated water is available from the aquifer. Nineteen of the applications have been formally deferred by the Water Management Board until study of the UVM aquifer is completed. Two other applications (Nos. 7690-3 and 7919-3) are currently public noticed for a March 6, 2014, hearing with a recommendation of deferral.

The South Dakota Geologic Survey (SDGS) conducted work in 2013 and early 2014 which established new boundaries for the main body of the aquifer. This work done by the SDGS has been analyzed by the Water Rights Program and provides identifiable geologic and hydrologic data documenting two boundaries which if implemented, establish three management units within the UVM aquifer. The Water Rights Program is proposing designating North, South and West Management Units of the UVM aquifer. Each management unit was analyzed to determine the availability of unappropriated water. Enclosed is the staff report to the

Chief Engineer that provides 1) the basis for designation of the three management units, and 2) an evaluation of water availability for each unit.

The Chief Engineer has revised the recommendation to approval for those applications within the boundary of the South Management Unit and West Management Unit. Attached is a table that provides a listing of the proposed applications, the applicant and the management location where each application is located. Revised recommendations are enclosed to each applicant specific to the applications they have pending. For those applicants in the North Management Unit, the original recommendation for deferral remains in place. Those desiring to view all the revised recommendations may find them on-line at <http://denr.sd.gov/des/wr/pubnotice.aspx>.

This notice schedules a hearing before the Water Management Board on these applications beginning at 10:30 AM, on Thursday, March 6, 2014, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. The agenda time is an estimate and may be delayed due to prior agenda items.

A notice of hearing on the applications setting forth the management unit boundaries, the Chief Engineer's revised recommendations, and scheduling a March 6th hearing before the Water Management Board will be published the week of February 10, 2014, in accordance with SDCL 46-2A-4. Enclosed is the public notice.

If you have any questions regarding the report, revised recommendation, public notice or the water permitting process, please contact Eric Gronlund or Ken Buhler at (605) 773-3352.

Enclosures

c: Diane Best, Assistant Attorney General
Ann Mines, Assistant Attorney General

Pending Applications from the Upper Vermillion Missouri Aquifer Designated by Management Units

West Management Unit – recommend for approval

North Management Unit – recommend continued deferral

South Management Unit – recommend for approval

Permit No.	Applicant	Management Unit of UVM Aquifer	CFS	Well Location	Acres	Acre Location
7535-3	Donald Benson	West	1.78	SW¼ NW¼ Sec. 30, T98N-R53W	65	NW¼ Sec. 30, T98N-R53W
7588-3	Paul Peterson	West	1.78	SW¼ Sec. 19, T98N-R53W	160	SW¼ Sec. 19, T98N-R53W
7602-3	Michael Stevens	West	1.89	Between NW¼ & NE¼ Sec. 34, T97N-R53W	132	E½NW¼, W½NE¼ Sec. 34, T97N-R53W
7633-3	Brad Farrar	West	1.78	SW¼ Sec. 32, T98N-R53W	152	SW¼ Sec. 32, T98N-R53W
7715-3	Allen Vannorsdel	West	2.22	SW ¼ Section 16, T97N- R53W	156	SW ¼ Sec. 16, T97N-R53W
7452-3	Jerome Hult	North	1.78	SW¼NE¼ Sec. 32, T98N-R52W	110	W½NE¼, SE¼NE¼ Sec. 32, T98N-R52W
7468-3	Cleland Hagen Trust	North	1.78	NE¼ Sec. 26, T98N-R52W	152	NE¼ Sec. 26, T98N-R52W
7558-3	Cleland Hagen Trust	North	1.78	Between NW¼ & SW¼ Sec. 1, T98N-R52W	120	N½SW¼, S½NW¼ Sec. 1, T98N-R52W
7587-3	Paul Peterson	North	1.78	SE¼ Sec. 10, T98N-R53W	160	SW¼ Sec. 10, T98N-R53W
7441-3	Gary/Julie Peterson	South	1.79	SE¼ Sec. 8, T95N-R52W	140	SE¼ Sec. 8, T95N-R52W
7442-3	Gary/Julie Peterson	South	no add'l	NW¼ Sec. 17, T95N-R52W	40	W½ NE¼ Sec. 17, T95N-R52W
7466-3	Bethel Hagen Trust	South	1.78	NE¼ Sec. 5, T96N-R51W	152	NE¼ Sec. 5, T96N-R51W
7467-3	Cleland Hagen Trust	South	1.78	NW¼ Sec. 13, T97N-R52W	152	NW¼ Sec. 13, T97N-R52W
7600-3	Michael Stevens	South	3.56	NE¼NW¼ & SW¼ Sec. 12, T96N-R52W (2 wells)	180	NW¼, N½SW¼ Sec. 12, T96N-R52W
7601-3	Michael Stevens	South	1.89	NE¼ Sec. 25, T-97N-R53W	132	NE¼ Sec. 25, T97N-R53W
7603-3	Michael Stevens	South	1.78	NE¼ Sec. 33, T97N-R52W	120	NE¼ Sec. 33, T97N-R52W
7623-3	Darrel Osborn	South	1.89	SE¼NW¼ Sec. 24, T97N-R52W	140	NW¼, W½NE¼ Sec 24, T97N-R52W
7653-3	Jeremiah Welsh	South	1.67	SW¼ Sec. 8, T96N-R52W	85	W½SW¼, NE¼SW¼ Sec. 8, T96N-R52W
7690-3	Tim/David Ostrem	South	1.78	NE¼ Sec. 29, T96N-R52W	160	NE¼ Sec. 29, T95N-R52W
7900-3	Leon Thompson	South	1.89	NW¼NE¼ Sec.6, T95N-R51W	136	NE¼ Sec. 6, T95N-R51W
7919-3	Larry/Marlene Erickson	South	1.83	NE¼ Sec. 9, T95N-R52W	83.83	NE¼ Sec. 9, T95N-R52W

CERTIFICATION

I hereby certify that on February 11, 2014, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelope(s) containing a Notice dated February 11, 2014 regarding scheduling a hearing in the matter of Water Right Permit Nos. 7441-3, 7442-3, 7452-3, 7466-3, 7535-3, 7467-3, 7468-3, 7558-3, 7587-3, 7588-3, 7600-3, 7601-3, 7602-3, 7603-3, 7623-3, 7633-3, 7653-3, 7690-3, 7715-3, 7900-3, and 7919-3 as set forth below:

A. Jason Rumpca, 103 N 3rd Street, Beresford SD 57004
Donald McCarty, PO Box 78, Brookings SD 57006
Gary or Julie Peterson, 45913 299th Street, Centerville SD 57014
Jerome Hult, 45958 Hwy 18, Davis SD 57021
Donald Benson, 45067 284th Street, Hurley SD 57036
Jeremiah Welsh, 29217 460th Avenue, Centerville SD 57014
Brad Farrar, 28795 452nd Avenue, Viborg SD 57070
Darrell Osborn, 28838 463rd Avenue, Centerville SD 57014
Michael D Stevens, 28916 458th Avenue, Viborg SD 57070
Paul Peterson, 45610 282nd Street, Hurley SD 57036
Dr Bruce Hagen, 1300 W Murphy Drive, Sioux Falls SD 57108
Dr Bruce Hagen, 38736 Nasturtium Way, Palm Desert, CA 92211
Allen Vannorsdel, 45515 288th Street, Viborg SD 57070
Leon Thompson, 401 S 11th Street, Beresford SD 57004
Tim or David Ostrem, 45924 300 St, Wakonda SD 57073
Larry and Marlene Erickson, 29859 461st Avenue, Centerville SD 57014
Diane Best, Assistant Attorney General, 317 N Main Ave, Sioux Falls SD 57104

Sent Interoffice to:

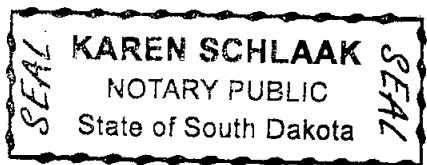
Ann Mines, Assistant Attorney General, 1302 E Hwy 14, Suite 1, Pierre SD 57501


Gail Jacobson
Secretary/Water Rights

[illegible]

Sworn to, before me, this 11th day of February, 2014.

Karen Schlaak
Karen Schlaak
Notary Public
My Commission expires April 1, 2019





DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



March 17, 2014

NOTICE

TO: A. Jason Rumpca, 103 N 3rd Street, Beresford SD 57004
Donald McCarty, PO Box 78, Brookings SD 57006
Gary or Julie Peterson, 45913 299th Street, Centerville SD 57014
Jerome Hult, 45958 Hwy 18, Davis SD 57021
Donald Benson, 45067 284th Street, Hurley SD 57036
Jeremiah Welsh, 29217 460th Avenue, Centerville SD 57014
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Leon Thompson, 401 S 11th Street, Beresford SD 57004
Tim or David Ostrem, 45924 300 St, Wakonda SD 57073
Larry and Marlene Erickson, 29859 461st Avenue, Centerville SD 57014

FROM:

for Jeanne Goodman, Chief Engineer *Eric Henderson*
Water Rights Program

SUBJECT: Order

This is to notify applicants of the Water Management Board's Order in the matter of water permit applications from the Upper Vermillion Missouri Aquifer considered at hearing before the Water Management Board on March 6, 2014.

South Dakota statutes provide that decisions of the Board may be appealed to the Courts to the extent that they constitute final agency decisions. Any appeals from decisions of the South Dakota Water Management Board must be filed within thirty days of this notice and be in accordance with procedures established in SDCL 1-26-31.

Enclosure

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

RECEIVED

MAR 14 2014

WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

WATER PERMIT APPLICATION NOS.)
7441-3 & 7442-3(GARY OR JULIE)
PETERSON); 7452-3 (JEROME HULT);)
7466-3 (BETHEL HAGEN TRUST);)
7467-3 & 7468-3 (CLELAND HAGEN)
TRUST); 7535-3(DONALD D)
BENSON); 7558-3 (CLELAND HAGEN)
TRUST); 7587-3 & 7588-3 (PAUL)
PETERSEN); 7600-3, 7601-3, 7602-3)
& 7603-3 (MICHAEL D. STEVENS);)
7623-3 (DARRELL OSBORN);)
7633-3(BRAD FARRAR); 7653-3)
(JEREMIAH WELSH); 7690-3 (TIM OR)
DAVID OSTREM); 7715-3 (ALLEN)
VANNORSDEL); 7900-3 (LEON)
THOMPSON); and 7919-3 (LARRY AND)
MARLENE ERICKSON))

FINAL ORDER

Hearing on the above entitled applications was held on March 6, 2014 before Board members Jim Hutmacher, Rodney Freeman, Tim Bjork, Chad Comes (Chairman), Everett Hoyt, and Leo Holzbauer pursuant to Notice dated February 10, 2014 . No applicants were present. At the hearing the Department of Natural Resources Water Rights Program presented evidence and argument for the Board's consideration.

The Board, having considered the testimony, exhibits and legal argument and all records and documents on file and having entered its oral decision and rulings on the parties' submissions, now enters its ruling as follows:

1. The Board incorporates the Ken Buhler report dated February 1, 2014, as its Findings of Fact.

2. The Board finds that the Upper Vermillion Missouri aquifer should be divided into three management units as presented in the Buhler report; and hereby adopts this finding for purposes of these and future water permit applications.

3. The Board concludes, with respect to the South and West Management Units, that the legal standard has been met to grant water permits under SDCL §§ 46-2A-9 and 46-6-3.1.

4. With respect to the North Management Unit, there is insufficient evidence to determine, with a reasonable probability, whether the withdrawals would exceed recharge if the permits were granted. Additional study is warranted.

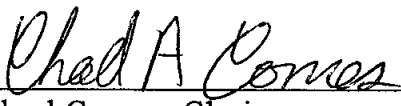
5. The Board hereby grants all permits to the Applicants from the West and South Units as recommended by the Chief Engineer on February 7, 2014, except that the acre feet limitation on permits 7603-3, 7535-3, 7653-3, and 7919-3 may not exceed 2 acre feet of water per acre per year. The permit applications granted are: 7441-3 & 7442-3 (Gary or Julie Peterson); 7466-3 (Bethel Hagen Trust); 7467-3 (Cleland Hagen Trust); 7535-3 (Donald D. Benson); 7588-3 (Paul Peterson); 7600-3, 7601-3, 7602-3 & 7603-3 (Michael D. Stevens); 7623-3 (Darrell Osborn); 7633-3 (Brad Farrar); 7653-3 (Jeremiah Welsh); 7690-3 (Tim or David Ostrem); 7715-3 (Allen Vannorsdel); 7900-3 (Leon Thompson); and 7919-3 (Larry and Marlene Erickson)

6. The Board further defers permits 7452-3 (Jerome Hult), 7468-3 (Cleland Hagen Trust), 7558-3 (Cleland Hagen Trust), and 7587-3 (Paul Peterson)

from the North Management Unit of the Upper Vermillion Missouri Aquifer for one year. This ruling on these 4 permits is not final; DENR is directed to notice this matter after one year. Accordingly, the applications, if ultimately granted, would hold priority dates relating back to the date of application under SDCL § 46-2A-15.

Dated this 10th day of March, 2014.

BY THE BOARD:



Chad Comes, Chairman
South Dakota Water Management Board

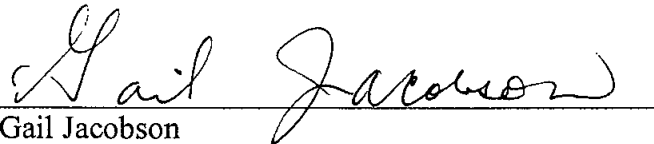
CERTIFICATION

I hereby certify that on March 17, 2014, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated March 17, 2014, regarding the order in the matter of Water Right Permit Application Nos. 7441-3, 7442-3, 7452-3, 7466-3, 7535-3, 7467-3, 7468-3, 7558-3, 7587-3, 7588-3, 7600-3, 7601-3, 7602-3, 7603-3, 7623-3, 7633-3, 7653-3, 7715-3, 7900-3, 7690-3 and 7919-3 as set forth below:

A. Jason Rumpca, 103 N 3rd Street, Beresford SD 57004
Donald McCarty, PO Box 78, Brookings SD 57006
Jerome Hult, 45958 Hwy 18, Davis SD 57021
Donald Benson, 45067 284th Street, Hurley SD 57036
Jeremiah Welsh, 29217 460th Avenue, Centerville SD 57014
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Tim or David Ostrem, 45924 300 St, Wakonda SD 57073
Larry and Marlene Erickson, 29859 461st Avenue, Centerville SD 57014
Diane Best, Assistant Attorney General, 317 N Main Avenue, Sioux Falls SD 57104

Sent Interoffice to:

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



Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 17th day of March, 2014.



Karen Schlaak
Notary Public
My Commission expires April 1, 2019



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



APR 11 2014

Larry & Marlene Erickson
29859 461st Ave
Centerville SD 57014

Dear Sir:

Enclosed is Water Permit No. 7919-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

January 20, 2023

NOTICE

TO: LARRY ERICKSON, 29859 461ST AVE, CENTERVILLE, SD 57014
FROM: Ron Duvall, Water Rights Permitting Administrator
for Eric Gronlund, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2022 Irrigation Questionnaires

Our records indicate your 2022 Irrigation Questionnaires have not been submitted. The request for the Questionnaires was dated October 21, 2022. The Water Management Board has directed owners of water permits who have not submitted the 2022 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 2372-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 5319-3 & 7919-3 qualification:

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

The hearing will be held at **Wednesday, March 8, 2023 at 9:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 5319-3 & 7919-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 2372-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

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

If the questionnaires are received in this office before the **March 8, 2023** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaires for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. **If you prefer, you can complete the questionnaire online at the following link: <https://danr.sd.gov/iq> using this password: FJFLOH**

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



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

January 31, 2023

2372-3
5319-3
7919-3

Larry Erickson
29859 461st Ave
Centerville SD 57014

Dear Mr. Erickson:

I am writing to acknowledge receipt of your 2022 irrigation questionnaires.

You may disregard the January 20, 2023, "Notice" concerning reporting requirements for Water Permit or Right Nos. 2372-3, 5319-3 and 7919-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us

Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 7919-3

I have this day, June 7, 2024, made a thorough examination of the water use systems owned by Larry & Marlene Erickson, 29859 461st Ave., Centerville, SD 57014, holders of Permit No. 7919-3, bearing the priority date of October 23, 2013. This permit authorizes the diversion of 1.83 cu. ft. per second of the waters of groundwater (South Management Unit of the Upper Vermillion Missouri Aquifer) authorizing the irrigation of 83.83 acres located in Clay County.

Inspection contacts: Larry Erickson

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Unknown
- 2) No. of Wells: 1
- 3) Depth(s): Unknown feet
- 4) Well log is available: No

Casing:

- 1) Diameter: Unknown inches
- 2) Length: Unknown feet
- 3) Type: Unknown

Screen:

- 1) Diameter: Unknown inches
- 2) Length: Unknown feet
- 3) Type: Unknown
- 4) Static water level: Unknown feet

Pump:

- 1) Make: Western Land Roller
- 2) Model: Unknown
- 3) Capacity: 850 GPM (estimated by owner)

Gear Drive:

- 1) Make: DE'LAN
- 2) Model No.: G125A
- 3) Horsepower rating: 125 hp

Engine:

- 1) Make: John Deere
- 2) Type: 329DH 01

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

- 1) Type: PVC Size: 6 inches Length: 610 feet

C. Works used to apply water to beneficial use:

Center Pivot:

- 1) Make: Valley
- 2) Overall length: 1,289 feet
- 3) Number of towers: 7

- 4) End gun: Yes
5) Capacity: 850 GPM

Chemigation Equipment:

- 1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: No
2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
3) Exceptions to compliance are: The well may produce more water than what was permitted.

E. Condition and Location:

- 1) The system is in good condition with the point(s) of diversion located as follows:
The well is 1,620 feet south and 1,960 feet west of the northeast corner of Section 9-T95N-R52W (Latitude 43.06424, Longitude -96.99061– SW1/4 of the NE1/4).
2) The works are capable of diverting and conveying to the places of use 1.89 cu. ft. per second of water from the well which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in

<u>Section 9-T95N-R52W</u>	
<u>NW1/4NE1/4</u>	<u>29 acres</u>
<u>NE1/4NE1/4</u>	<u>28 acres</u>
<u>SW1/4NE1/4</u>	<u>7 acres</u>
<u>SE1/4NE1/4</u>	<u>16 acres</u>

comprising a total of 80 acres of land and the license should be issued for 1.83 cfs.

- 3) All structures, wells and lands on map: Yes

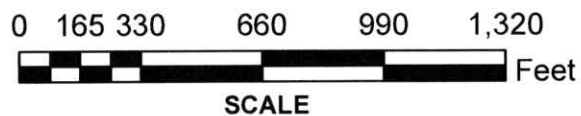
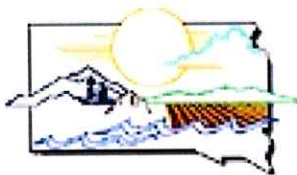
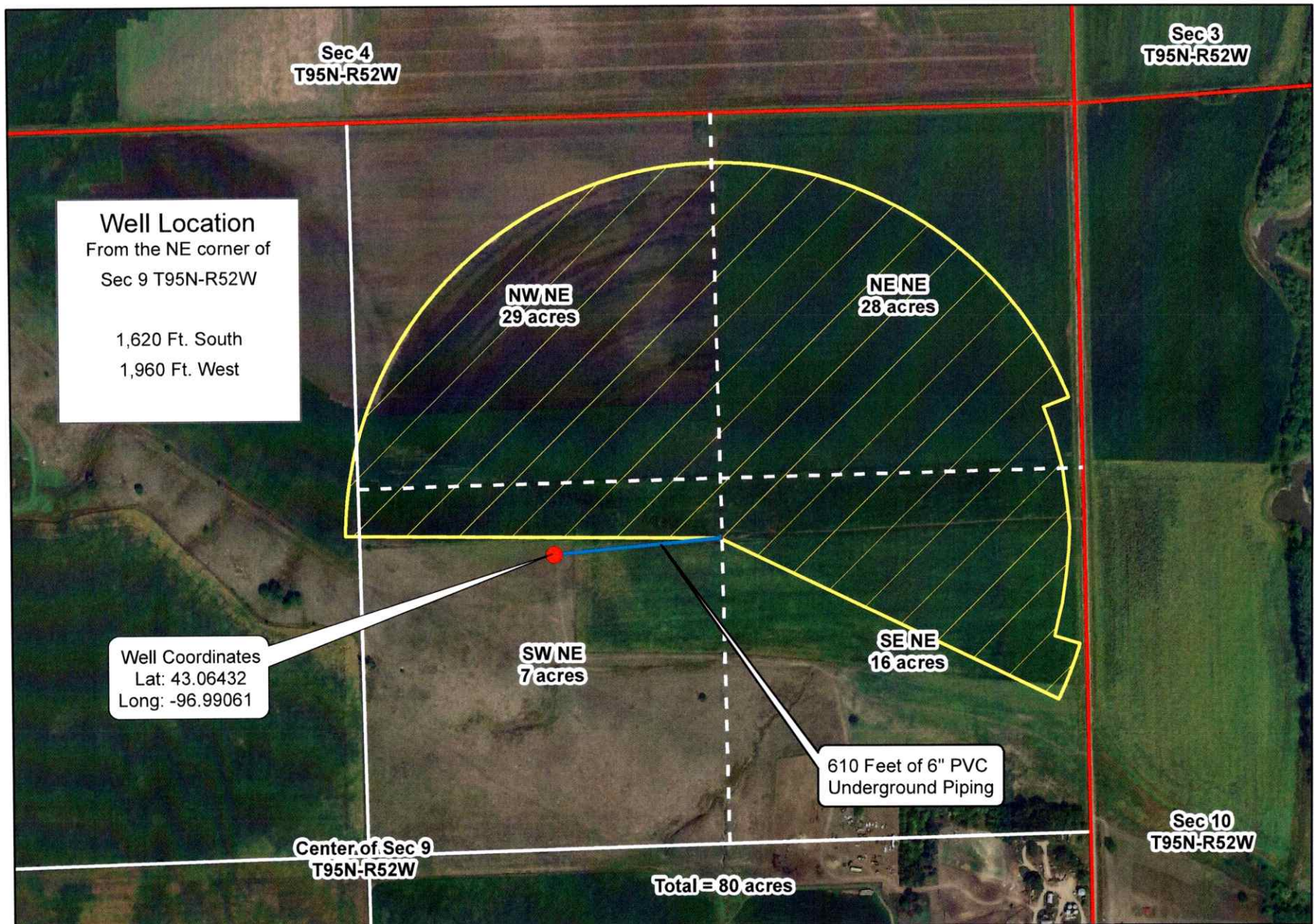
F. Comments or other permit(s) associated with the project: I could not identify a well driller for the project and a well log was not available. I contacted three well drillers that Mr. Erickson thought might have drilled the well, but none of the three had any records of drilling the well. Lacey Well Drilling installed the pump in the well, but they do not have records indicating the capacity of the pump. They also stated that they did not drill the well. The pump did not have a plate on it, but Mr. Erickson stated that he was told that the well produced 850 gpm (1.89 cfs).

Keith DeJong

Keith DeJong, PE Ret.
Water Rights Inspector
DANR, Water Rights Program

Date report completed: June 7, 2024

Water Permit No. 7919-3



Keith DeJong

Keith DeJong, PE Ret.
Staff Engineer
June 7, 2024



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUL 22 2024

7919-3

Larry & Marlene Erickson
29859 461st Ave
Centerville SD 57014

Dear Mr. & Ms. Erickson:

Enclosed is Water License No. 7919-3. 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.

So 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

NOTE: The investigation found your irrigation system is capable of diverting 1.89 cubic feet of water per second (cfs) which is equivalent to approximately 850 gallons per minute. Permit No. 7919-3 authorized the diversion of 1.83 cfs (equivalent to 820 gpm). Diversion of water under this water license is limited to 1.83 cfs.

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7919-3**

(1) Larry & Marlene Erickson, 29859 461st Ave, Centerville SD 57014, made Application No. 7919-3, October 23, 2013, for a water permit to divert 1.83 cubic feet of water per second from groundwater, one well (South Management Unit of the Upper Vermillion Missouri Aquifer), Clay County, South Dakota for irrigation purposes. Permit No. 7919-3, with a priority date of October 23, 2013, was approved by the Water Management Board March 6, 2014, and issued to the applicants for diversion of water with construction of the described water supply system to be completed on or before March 6, 2019, and for the application to beneficial use of water on or before March 6, 2023.

(2) It is certified that the permit holders have complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.83 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,620 ft S & 1,960 ft W of the NE corner Section 9, T95N, R52W (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
(Latitude 43.06432 & Longitude -96.99061)

(3) The amount of appropriation may not exceed 2 acre-feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.

(4) The permit holders have complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate to following land:

Section 9, T95N, R52W			
NE $\frac{1}{4}$ NE $\frac{1}{4}$	28 acres	NW $\frac{1}{4}$ NE $\frac{1}{4}$	29 acres
SW $\frac{1}{4}$ NE $\frac{1}{4}$	7 acres	SE $\frac{1}{4}$ NE $\frac{1}{4}$	16 acres
TOTAL: 80 acres			

(5) Pursuant to South Dakota Water Law 46-5-30.1 Larry & Marlene Erickson, the holders and/or owners of Water Right No. 7919-3 are issued a license to appropriate water, the right to use 1.83 cubic feet of water per second from groundwater, one well (South Management Unit of the Upper Vermillion Missouri Aquifer), with a priority date of October 23, 2013, from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7919-3 and subject to the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7919-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.

continued

3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 7919-3 authorizes a maximum diversion rate of 1.83 cubic feet of water per second for the irrigation of 83.83 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *(Irrigation is limited to 80 acres, based on the system as developed.)*

Eric Gronlund

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

JUL 22 2024

date

