

WATER PERMIT NO. 7800-3

Name of Applicant: **Ralph Marquardt**

Address: **PO Box 1040, Yankton SD 57078** Phone: **605 660-6970**

Amount of Water Claimed: **2.22 cfs** Total Acres: **110**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **irrigation** County: **Clay**

Type of Waste Disposal System:

Location: **10 miles northwest of Vermillion**

PRIORITY Date Received: **2-27-13** Application/License Fee: **\$ 750**

Corrected Application Received: **3-20-13** Period of Annual Use: **April 1 – October 31**

Remarks: **Requesting diversion rate greater than statutory limit**

Diversion Point: **NW 1/4 SW 1/4 Sec 22-T93N-R53W**

Land to be Irrigated: **W 1/2 NW 1/4, SE 1/4 NW 1/4, NW 1/4 SW 1/4 Sec 22-T93N-R53W**

Depth of Well: **110**

Well Driller:

Remarks:

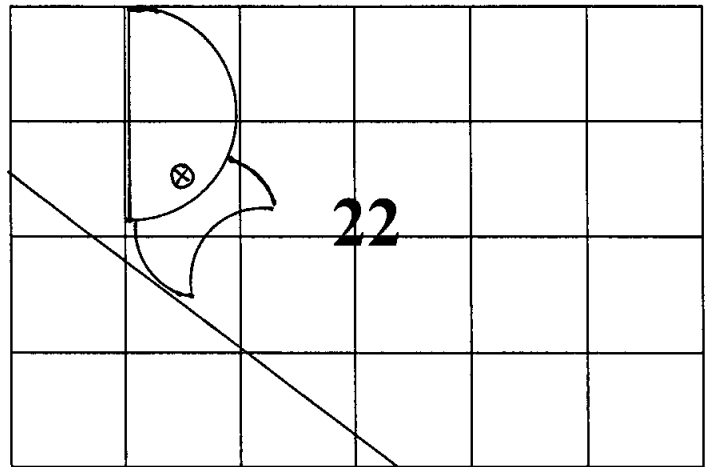
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **3-21-13**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



SD EForm - 0499LD V4

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	(office use only)	
	No. <u>7800-3</u>	Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>	<u>605-624-2695</u>
	Newspaper <u>Plain Talk 201 W Cherry St. Vermillion</u>	<u>57069</u>
	<u>605-665-7811</u>	
	<u>Press & Inkster 319 Walnut Yankton 57028</u>	

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FEB 27 2013
WATER RIGHTS
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Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____

(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Ralph Marquardt

(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent Ralph J. Marquardt and Lucille M. Marquardt
(name and complete address if different than above name)

Mailing Address PO Box 1040 Yankton SD 57078
(Address) (City) (State) (Zip Code)

Home Phone 605-665-4665 Cell 605-660-6970 Email cariel@marquardttrans.com

2. Amount of water claimed 2.22*CFS or 1000 **GPM ***AF Total Acreage 110
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Missouri:Elk Point Aquifer

4. Location of point of diversion 1 Well - SWNW S22 T93N R53W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Clay

5. County or counties where water will be used Clay

6. Annual period during which water is to be used April 1 - October 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NWNW S22 T93N R53W	33		
SWNW S22 T93N R53W	40		
SE NW S22 T93N R53W	15		
NWSW S22 T93N R53W	22		

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

Drill a new well to irrigate cropland in a full circle.

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

2012-09

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

SOUTH DAKOTA
WATER PERMIT NO. 7800-3

Date of first receipt of application February 27, 2013.

Date of return to applicant for corrections, amendments or changes February 28, 2013.

Date of receipt of corrected application March 20, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7800-3 to Ralph Marquardt, PO Box 1040, Yankton SD 57078 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. 7800-3 appropriates 2.22 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the SW 1/4 NW 1/4 Section 22 for irrigation of 110 acres located in the W 1/2 NW 1/4, SE 1/4 NW 1/4, NW 1/4 SW 1/4 Section 22; all in T93N-R53W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is February 27, 2013.
4. The date of approval of Permit No. 7800-3 is June 3, 2013.
5. One-fifth of the construction is to be completed on or before December 3, 2015.
6. All construction is to be completed on or before June 3, 2018.
7. Water is to be put to beneficial use on or before June 3, 2022.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

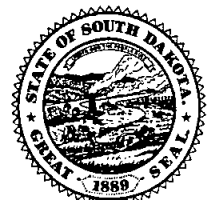
1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7800-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. 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. 7800-3 authorizes a maximum diversion rate of 2.22 cfs for the irrigation of 110 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

JUN 24 2013

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 Hammond-Wetmore Drilling, Inc
(if yes, please provide copies of logs)

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

c) Well Depth 110 Depth to Top of Water Bearing Material 30 Depth to Water from Surface 22

d) Distance to nearest existing domestic well:

On applicant's property 2390 Ft On property owned by others 3150 Ft

2. Wastewater Disposal System Information

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

b) System Capacity (gallons) Year Constructed

c) Connected to the City of Sanitary System

3. Dugout Information

a) Surface Dimensions Depth

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

4. Water Storage Dams

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

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

b) Freeboard

c) Crest Width

Crest Length

d) Height

e) Primary Outlet Capacity

If pipe, diameter

f) Secondary Spillway Capacity

Spillway Width

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

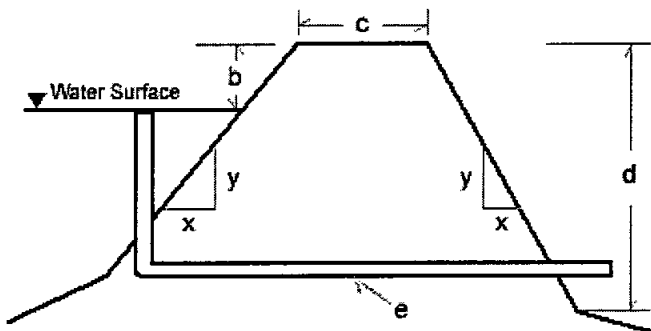
Upstream

Downstream

h) Surface Area of Impoundment

i) Storage Acre Feet

j) Drainage Area Above Dam Acres

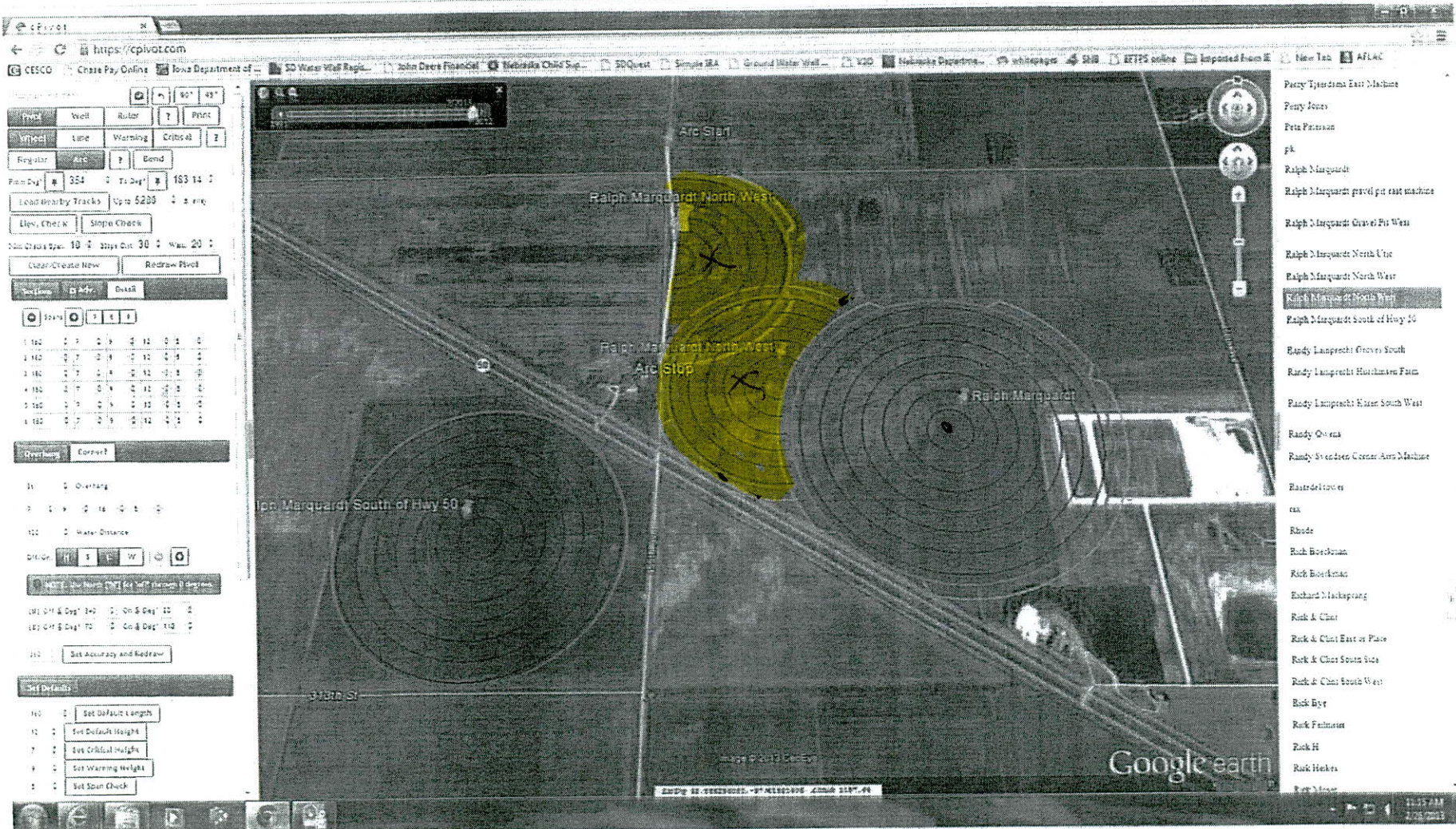




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FEB 27 2013

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Sec 16
T093N
R53W

Sec 15
T093N
R53W

Sec 14
T093N
R53W

Sec 21
T093N
R53W

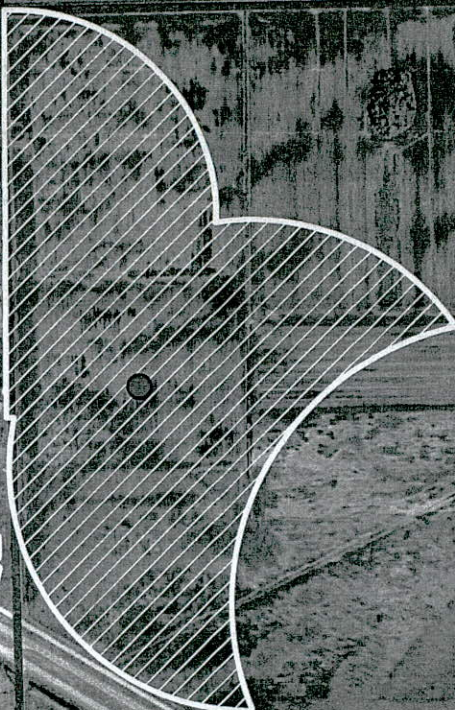
Sec 23
T093N
R53W

Sec 22
T093N
R53W

Sec 28
T093N
R53W

Sec 27
T093N
R53W

Sec 26
T093N
R53W





**WATER RIGHTS
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United States Department of Agriculture
Farm Service Agency

PLSS: 22_93N_53W
Farm: 4287

Clay County, SD
1:8,813

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October 26, 2011

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Wetland Determination Identifiers

- Restricted Use
- ▼ Limited Restrictions
- Exempt from Conservation Compliance Provisions

□ Common Land Units

▨ Non Cropland

2010 Ortho-Photography - Not to Scale

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South Dakota Department of Environment and Natural Resources

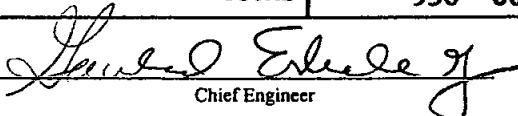
Date 2/28, 20 13

RECEIVED OF Marquardt Farms PO Box 1040 Yankton SD 57078

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

Fee for Application for Permit No. <u>7800-3</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>7800-3</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. 06182

By 
Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

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WATER RIGHTS
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February 28, 2013

Ralph Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. Marquardt:

Thank you for submitting the four *Applications for a Permit to Appropriate Water* for Clay County. In order to complete the applications, the following needs to be clarified.

Regarding the application for irrigation in NE 1/4 Section 33-T94N-R55W

Enclosed is a map we prepared which outlines the 68 acres to be irrigated according to the map you submitted. It appears that some acres to be irrigated will be located in SW 1/4 NW 1/4 Section 34-T94N-R55W. The application does not list any acres located in Section 34. Please make the necessary change on Item No. 7 of the application.

Regarding the application for irrigation in W 1/2 Section 22-T93N-R53W

Enclosed is a map we prepared which outlines the 110 acres to be irrigated according to the map you submitted. Do you agree with the following breakdown of acreages?

NW 1/4 NW 1/4 30 acres
NE 1/4 NW 1/4 3 acres
SW 1/4 NW 1/4 40 acres
SE 1/4 NW 1/4 15 acres
NW 1/4 SW 1/4 22 acres for a total of 110 acres

It is important that your applications accurately reflect your proposed projects. There are no questions regarding the other two applications.

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

Karen,
If you have any
questions, please call
me. 605-665-1053
Carie LaBrie



**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. 7800-3, Ralph Marquardt**

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. 7800-3, Ralph Marquardt, PO Box 1040, Yankton SD 57078.

The Chief Engineer is recommending APPROVAL of Application No. 7800-3 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. 7800-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. 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. 7800-3 authorizes a maximum diversion rate of 2.22 cfs for the irrigation of 110 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
May 15, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NOS. 7800-3, 7801-3 & 7802-3
RALPH MARQUARDT
APRIL 1, 2013

Water Permit Application No. 7800-3 proposes to appropriate water from one well to be completed into the Missouri: Elk Point aquifer at a maximum diversion rate of 2.22 cubic feet of water per second (cfs). The well will be located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 22, T93N-R53W and is expected to be approximately 110 feet deep. This application proposes to irrigate 110 acres located in the W $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 22, all in T93N-R53W in Clay County. The applicant is requesting a diversion rate greater than the statutory limit.

Water Permit Application No. 7801-3 proposes to appropriate water from one well to be completed into the Missouri: Elk Point aquifer at a maximum diversion rate of 1.56 cubic feet of water per second (cfs). The well will be located in the S $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 21, T93N-R53W and is expected to be approximately 110 feet deep. This application proposes to irrigate 108 acres located in the SE $\frac{1}{4}$ of Section 21, all in T93N-R53W in Clay County. The applicant is requesting a diversion rate greater than the statutory limit.

Water Permit Application No. 7802-3 proposes to appropriate water from one well to be completed into the Missouri: Elk Point aquifer at a maximum diversion rate of 1.78 cubic feet of water per second (cfs). The well will be located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 22, T93N-R53W and is expected to be approximately 110 feet deep. This application proposes to irrigate 165 acres located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 22, all in T93N-R53W in Clay County.

AQUIFER: Elk Point management unit of the Missouri aquifer (M:EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Missouri: Elk Point aquifer extends from Yankton County to Union County. In Yankton County, Bugliosi (1986) refers to the Elk Point management unit of the Missouri aquifer as the southern portion of the Lower James-Missouri aquifer. For water management purposes, the Water Management Board and the SD DENR-Water Rights Program refer to this aquifer as the Missouri: Elk Point. The Missouri: Elk Point is a surficial aquifer composed of unconsolidated glacial outwash material ranging from fine sand to coarse gravel (Niehus, 1994). The aquifer generally lies below the flood plain of the Missouri River (Bugliosi, 1986) and also below the flood plain of the Big Sioux River in the southern part of Union County (Niehus, 1994). Bugliosi (1986) reported that the aquifer directly overlies and is hydraulically connected to the Dakota aquifer and is hydraulically connected at its northern boundary to the Lower James-Missouri and the Lower Vermillion-Missouri aquifers as well as the Missouri and Vermillion Rivers. Niehus (1994) found the aquifer is also hydraulically connected to the Big Sioux aquifer in the northeast portion of Union County. The proposed well sites are located in southwestern Clay County less than three miles from the Clay and Yankton county line and approximately five and one half miles north of the Missouri River. The Elk Point management unit of the Missouri aquifer encompasses approximately 234,700 acres of Clay, Union, and Yankton Counties, as determined by Hedges and others (1982) and Niehus (1994). The aquifer contains an estimated 3,287,100 acre feet of recoverable water, of which an estimated 1,117,500 acre-feet of recoverable water is

in storage in Clay County (Hedges and others, 1982). The ground water in this aquifer generally moves from northwest to southeast in the area of this application (Stephens, 1967). The maximum thickness of the aquifer is estimated to be 150 feet (Bugliosi, 1986). The transmissivity of the aquifer ranges from 20,700 to 24,700 square feet per day (ft²/d) (Bugliosi, 1986). The specific capacity of wells completed into the aquifer ranges from approximately 124 to 173 gallons per minute per foot ((gal/min)/ft) (Bugliosi, 1986). The aquifer can be under confined or unconfined (water-table) conditions. The well site proposed by Application No. 7801-3 is likely under artesian conditions, and the well sites proposed by Application Nos. 7800-3 and 7802-3 are likely under water-table conditions. The average saturated thickness reported for nearby well sites is approximately 45 feet as shown in Table 1 (Water Rights, 2013a).

Well Log Identification	Saturated Thickness (ft)
Well Log for Water Permit No. 6554-3	29
Domestic Well for Fritz Bartels	30
Domestic Well for Glacial Lakes Energy, LLC	69
Well Log for Water Permit No. 6978-3	57
Well Log for Water Permit No. 6966-3	40

Table 1. Reported saturated thickness for nearby wells (Water Rights, 2013a).

SDCL 46-2A-9

In accordance with SDCL 46-2A-9, a permit may be issued to appropriate water 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 review the availability of unappropriated water and existing rights within the Missouri: Elk Point aquifer.

WATER AVAILABILITY:

These applications propose to appropriate water from the Missouri: Elk Point aquifer. If these applications are approved, it is likely that the actual water use will be less than 766 acre feet per year (ac-ft/yr). The probability of unappropriated water available from the aquifer can be evaluated using 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 Missouri: Elk Point aquifer occurs through seepage from streams and by infiltration of precipitation (Bugliosi, 1986; Niehus, 1994). Recharge is also provided to the aquifer from the Big Sioux, Lower Vermillion-Missouri, and Dakota aquifers as well as during times of high flow from the Big Sioux and Missouri Rivers. The average annual recharge rate to the Missouri: Elk Point aquifer is estimated to be 3.8 in/yr based on observation well analysis (Hedges and others, 1985). Given the area of the management unit in Clay, Union, and Yankton Counties of 234,700 acres, average annual recharge to the aquifer is estimated to be 74,322 ac-ft/yr. Recharge in Clay County alone is estimated to be 23,592 ac-ft/yr based on the 74,500 acres that the aquifer underlies in the county (Hedges and others, 1982).

Discharge:

Discharge from the Missouri: Elk Point aquifer is by evapotranspiration, discharge to the Big Sioux and Missouri Rivers during low flow, to the underlying Dakota aquifer, and withdrawal from wells (Niehus, 1994). Discharge in Clay County is primarily groundwater outflow, evapotranspiration, and withdrawal from wells (Stephens, 1967). There are a number of completion reports on file with the SD DENR-Water Rights Program for domestic use wells completed into the Missouri: Elk Point aquifer (Water Rights, 2013b), and there are currently 538 water rights/permits appropriating water from the Missouri: Elk Point aquifer of which 134 are in Clay County (Water Rights, 2013c). In addition, there are five future use permits in Clay County reserving 14,900 ac-ft/yr of water from the aquifer. The distribution of these appropriations for the entire aquifer and their types are shown in Table 2.

Water Rights/Permits	Number
Commercial	7
Domestic	2
Fish and Wildlife Propagation	4
Industrial	5
Irrigation	505
Municipal	10
Recreational	1
Rural Water System	2
Suburban Housing Development	2
Future Use Permits	Number
Lewis & Clark Rural Water System	4
City of Vermillion	1

Table 2. Water rights/permits from the Missouri: Elk Point aquifer (Water Rights, 2013c).

The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming:

1. Water rights/permits limited by an annual volume will pump the entire volume appropriated.
2. Water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time.
3. Future use permits can be fully developed.

The expected water use for non-irrigation purposes, including that reserved for future use, from the Missouri: Elk Point aquifer is less than 61,300 ac-ft/yr based on current water appropriations. Clay County accounts for approximately 50,503 ac-ft/yr of this based on current water appropriations.

The annual reported water use from the Missouri: Elk Point aquifer for irrigation purposes is displayed in Table 3. The average pumpage reported, for irrigation purposes, over the 1979 to 2011 period of record in Clay County is approximately 2,706 ac-ft/yr. The water usage from domestic wells is not significant to the hydrologic budget.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
1979	259	122980	9859
1980	262	124404.9	14586
1981	297	134477.6	13096
1982	269	122297.8	18822.35
1983	273	121483.1	10834.04
1984	281	126221.6	9194.3
1985	282	124546.7	13718.5
1986	286	125320.7	6252.1
1987	281	123601.7	13163.7
1988	282	123601.5	28184.55
1989	292	126354.7	25651.9
1990	297	127965.7	19425
1991	300	126471.7	18798.6
1992	295	125256.7	1881.95
1993	298	125576.3	1475.2
1994	295	122975.1	10221.43
1995	292	121644.3	18320.24
1996	296	124606.2	9412.78
1997	305	126518.2	17182
1998	313	127862.6	11127.24
1999	308	125225.6	14748.02
2000	309	124852.2	26640.12
2001	313	125537.4	19071.88
2002	315	125555.8	23547.22
2003	314	125379.8	26734.67
2004	322	126955.8	23862.25
2005	335	130046.6	23964.5
2006	353	136491.6	27974.54
2007	366	139826.6	30482.84
2008	396	151130.4	16261.88
2009	410	155245.4	6120.97
2010	419	155905.4	2723.87
2011	431	159700.8	12107.55
MIN	259	121483.10	1475.20
MAX	431	159700.80	30482.84
AVE	313.52	129879.40	15922.64

Table 3. Irrigation from the Missouri: Elk Point aquifer (Water Rights, 1979-2011)

Lewis and Clark Rural Water System currently reserves 13,000 ac-ft/yr for future use and has permits appropriating 32,165 ac-ft/yr (Water Rights, 2013b). These account for a significant portion of the annual water usage in Clay County, and most of the water from these wells will be induced from the Missouri River. More recharge can be induced with more pumping in particular from the Missouri River because it is hydraulically connected to the aquifer.

There are a number of new permits and pending applications from the Missouri: Elk Point aquifer. Once they are developed, the average pumping for irrigation purposes is expected to increase significantly. Since January 1, 2012, there have been 71 permits issued from the Missouri: Elk Point aquifer authorizing irrigation for a total of 8,954.4 acres. The average

annual withdrawal is still expected to be less than the average annual recharge. As of April 1, 2013, an additional 19 permit applications are pending from the Missouri: Elk Point aquifer. The pending permits, shown in Table 4, have a total diversion rate of 33.55 cfs, and 2,311.1 acres of coverage (Water Rights, 2013a).

PERMIT NO.	DIV. RATE (CFS)	ACRES
6895A-3	1.56	135.5
7634-3	2.0	296
7635-3	2.0	320
7644-3	1.78	160
7659-3	2.0	37.25
7660-3	1.56	82
7661-3	2.22	24
7663-3	1.44	132
7669-3	1.33	70
7670-3	1.78	120
7671-3	1.55	92.25
7675-3	3.56	115
7676-3	2.0	157.1
7677-3	2.55	200
7684-3	1.78	160
7686-3	1.0	70
7687-3	1.0	70
7689-3	1.0	70
7703-3	1.44	N/A
TOTAL	33.55	2311.1

Table 4. List of pending permits and their appropriations from the Missouri: Elk Point aquifer (Water Rights, 2013a).

Recognizing that Lewis and Clark RWS withdraws water from the Missouri: Elk Point aquifer that is induced from the Missouri River, and considering the remaining hydrologic budget, there is reasonable probability that unappropriated water is available for this application.

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 SD DENR-Water Rights Program monitors 37 observation wells completed into the Missouri: Elk Point aquifer with three of these observation wells located within four and one half miles of the well sites proposed by these applications (Water Rights, 2013a). Hydrographs for these wells are shown in Figures 1, 2 and 3.

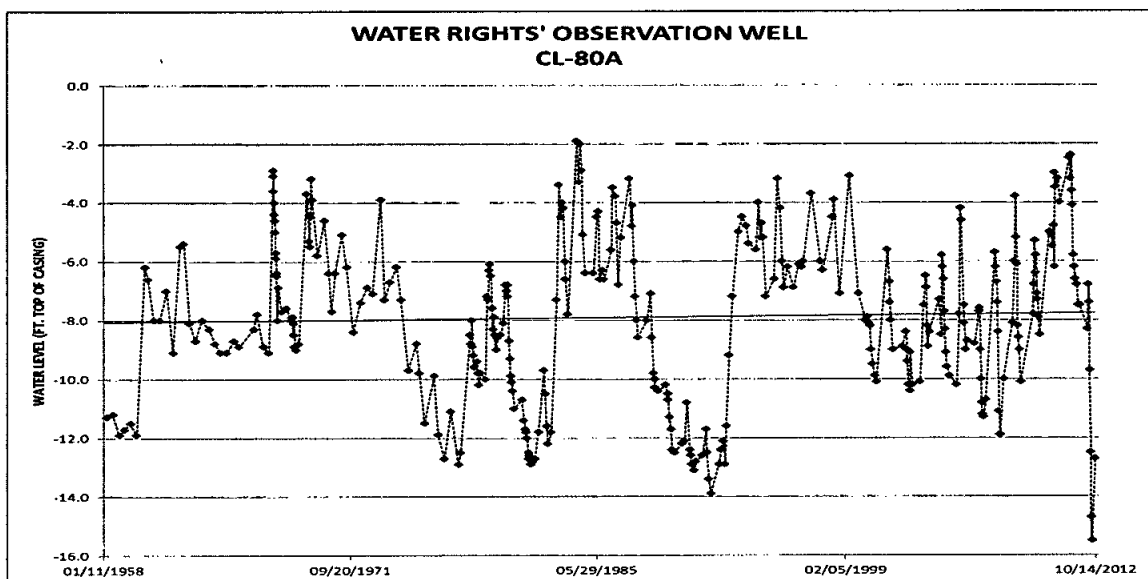


Figure 1. Hydrograph with linear trend line for SD DENR-Water Rights' Observation Well CL-80A completed into the Missouri: Elk Point aquifer approximately three miles northeast of the well sites proposed by these applications (Water Rights, 2013b).

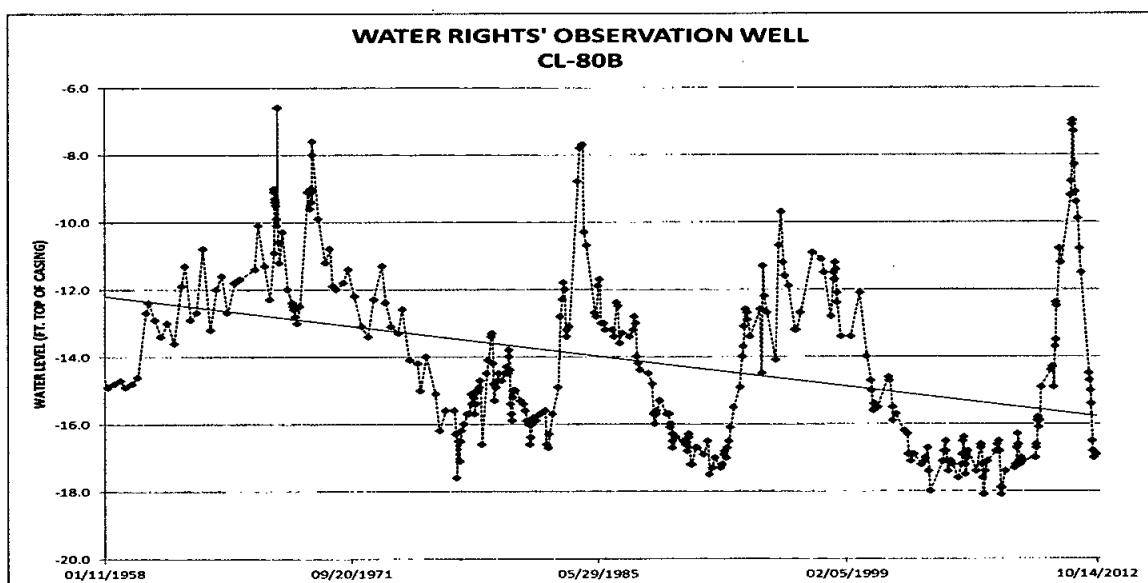


Figure 2. Hydrograph with linear trend line for SD DENR-Water Rights' Observation Well CL-80B completed into the Missouri: Elk Point aquifer approximately four and one quarter miles south of the well sites proposed by these applications (Water Rights, 2013b).

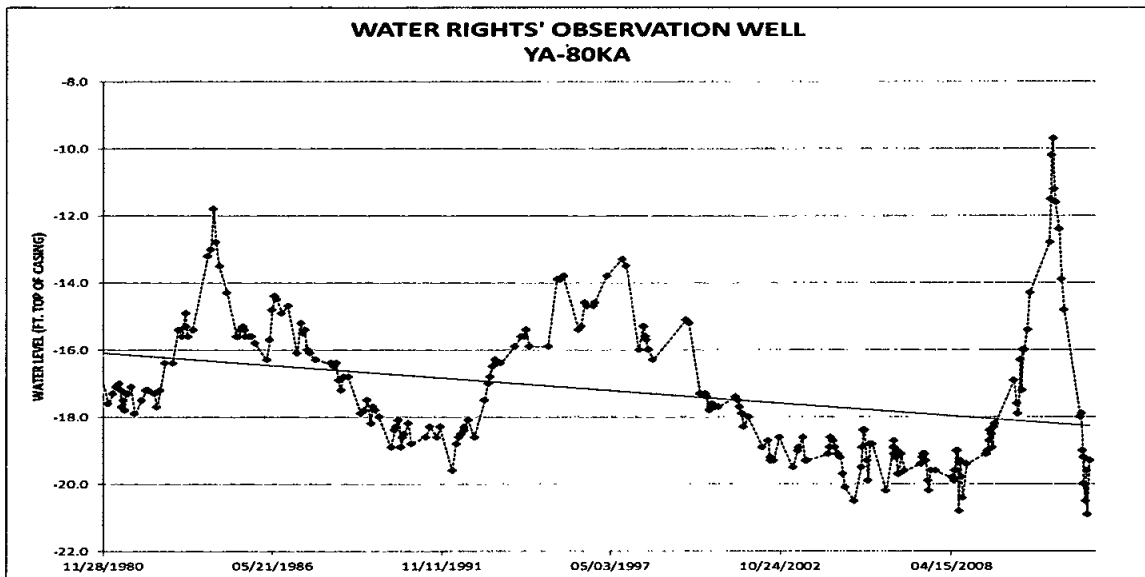


Figure 3. Hydrograph with linear trend line for SD DENR-Water Rights' Observation Well YA-80KA completed into the Missouri: Elk Point aquifer less than four and one half miles southwest of the well sites proposed by these applications (Water Rights, 2013b).

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. The observation well data shows that at the current level of development, climatic conditions mask the temporal effects of well withdrawals. The observation well data documents the hydraulic connection between the Missouri: Elk Point aquifer and the Missouri River (e.g. in particular, record high groundwater levels associated with flooding in 2011). Linear trend lines for two of the hydrographs do show a general gradual decline. This gradual decline may be attributed to entrenching of the Missouri River (Goodman, 2007).

Because of this obvious hydraulic connection between Missouri: Elk Point aquifer and the Missouri River and the availability of water in the Missouri River, there is a reasonable probability that additional recharge to the Missouri: Elk Point will be induced with additional pumping. Natural discharge from the aquifer can be captured for pumping. Additional pumping from the Missouri: Elk Point aquifer can also induce recharge from the underlying Dakota aquifer. Therefore, there is reasonable probability that unappropriated water is available from the aquifer to support this appropriation.

EXISTING WATER RIGHTS:

The proposed well sites are located in southwestern Clay County less than three miles from the Clay and Yankton county line and approximately five and one half miles north of the Missouri River. Figure 4 shows the nearby existing water rights located in the Missouri: Elk Point aquifer. The locations of the existing water rights/permits were determined using the best data reasonably available. The nearest water right/permit is Water Permit No. 6966-3, for Troy Walraven, located more than 2,200 feet south and down-gradient of the proposed well sites.

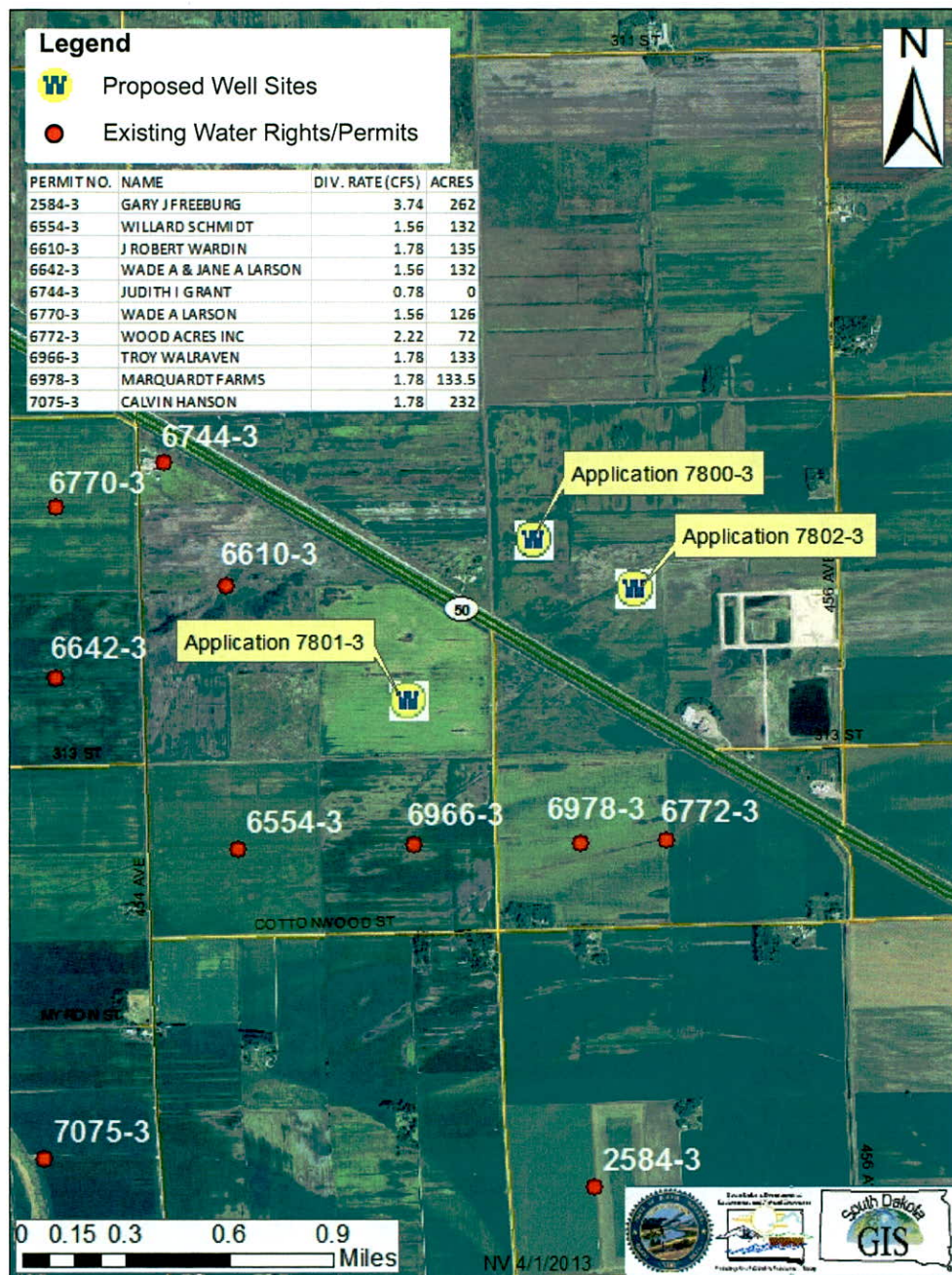


Figure 4. Existing water rights/permits located within close proximity to the well sites proposed by these applications (Water Rights, 2013c).

Observation Well CL-80B is located within 800 feet of Water Right No. 2158-3, for D A Olson & Sons, and the hydrograph, shown in Figure 2, reports minimal drawdown at this distance due to pumping. While some wells appear to be confined, overall the Missouri: Elk Point aquifer acts under water-table conditions. Water-table conditions dictate that drawdown will be minimal at these distances. Based on the observation well data and the distance between wells, drawdown is not expected to be significant nor likely to cause adverse impacts to existing water rights or domestic wells. The precise drawdown cannot be quantified without aquifer testing.

With that in mind, this permit should adhere to and include the standard permit qualification which applies to most groundwater permits/rights stating that:

“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”.

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

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

In reality, the assurance of reasonable domestic use provided by SDCL 46-6-6.1 and ARSD 74:02:04:20(7) generally ensures not only that interference will not be adverse to domestic well users but also in existing appropriative rights (i.e. in most cases, the protection afforded to adequate domestic wells by water law, would lead to enforcement of the “standard permit qualification” before there is a reduction of needed water supplies to appropriative rights). Although drawdown is expected to be minimal, as shown by the observation well hydrographs, some drawdown will occur. Depending on the extent of drawdown, some existing well owners may need to lower their pumps to accommodate for deeper water levels. However, when considering the statute and rule, there is a reasonable probability that any well interference from these proposed applications will not be adverse to adequate domestic wells.

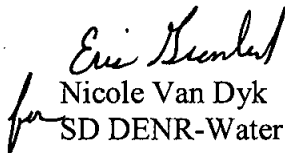
SDCL 46-5-6

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cubic foot of water per second for every seventy acres, or “the equivalent thereof”. The statute provides that the Water Management Board may allow a greater diversion if the method of irrigation so requires. Water Permit Application No. 7800-3 proposes to divert at a rate of 2.22 cfs to irrigate 110 acres, or the equivalent of 1.41 cfs per 70 acres. Water Permit Application No. 7801-3 proposes to divert at a rate of 1.56 cfs to irrigate 108 acres, or the equivalent of 1.01 cfs per 70 acres. The applicant does not provide a justification for the request of these diversion rates.

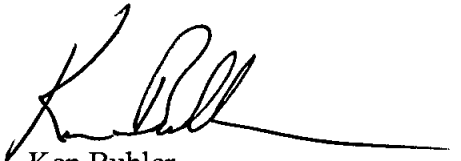
CONCLUSIONS:

1. This application proposes to appropriate water from the Missouri: Elk Point aquifer.
2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to supply this proposed appropriation based on observation well data and the amount of water reserved by Lewis and Clark RWS that will likely be induced from the Missouri River.

3. The Missouri: Elk Point aquifer is under unconfined (water-table) conditions in this area, and drawdown from pumping is not expected to be significant very far from a production well.
4. There is a reasonable probability that the well proposed by this application will not adversely impact existing water rights or domestic wells.


Nicole Van Dyk
for SD DENR-Water Rights Program

Approved by


Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Bugliosi, E.F., 1986, Water Resources of Yankton County, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 84-4241. 41 p.
- Goodman, J.A. 2007. Report on Water Permit Application No. 6869-3 for Lewis and Clark RWS: SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Niehus, C.A., 1994, Water Resources of Lincoln and Union Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 93-4195, 57p.
- Stephens, J.C., 1967, Geology and Hydrology of Clay County, South Dakota, Part II: Water Resources, SD DENR- Geological Survey Bulletin 19, 62 p.

Water Rights, 1979-2011, Irrigation Questionnaire Summaries 1979-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

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JUN - 3 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

PLAIN TALK

DENR
Division of Environmental Services
Water Rights Program
Joe Foss Building, 523 East Capitol
Pierre, SD 57501

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

TERA SCHMIDT BEING FIRST DULY SWORN ON
AND SAYS THAT SHE IS THE CLASSIFIED MANAGER
MEDIA INC., A CORPORATION, THE PRINTER AND THE PUBLISHER OF
PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED
IN THE CITY OF VERMILLION, SAID COUNTY AND STATE,
OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS
AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION TO APPROPRIATE WATER

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED
NEWSPAPER ON THE 24 DAY OF May
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE
OF SAID NOTICE TO WIT \$38.40 ENSURE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND
AGREEMENT AND UNDERSTANDING FOR THE DIVISION
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 5/24/13

FILED ON: 5/24/13

Tera A. Schmidt

SUBSCRIBED AND SWORN TO BEFORE ME THIS

28th

DAY OF

May

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 3, 2013.

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

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

Published once at the total approximate cost of \$38.40.

Published: May 24, 2013

**NOTICE OF APPLICATION
NOS. 7800-3, 7801-3 and 7802-3
to Appropriate Water**

Notice is given that Ralph Marquardt, PO Box 1040, Yankton SD 57078 has filed the following applications for a water permit.

Application No. 7800-3 proposes to appropriate 2.22 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the SW 1/4 NW 1/4 Section 22 for irrigation of 110 acres located in the W 1/2 NW 1/4, SE 1/4 NW 1/4, NW 1/4 SW 1/4 Section 22; all in T93N-R53W. The applicant is requesting a diversion rate greater than the statutory limit.

Application No. 7801-3 proposes to appropriate 1.56 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the S 1/2 SE 1/4 Section 21 for irrigation of 108 acres located in the SE 1/4 Section 21; all in T93N-R53W. The applicant is requesting a diversion rate greater than the statutory limit.

Application No. 7802-3 proposes to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the NE 1/4 SW 1/4 Section 22 for irrigation of 165 acres located in the SE 1/4 NW 1/4, E 1/2 SW 1/4, NW 1/4 SW 1/4, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 22; all in T93N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7800-3, 7801-3 and 7802-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

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JUN - 3 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
PMB 2020
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3182

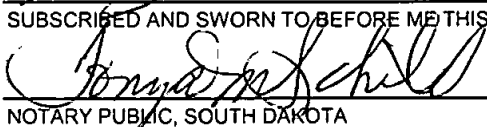
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

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 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 STATE OF SOUTH DAKOTA, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE COUNTY OF YANKTON, AS STATED IN THIS AFFIDAVIT; THAT THE ANNE

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE NEWSPAPER ON THE 24th DAY OF May 2013 THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID **NOTICE** TO WIT **\$34.76** 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: 5/24/2013

FILED ON: 5/24/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 24th DAY OF May 2013

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

recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 3, 2013.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to these applications. Steven M. Pimer, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$34.76.

**NOTICE OF APPLICATION
NOS. 7800-3, 7801-3 and 7802-3
to Appropriate Water**

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Application No. 7801-3 proposes to appropriate 1.56 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the S 1/2 SE 1/4 Section 21 for irrigation of 108 acres located in the SE 1/4 Section 21; all in T93N-R53W. The applicant is requesting a diversion rate greater than the statutory limit.

Application No. 7802-3 proposes to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the NE 1/4 SW 1/4 Section 22 for irrigation of 165 acres located in the SE 1/4 NW 1/4, E 1/2 SW 1/4, NW 1/4 SW 1/4, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 22; all in T93N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7800-3, 7801-3 and 7802-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

May 16, 2013

Plain Talk
201 W Cherry St
Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7800-3, 7801-3 and 7802-3 to Appropriate Water. Please publish the notice once on May 24, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Ralph Marquardt, PO Box 1040, Yankton SD 57078 (Ph # 605-665-4665).

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

May 16, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

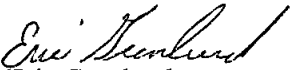
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The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Ralph Marquardt, PO Box 1040, Yankton SD 57078 (Ph # 605-665-4665).

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

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Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

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

May 16, 2013

Ralph Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. Marquardt:

Water Permit Application Nos. 7800-3, 7801-3 and 7802-3 for irrigation use have 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 recommendations of the Chief Engineer and reports on the applications are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above 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(s) has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

Sincerely,

Eric Gronlund
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 applications.

Instruction to Newspaper - Publish the Notice on May 24, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NOS. 7800-3, 7801-3 and 7802-3 to Appropriate Water

Notice is given that Ralph Marquardt, PO Box 1040, Yankton SD 57078 has filed the following applications for a water permit.

Application No. 7800-3 proposes to appropriate 2.22 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the SW 1/4 NW 1/4 Section 22 for irrigation of 110 acres located in the W 1/2 NW 1/4, SE 1/4 NW 1/4, NW 1/4 SW 1/4 Section 22; all in T93N-R53W. The applicant is requesting a diversion rate greater than the statutory limit.

Application No. 7801-3 proposes to appropriate 1.56 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the S 1/2 SE 1/4 Section 21 for irrigation of 108 acres located in the SE 1/4 Section 21; all in T93N-R53W. The applicant is requesting a diversion rate greater than the statutory limit.

Application No. 7802-3 proposes to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (110 feet deep) located in the NE 1/4 SW 1/4 Section 22 for irrigation of 165 acres located in the SE 1/4 NW 1/4, E 1/2 SW 1/4, NW 1/4 SW 1/4, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 22; all in T93N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7800-3, 7801-3 and 7802-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 3, 2013.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to these applications. Steven M. Pimer, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

JUN 24 2013

Ralph Marquardt
PO Box 140
Yankton SD 57078

Dear Mr. Marquardt:

Enclosed are Water Permit Nos. 7800-3, 7801-3, 7802-3 and 7803-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses 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

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AUG - 2 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE

Date

7/29/13

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

FROM:

Ralph Marguardt

(name)

PO Box 1040

(address)

Yankton SD 57078

(city, state, zip)

605-665-1053

(phone)

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

Water Permit No. 7800-3 states that the water use system is to be constructed by

6-3-18

(date)

, and water is to be put to beneficial use by 6-3-22

(date)

The water use system was completed on 7/25/13

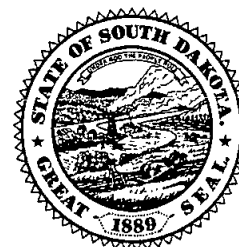
(date)

Applying the water to beneficial use was completed on 7/25/13

(date)

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

Ralph Marguardt
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

August 5, 2013

7800-3
7801-3
7802-3
7803-3

Ralph Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. Marquardt:

I am writing to acknowledge receipt of the "Notice of Completion of Works" forms that you sent in to let us know that you are completed with your irrigation systems.

The systems are now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of the projects and the staff inspection has no bearing on your water permits.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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



7800-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 25, 2019

NOTICE

TO: MARQUARDT FAMILY LTD PARTNERSHIP, PO BOX 1040, YANKTON, SD 57078

FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2018 Irrigation Questionnaire(s)

Our records indicate your 2018 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3. The request for the Questionnaire was dated October 30, 2018. The Water Management Board has directed that owners of water permits who have not submitted the 2018 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3 qualification:

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

The hearing will be held at **Wednesday, March 6, 2019 at 10:30 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) 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is (are) received in this office before the **March 6, 2019** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 6, 2019

Marquardt Family Ltd Partnership
PO Box 1040
Yankton SD 57078

RE: Water Permit/Right Nos. 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3,
7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3

Dear Sir:

I am writing to acknowledge receipt of your 2018 irrigation questionnaires.

You may disregard the January 25, 2019, "Notice" concerning reporting requirements for Water Permit or Right Nos. 5391A-3, 5658A-3, 6978-3, 6979-3, 6980-3, 7152-3, 7213-3, 7214-3 & 7800-3, 7801-3, 7802-3 & 7803-3. 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,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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

7800-3



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

MAY 01 2022

7800-3
7802-3

Ralph Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. Marquardt:

Enclosed is Water License No. 7802-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

Note: The applicable portions of Water Permit No. 7800-3 were incorporated into Water License No. 7802-3.