

WATER PERMIT NO. 8615-3

Name of Applicant: **Ralph and Lucille Marquardt**

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

Amount of Water Claimed: **2 cfs** Total Acres: **160 acres**

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

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

Type of Waste Disposal System:

Location: **12 miles northwest of Vermillion**

PRIORITY Date Received: **3-18-22** Application/License Fee: **\$ 1050**

Corrected Application Received: Period of Annual Use: **April 1 – October 31**

Remarks:

Diversion Point: **center of SW 1/4 Sec 9-T93N-
R53W**

Land to be Irrigated: **SW 1/4 Sec 9-T93N-R53W**

Depth of Well: **125 feet deep**

Well Driller:

Remarks:

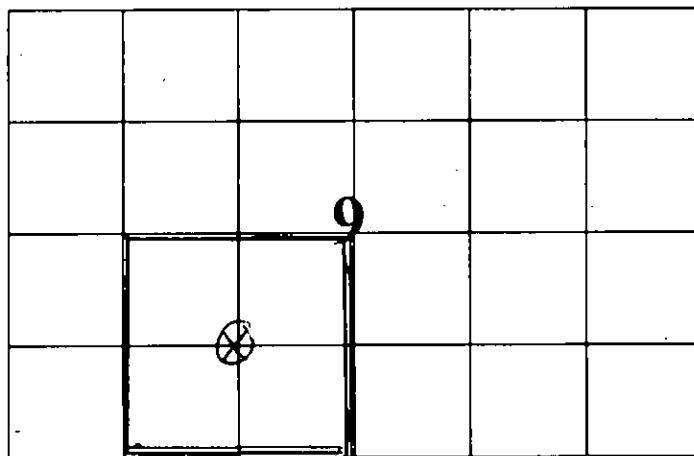
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **3-23-22**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 8615-3**

Date of first receipt of application March 18, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8615-3 to Ralph and Lucille 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. 8615-3 appropriates 2.0 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (approximately 125 feet deep) located in the center of the SW 1/4 Section 9 for irrigation of 160 acres located in the SW 1/4 Section 9; all in T93N-R53W. This site is located approximately 12 miles northwest of Vermillion SD.
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 March 18, 2022.
4. The date of approval of Permit No. 8615-3 is May 31, 2022.
5. One-fifth of the construction is to be completed on or before December 1, 2024.
6. All construction is to be completed on or before May 31, 2027.
7. Water is to be put to beneficial use on or before May 31, 2031.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

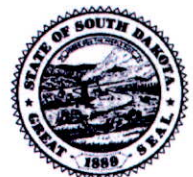
QUALIFICATIONS

1. The well approved under Water Permit No. 8615-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled 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. 8615-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

JUN 28 2022
date



RECEIVED

MAR 18 2022

PAID

MAR 18 2022

Ck#

Rec't#

Mail to: DENR - Water Rights 523 E. Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8615-3</u> (office use only) Hydrologic Unit <u>10170102</u>	WATER RIGHTS PROGRAM
	Basin <u>Vermillion River</u>	
	Newspaper <u>Plain Talk</u>	
	<u>Press & Dakotan</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.)

1. Name to Appear on Irrigation Permit Ralph and Lucille Margwardt

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 1317 601st Viewham Rd Box 440 Yankton SD 57078
(Address) (City) (State) (Zip Code)Phone 605 664 4900 Mobile 605 662 8970 Email dave@c.margcompanies.com2. Amount of water claimed 2 *CFS or 900 **GPM ***AF Total Acreage 160
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply Ground water4. Location of point of diversion One new well in center of SW 1/4, Section 9,
T93N, R53W Clay Co., South Dakota County Clay
(example - 3 wells in SW 1/4 NE 1/4 section 12 - T104N R53W)5. County or counties where water will be used Clay County6. Annual period during which water is to be used April 1 thru October 317. 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>SW 1/4, Sec 9, T93N, R53W</u>	<u>160 Ac</u>		

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

Install irrigation pivot (center) and one new well in center of
the quarter in SW 1/4, Sec 9, T93N, R53W, Clay Co., South Dakota

I, Ralph J. Margwardt, the applicant, certify under
Name of Person Title (if applicable)

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

(Type or print)

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

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by Sam Heine Well Drilling
(if yes, please provide copies of logs)

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

For either Existing or Proposed Wells:

c) Well Depth (required) 125 ft. Depth to Top of Water Bearing Material 60 ft. Depth to Water from Surface 4 ft.

d) Distance to nearest domestic well on applicant's property None Property owned by others 1/2 mile

distance to nearest domestic well on
" " " irrigation

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

b) System Capacity (gallons)	Year Constructed
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c) Connected to the City of Sanitary System

ected to the City

a) Surface Dimensions Depth

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

to water (ground

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

c) 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)

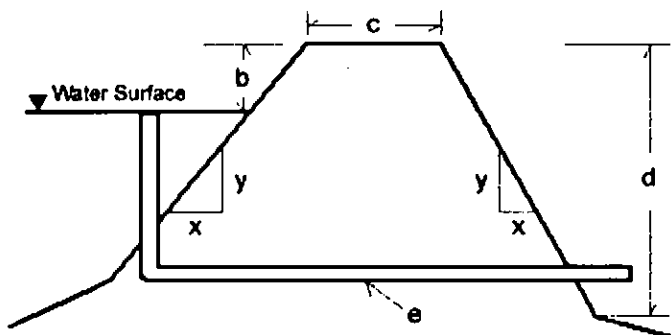
Upstream

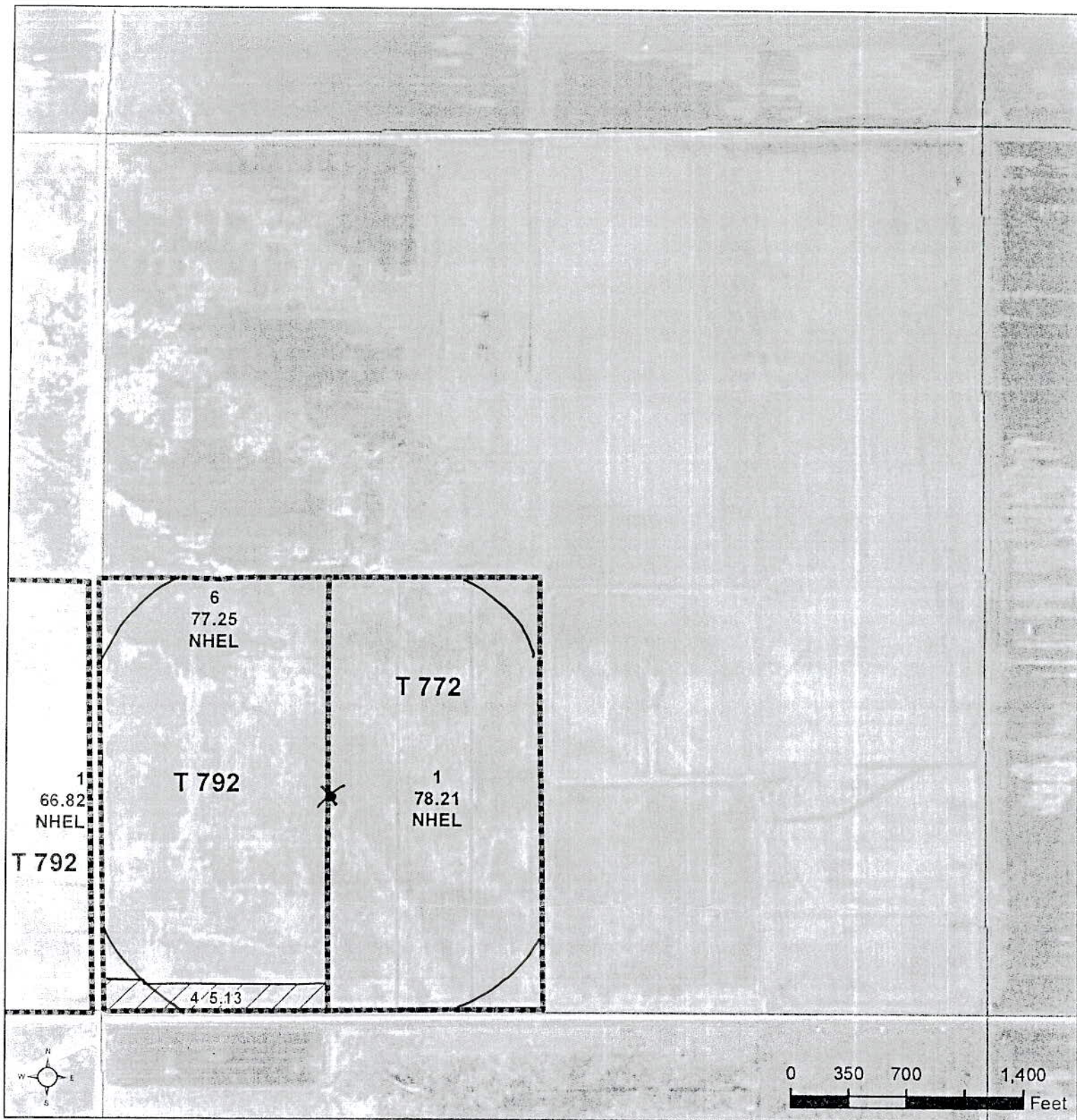
Downstream

h) Surface Area of Impoundment

i) Storage	Acre Feet
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j) Drainage Area Above Dam	Acres
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Common Land Unit

	Tract Boundary
	Non-Cropland
	Cropland

Wetland Determination Identifiers

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

PLSS

2018 Program Year

Map Created April 23, 2018

Farm 5606

COPY

9 -93N -53W

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date March 18, 2022

RECEIVED OF Ralph/Lucille Marquardt 1317 601 F View Lane 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>8615-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>850.00</u>
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>8615-3</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	TOTAL
	\$ <u>1050.00</u>

By Eric Gronlund
Chief Engineer
Em

RECEIVED

MAR 18 2022

WATER RIGHTS
PROGRAM

March 15, 2022

Eric Gronlund, PE

Chief Engineer, Water Rights Program

Department of Agriculture and Natural Resources

523 E. Capitol Ave.

Pierre, SD 57501

Re: Water Permit for Irrigation

Eric.

Enclosed please find our application for a water permit to irrigate 160 acres owned by Ralph and Lucille Marquardt. Also enclosed is a check in the amount of \$1,050 as noted in your email to me payable to the Water Rights Program.

Please process this application as promptly as possible and follow up with me in the event you have any questions or need additional information.

Thank you for your kind assistance in this matter.



Dave Husby

General Counsel

Enc.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8615-3, Ralph and Lucille Marquardt**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8615-3, Ralph and Lucille Marquardt, PO Box 1040, Yankton SD 57078.

The Chief Engineer is recommending APPROVAL of Application No. 8615-3 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 domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The well approved under Water Permit No. 8615-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled 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. 8615-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
May 12, 2022

Report to the Chief Engineer
On Water Permit Application No. 8615-3
Ralph and Lucille Marquardt

April 24, 2022

Water Permit Application No. 8615-3 proposes to appropriate water at a maximum instantaneous diversion rate of 2.0 cubic feet per second (cfs) from one well to be completed into the Missouri: Elk Point aquifer (approximately 125 feet deep) located in the center of the SW ¼ of Section 9 for the irrigation of 160 acres located in the SW ¼ of Section 9; all in T93N-R53W. The site is located in Clay County approximately twelve miles northwest of Vermillion, SD.

AQUIFER: Missouri: Elk Point (M: EP)

HYDROGEOLOGY:

The Missouri: Elk Point aquifer is a glacial deposit of comprised of unconsolidated materials that consist of fine sand to very coarse gravel (Nichus, 1994; Stephens, 1967). The Missouri: Elk Point aquifer underlies Clay, Union, and Yankton counties in South Dakota (Hedges et al., 1982). The Missouri: Elk Point aquifer underlies approximately 219,000 acres and contained approximately 3,287,100 acre-feet (ac-ft) of recoverable water in storage (Hedges et al., 1982). The approximate areal extent of the Missouri: Elk Point aquifer is displayed in Figure 1 along with the location of the diversion point. The Missouri: Elk Point aquifer is hydraulically connected to the Lower James Missouri and the Lower Vermillion Missouri aquifers, as well as the Big Sioux, Missouri, James, and Vermillion Rivers (Nichus, 1994, Stephens, 1967).

No well completion report or test hole log was submitted with Water Permit Application No. 8615-3. Well completion reports on file with the DANR-Water Rights Program for wells completed into the Missouri: Elk Point aquifer within approximately one and one-half miles of the proposed diversion point for this application have a saturated thickness ranging from approximately 50 to 130 feet, with the depth to the top of aquifer materials ranging from approximately 10 to 115 feet below land surface, and static water levels at well completion varying from approximately 10 to 20 feet below land surface (SDGS, 2022; Water Rights, 2022b and 2022d). The Missouri: Elk Point aquifer is expected to be unconfined at the proposed diversion point based on lithologic logs on file for nearby observation wells and well completion reports for nearby wells (SDGS, 2022; Water Rights 2022b and 2022d).

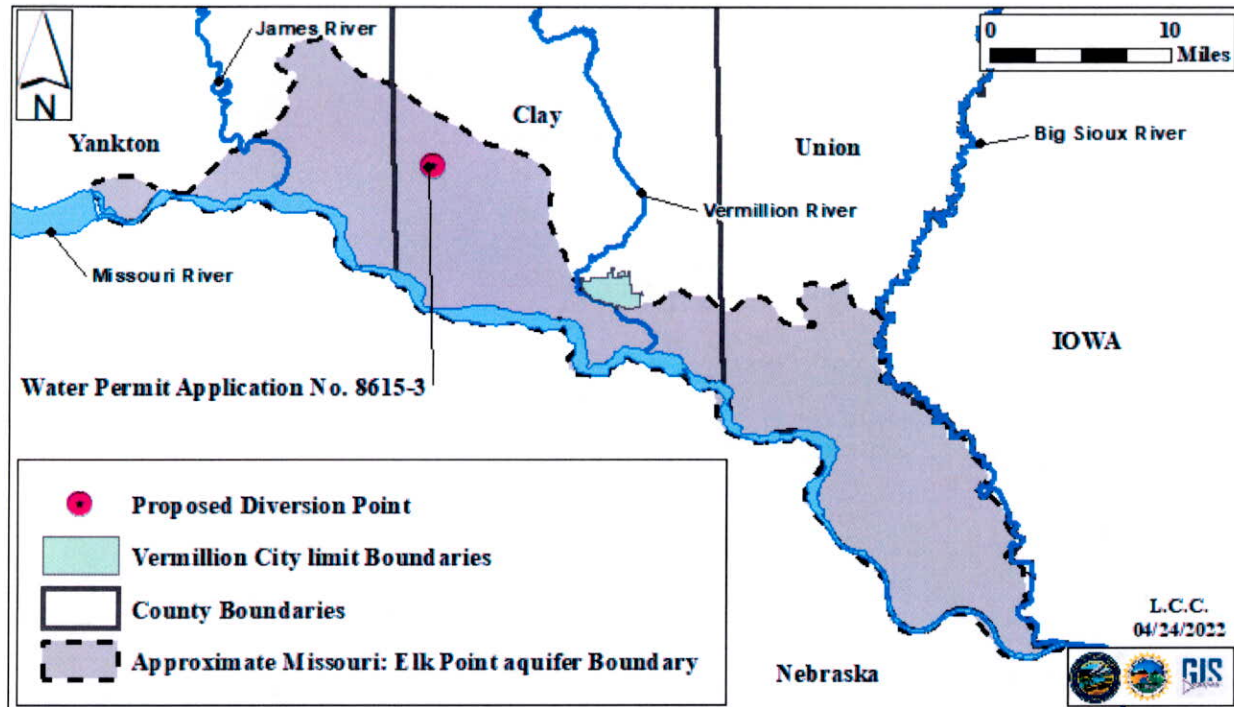


Figure 1: The approximate areal extent of the Missouri: Elk Point aquifer including the diversion point location of Water Permit Application No. 8615-3 (Hedges et al., 1982; Water Rights, 2022b and 2022c).

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

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant’s proposed use, that the diversion point can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Missouri: Elk Point aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8615-3 proposes to appropriate water from the Missouri: Elk Point aquifer for irrigation. The probability of unappropriated water being 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. However, an application may be approved for a water distribution system for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge.” The Missouri: Elk Point aquifer is not older than or stratigraphically lower than the Greenhorn Formation

(Fahrenbach et al, 2010), and the applicant's proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the Missouri: Elk Point aquifer must be considered.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Missouri: Elk Point aquifer is primarily through infiltration of precipitation, seepage from the Big Sioux, James, Missouri, and Vermillion Rivers, and inflow of groundwater from the Lower James Missouri and Lower Vermillion Missouri aquifers (Bugliosi, 1986; Niehus, 1994). The recharge rate to the Missouri: Elk Point aquifer was estimated by Hedges and others (1985). The average annual recharge rate that was estimated for the Missouri: Elk Point aquifer was 3.8 inches per year (Hedges et al., 1985). The estimated areal extent of the Missouri: Elk Point aquifer is 219,100 acres (Hedges et al., 1985). Therefore, the estimated average annual recharge to the Missouri: Elk Point aquifer is approximately 69,382 ac-ft/yr. A more recent study of the Missouri: Elk Point aquifer noted that withdrawals from the aquifer will bring an influx of recharge from the Missouri River (Stephens, 1967). Stonesifer (2013) estimated that the Missouri River contributed approximately 22,582 ac-ft/yr as a result of pumping from the Lewis and Clark RWS. This additional recharge to the aquifer results in the total estimated annual recharge of the Missouri: Elk Point aquifer to approximately 92,000 ac-ft/yr. It should be noted that other wells (domestic and appropriative) in close vicinity to the Missouri River can induce recharge from the river, the amount of induced recharge has yet to be estimated.

Discharge

Discharge from the Missouri: Elk Point aquifer is primarily through evapotranspiration where the aquifer is at or near land surface, leakage to the Dakota aquifer, outflow to the Big Sioux, James, Missouri, and Vermillion Rivers, and well withdrawals (Bugliosi, 1986; Niehus, 1994). Currently, there are 623 water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer, including two pending applications - Water Permit Application Nos. 8609-3 and 8610-3 propose the irrigation of 125 acres, combined (Water Rights, 2022c). There are five future use permits reserving water from the Missouri: Elk Point aquifer presently and the amount of future use permits has not changed since the report by Hansen (2021) was completed. For the purpose of estimating the average annual withdrawal rate from the Missouri: Elk Point aquifer, the five future use permits are assumed to be fully developable for a total of 14,900 ac-ft/yr (Water Rights, 2022c).

The estimated average annual use for non-irrigation water rights/permits within the Missouri: Elk Point aquifer was estimated by Hansen (2021) to be approximately 48,361 ac-ft/yr. It should be noted that Water Permit Nos. 5998A-3 and 7388-3, held by Clay Rural Water System Inc., are included in this average annual use estimate as a result 5998A-3 being authorized for turf, domestic, irrigation, and domestic use and 7388-3 being authorized for rural water system use (Hansen, 2021).

The estimated average annual use for irrigation water rights/permits from the Missouri: Elk Point aquifer from 1979 to 2020 is approximately 19,031 ac-ft/yr (Hansen, 2021). There has been no additional data compiled for the Missouri: Elk Point aquifer since what was analyzed by Hansen (2021) as a result of the 2021 irrigation questionnaire has yet to be reported. It should be noted that this estimate for irrigation use for the Missouri: Elk Point aquifer may not be fully representative of the of the current development of the aquifer as a result of an increase in the number of permits and permitted acreage that began in 2006.

The current average annual irrigation use for the Missouri: Elk Point aquifer was estimated by Hansen (2021) as developed by Farmer (2021). The application rate for the Missouri: Elk Point aquifer was estimated to be approximately 0.343 ft/yr for crop irrigation and 0.97 ft/yr for turf irrigation per permitted acre (Farmer, 2021). These application rates for the Missouri: Elk Point aquifer were based on previous irrigation questionnaire data submitted to the SD DANR-Water Rights Program (Water Rights, 2022a). There are currently 584 irrigation water rights/permits for the Missouri: Elk Point aquifer authorized for the irrigation of 80,564.54 crop acres and 744.6 turf acres (Water Rights, 2022c). Applying the crop and turf application rates estimated by Farmer (2021), the average annual irrigation use for the Missouri: Elk Point aquifer is approximately 27,634 ac-ft/yr. The estimated annual turf irrigation for the Missouri: Elk Point aquifer is shown in Table 1.

There are domestic wells completed into the Missouri: Elk Point aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2022d). Withdrawals from domestic wells on an average annual basis are not considered to be a significant portion of the hydrologic budget due to their relatively low diversion rates. Additionally, with the development of rural water systems in areas it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the Missouri: Elk Point aquifer.

Table 1: Estimated annual water use for turf irrigation within the Missouri: Elk Point aquifer (Farmer, 2021; Water Rights, 2022c).

Permit No.	Name	Status	County	Acres	Estimated Use (ac-ft/yr)
1294-3	Recreation Dev Assn Inc	LC	Union	102	98.9
2011-3	TR Golf LLC	LC	Union	95	92.2
5786-3	Dakota Dunes Golf Course	LC	Union	173	167.8
5935-3	Ted Waitt	LC	Union	1	1
5936-3	Applied Engineering Inc	LC	Yankton	1.8	1.7
5998A-3	Clay Rural Water System Inc	PE	Union	300	N/A*
8010-3	Ryan Rusher	LC	Yankton	2.5	2.4
8029-3	Dakota Dunes Comm Improvement District	PE	Union	17.8	17.3
8040-3	Heine Electric & Irrigation Inc	LC	Clay	1	1
8354-3	TR Golf LLC	PE	Union	30	29.1
8407-3	Gayville-Volin School District 63-1	LC	Yankton	4.5	4.4
8530-3	National Field Archery Association Foundation	LC	Yankton	16	15.5
LC: Licensed Water Right; PE: Permitted Water Right;			TOTAL:	744.6	431.3
*Accounted for within non-irrigation section					

Hydrologic Budget Summary

The average annual withdrawal rate from the Missouri: Elk Point aquifer totals approximately 91,424.1 ac-ft/yr (crop irrigation: 27,634 ac-ft/yr; turf irrigation: 431.3 non-irrigation: 48,361 ac-ft/yr; future use: 14,900 ac-ft/yr; pending applications: 42.9 ac-ft/yr; Water Permit Application No. 8615-3 (if approved) (assuming an application rate of 0.343 ft/ac): 54.9 ac-ft/yr) (Water Rights 2022a and 2022c). The estimated average annual recharge rate to the Missouri: Elk Point aquifer is approximately 92,000 ac-ft/yr. Overall, the estimated average annual recharge to the Missouri: Elk Point aquifer is greater than the estimated average annual withdrawal rate from the aquifer. Therefore, there is a reasonable probability that unappropriated water is available for the appropriation proposed by this permit application.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

The DNR-Water Rights Program monitors 36 observation wells completed into the Missouri: Elk Point aquifer (Water Rights, 2022b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. There is one observation well within approximately four miles of the proposed diversion point. The hydrograph for this observation well is displayed in Figure 2 (Water Rights, 2022b).

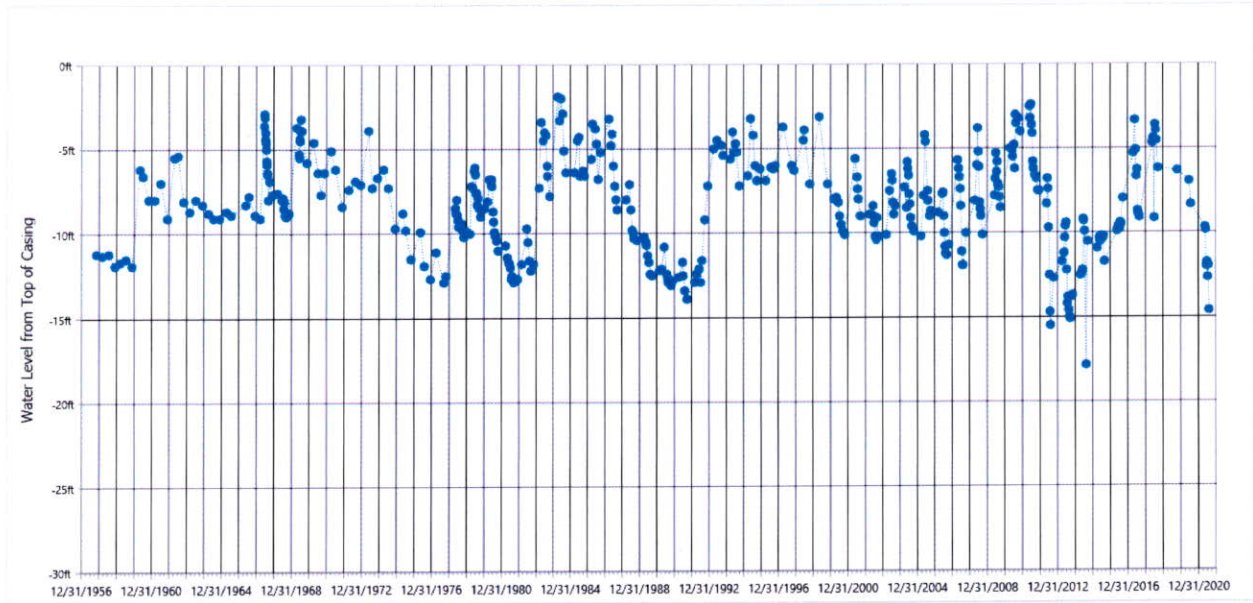


Figure 2: Hydrograph of the Missouri: Elk Point aquifer observation well CL-80A, located approximately 3.8 miles southeast of the diversion point (Water Rights, 2022b).

The hydrograph for the observation well displays stable water levels over their respective periods of record. The hydrograph for the Missouri: Elk Point aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods (early spring snowmelt and precipitation) and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons. This recovery of the aquifer indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Missouri: Elk Point aquifer. Some Missouri: Elk Point aquifer wells show a declining trend in water level over their respective periods of records. Generally, these wells are in close proximity to the Missouri River. This downward trend is due to the entrenchment of the Missouri River channel below Gavins Point Dam in Yankton. This entrenchment has lowered the water level of the river and thus of the hydrologically connected aquifer and is easily noticed in the observation wells near the river (goodman, 2007). However, this lowering of the water level in the aquifer is not a sign of over appropriation of the aquifer. The observation well data and how it reacts to climatic conditions does not show any long-term effects from pumping. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 623 water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer, including 5 future use permits appropriating water from the aquifer (Water Rights, 2022c). There are 40 water rights/permits authorized to appropriate water from the

Missouri: Elk Point aquifer within approximately four miles of the proposed diversion point (Water Rights, 2022c). The 40 water rights/permits are shown in Figure 3 and identified in Table 2. The nearest water right/permit (not held by the applicant) to the proposed diversion point completed into the Missouri: Elk Point aquifer is Water Right No. 8204-3 located approximately 0.5 miles northwest of the proposed diversion point.

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Missouri: Elk Point aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.5 miles southeast of the proposed diversion point (Water Rights, 2022d). There could potentially be other domestic wells completed into the Missouri: Elk Point aquifer near the proposed diversion point that are not on file with the DANR-Water Rights Program.

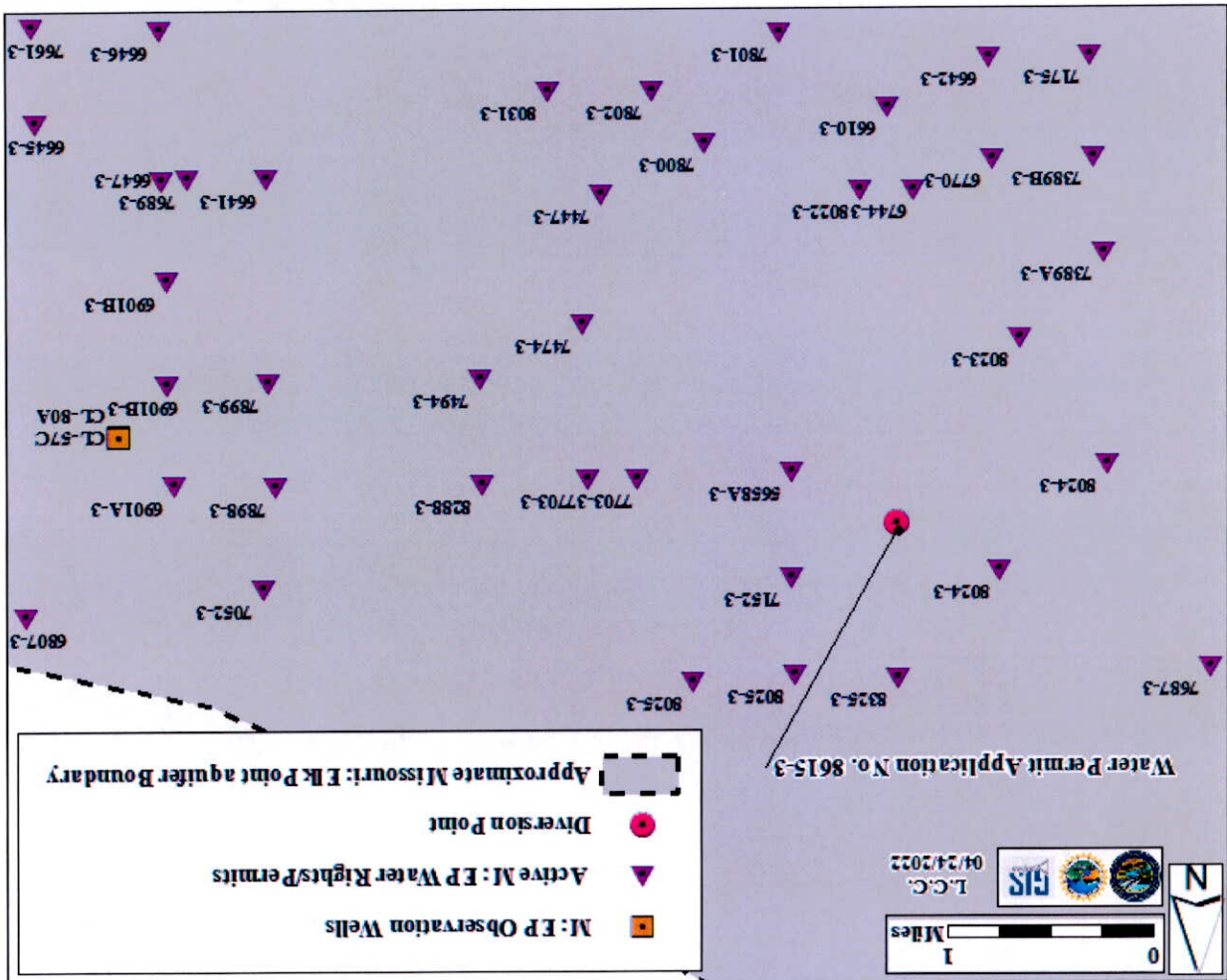


Figure 3: The site location of Water Right Permit Application No. 8615-3, nearby observation wells, and nearby water rights/permits completed into the Missouri: Elk Point aquifer (Water Rights, 2022b and 2022c).

Table 2: Water rights/permits from the Missouri: Elk Point aquifer within approximately 4 miles of the diversion point (Water Rights, 2022c).

Permit No.	Name	Status	Use	Rate (cfs)	Acres
3475-3	D A Olson & Sons	LC	IRR	1.03	72
5289-3	D A Olson & Sons	LC	IRR	1.66	116
6554-3	Willard Schmidt	LC	IRR	1.56	132
6610-3	J Robert Wardin	LC	IRR	1.67	135
6641-3	Thomas Dreesen	LC	IRR	1.56	125
6645-3	Freeburg Limited Partnership	LC	IRR	1.78	148
6646-3	Freeburg Limited Partnership	LC	IRR	1.9	271.2
6647-3	Freeburg Limited Partnership	LC	IRR	1.56	138
6744-3	Judith I Grant	PE	DOM, COM	0.78	N/A
5658A-3	Marquardt Family LTD Partnership	PE	IRR	2	140
6966-3	Troy Walraven	LC	IRR	1.78	133
6978-3	Marquardt Farms	PE	IRR	1.78	133.5
6901B-3	Thomas Dreesen	PE	IRR	4.57	320
6901A-3	Jeff Dreesen	PE	IRR	2.29	160
7447-3	Michael F Hauck	PE	IRR	1.78	160
7474-3	Gwen Orr	LC	IRR	1.78	134
7494-3	Franklin Orr	LC	IRR	1.56	115
7661-3	Freeburg Limited Partnership	LC	IRR	5.44	402
7689-3	Nicholas W Olson	PE	IRR	1	70
7703-3	J Robert Wardin	LC	IRR	3.9	534
7800-3	Ralph Marquardt	PE	IRR	2.22	110
7801-3	Ralph Marquardt	PE	IRR	1.56	108
7802-3	Ralph Marquardt	PE	IRR	1.78	165
7898-3	James Orr	LC	IRR	1.56	132
7899-3	Justin Orr	LC	IRR	1.56	97
8022-3	Double Down Farm Gp	PE	IRR	1.91	134
8031-3	Dakota Protein Conversion Inc	PE	COM	0.22	N/A
8288-3	Franklin Orr	LC	IRR	1.78	97
6642-3	DGL Farmland Holdings Gp	LC	IRR	1.56	132
6770-3	Wade A Larson	LC	IRR	1.56	125
6807-3	James Orr	LC	IRR	1.78	132
7052-3	J Robert Wardin	LC	IRR	1.56	216
7152-3	Marquardt Family Ltd Partnership	PE	IRR	2	145
7175-3	Troy Walraven	LC	IRR	1.78	133
8023-3	Double Down Farm Gp	PE	IRR	4.14	290
7389A-3	Wade A Larson	LC	IRR	1.6	137
7389B-3	Dgl Farmland Holdings Gp	LC	IRR	1.51	129
8325-3	Double Down Farm Gp	PE	IRR	1.67	146
8024-3	Double Down Farm Gp	PE	IRR	3.36	235.2
8025-3	Double Down Farm Gp	PE	IRR	3.82	267.2
IRR: Irrigation; COM: Commercial; DOM: Domestic					
LC: Licensed Water Permit; PE: Permitted Water Permit					

The Missouri: Elk Point aquifer is generally under unconfined conditions in Union County (SDGS, 2022; Water Rights, 2022d). The diversion point is expected to be under unconfined conditions based on water levels and lithologic logs on file for the nearby observation wells (Water Rights, 2022d). Observation well data (see Figure 2) documents minimal drawdown from withdrawals of existing wells near the diversion point. Therefore, pumping from the diversion point is not expected to significantly lower water levels within the aquifer. Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer. The exact drawdown behavior cannot be known without an aquifer performance test. In Clay County, there have been no complaints submitted to the DNR-Water Rights Program regarding potential well interference for adequate wells completed into the Missouri: Elk Point aquifer (Water Rights, 2022e).

Within approximately 3 miles of the diversion point for this application, the Missouri: Elk Point aquifer has a saturated aquifer thickness ranging from approximately 50 to 130 feet, with the depth to the top of aquifer materials ranging from approximately 50 to 115 feet below land surface, and static water levels at well completion varying from approximately 10 to 20 feet below land surface (SDGS, 2022; Water Rights 2022b and 2022d). This would allow for sufficient saturated thickness for a pump to be placed 20 feet below the top of the aquifer; which is required for the well to be considered adequate under ARSD 74:02:04:20(6).

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

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

Any drawdown created from pumping this diversion point is not expected to cause unlawful impairment on existing water right/permit holders or domestic users with adequate wells considering the location of the diversion point, the saturated thickness, and the lack of complaints for adequate wells completed into the Missouri: Elk Point aquifer. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

CONCLUSIONS:

1. Water Permit Application No. 8615-3 proposes to appropriate water at a maximum instantaneous diversion rate of 2.0 cfs from one well to be completed into the Missouri: Elk Point aquifer for the irrigation of 160 acres. The site is located in Clay County approximately twelve miles northwest of Vermillion, SD

2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer for this proposed appropriation based on the hydrological budget and observation well data.
3. There is a reasonable probability this diversion will not unlawfully impair adequate wells authorized by existing water rights or domestic use wells.

for Eric Henslund
Lindsey Cederberg
Natural Resources Engineer I
SD DANR - Water Rights Program

Adam Mathiowetz
Adam Mathiowetz, PE
Natural Resources Engineer IV
SD DANR - Water Rights Program

References

- Bugliosi, E.F. 1986. Water Resources of Yankton County, South Dakota. Water Resources Investigations Report 84-4241. U.S. Geological Survey, Huron, SD.
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- Water Rights, 2022b. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, May 13, 2022 7:45 AM
To: daveh@marqcompanies.com
Subject: Water Permit Application No. 8615-3
Attachments: 3416.pdf

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for your water permit application. As stated in the letter, please contact the paper(s) as soon as possible to authorize publication and arrange for payment. This information is being mailed to you today.

Karen Schlaak
DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>



AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

MAY 23 2022

OFFICE OF
WATER

RALPH MARQUARDT
P.O. BOX 1040
YANKTON SD 57078

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)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
5 + 20 NOTICE OF APPLICATIO

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 20th DAY OF May, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$39.52 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: 05/20/2022

FILED ON: 05/20/2022


SUBSCRIBED AND SWORN TO BEFORE ME THIS 20th DAY OF May, 2022


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

NOTICE OF APPLICATION NO. 8615-3 to Appropriate Water

Notice is given that Ralph and Lucille Marquardt, PO Box 1040, Yankton SD 57078 have filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (approximately 125 feet deep) located in the center of the SW 1/4 Section 9 for irrigation of 160 acres located in the SW 1/4 Section 9; all in T93N-R53W. This site is located approximately 12 miles northwest of Vermillion SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8615-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by May 31, 2022.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by May 31, 2022.

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 recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of \$39.52 and can be viewed free of charge at www.sdpublicnotices.com

AFFIDAVIT OF PUBLICATION

PLAIN TALK

RALPH MARQUARDT
PO BOX 1040
YANKTON SD 57078

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

MICHELE SCHIEVELBEIN, BEING FIRST DULY SWORN ON OATH DEPOSES AND SAYS THAT (S)HE IS THE ADVERTISING DIRECTOR 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 APPLICATION NO.

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE NEWSPAPER ON THE 20th DAY OF May, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID NOTICE TO WIT \$39.68 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: 05/20/2022

FILED ON: 05/20/2022



SUBSCRIBED AND SWORN TO BEFORE ME THIS 20th DAY OF May, 2022



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

Ad text : NOTICE OF APPLICATION NO. 8615-3 to Appropriate Water

Notice is given that Ralph and Lucille Marquardt, PO Box 1040, Yankton SD 57078 have filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (approximately 125 feet deep) located in the center of the SW 1/4 Section 9 for irrigation of 160 acres located in the SW 1/4 Section 9; all in T93N-R53W. This site is located approximately 12 miles northwest of Vermillion SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8615-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

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Published once at the total approximate cost of \$39.68 and can be viewed free of charge at www.sdpublicnotices.com

Published May 20, 2022.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, May 13, 2022 7:40 AM
To: Kelly Kronsahl
Subject: 8615-3, Ralph and Lucille Marquardt
Attachments: 8615-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on May 20, 2022 in both the Plain Talk and the Press & Dakotan.

Ralph and Lucille Marquardt, PO Box 1040, Yankton SD 57078 (605 660-6970) has been notified to contact you to authorize publication and arrange for payment.

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

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

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

Website: <https://danr.sd.gov>





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

May 13, 2022

Ralph & Lucille Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. & Mrs. Marquardt:

Water Permit Application No. 8615-3 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 (Ph # 605 624-2695) and the Press & Dakota printed at Yankton (Ph # 605 665-7811). You will need to contact the newspapers 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 newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have 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,

Karen Schlaak

Karen Schlaak
Water Rights Program
(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.

NOTICE OF APPLICATION NO. 8615-3 to Appropriate Water

Notice is given that Ralph and Lucille Marquardt, PO Box 1040, Yankton SD 57078 have filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (approximately 125 feet deep) located in the center of the SW 1/4 Section 9 for irrigation of 160 acres located in the SW 1/4 Section 9; all in T93N-R53W. This site is located approximately 12 miles northwest of Vermillion SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8615-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

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Published once at the total approximate cost of_

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, June 28, 2022 7:49 AM
To: Dave Husby
Subject: Water Permit No. 8615-3, Ralph & Lucille Marquardt
Attachments: 3623.pdf

Attached is a copy of Water Permit No. 8615-3, Ralph & Lucille Marquardt.

Karen Schlaak

DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 28 2022

Ralph & Lucille Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. & Mrs. Marquardt:

Enclosed is Water Permit No. 8615-3 authorizing construction of the 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,

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

enclosures

8615-3
RECEIVED

JUL 07 2022

OFFICE OF
WATERNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 7/5/22TO: Water Rights Program, DANR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Ralph J. Marquardt
(name)1317 Golf View Lane PO Box 10410
(address)Yankton SD 57078
(city, state, zip)605 664 4900 (o)
(phone)605 660-6970 (c)

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. 8615-3 states that the water use system is to be constructed by5/31/27 (date), and water is to be put to beneficial use by 5/31/31 (date).The water use system was completed on 7/2/22 (date).Applying the water to beneficial use was completed on 7/5/22 (date).

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

Ralph J. Marquardt
(signature)



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

July 8, 2022

8615-3

Ralph J Marquardt
PO Box 1040
Yankton SD 57078

Dear Mr. Marquardt:

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

The system is 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 your project and the staff inspection has no bearing on your water permit.

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,

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

MARQUARDT COMPANIES
PO BOX 1040
YANKTON, SOUTH DAKOTA 57078

November 10, 2022

State of South Dakota
Water Rights Program
Joe Foss Building
523 E. Capitol Ave.
Pierre, SD 57501-9970

RECEIVED

NOV 14 2022

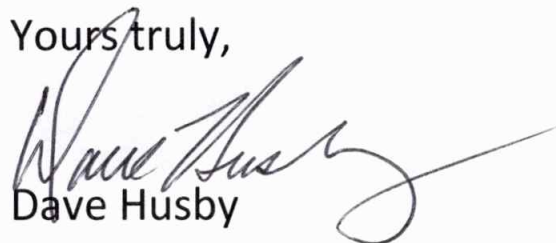
OFFICE OF
WATER

Re: Irrigation Questionnaire

Enclosed please find the completed 2022 Water Management Board Irrigation Questionnaires for the various Marquardt entities. We have done the best that we can to gather this information from our lessees and be as accurate as possible.

Please review and let me know if we can provide any further assistance or additional information.

Yours truly,



Dave Husby

General Counsel

Cc: Ralph Marquardt

8615-3

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8615-3**

I have this day, August 8, 2022, made a thorough examination of the water use system owned by Ralph and Lucille Marquardt, PO Box 1040, Yankton, SD 57078, holder of Permit No. 8615-3, bearing the priority date of March 18, 2022, authorizing the diversion of 2.0 cu. ft. per second each of the waters of groundwater (Missouri: Elk Point Aquifer) for the irrigation of 160 acres, located in Clay County.

Inspection contacts: Dave Husby

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Sam Heine Well Co.
- 2) No. of Wells: 1
- 3) Depth(s): 120 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: Grundfos
- 2) Model: 800S50
- 3) Capacity: 800 GPM

Motor:

- 1) Make: Grundfos
- 2) Model No.: Unknown
- 3) Horsepower rating: 50 hp

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

- 1) Type: Aluminum Size: 8 inches Length: 15 feet

C. Works used to apply water to beneficial use:

Center Pivot:

- 1) Make: Valley
- 2) Overall length: 1,298 feet
- 3) Number of towers: 7
- 4) End gun: Yes
- 5) Capacity: 1,000 GPM

Chemigation Equipment:

- 1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Began using in 2022
- 3) Exceptions to compliance are: None

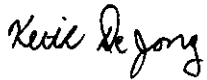
E. Condition and Location:

- 1) The system is in good condition with the point(s) of diversion located as follows:
The well is 1,380 feet east and 1,370 feet north of the southwest corner of Section 9-T93N-R53W (Latitude 42.88477, Longitude -97.11717 – NE1/4 of the SW1/4).
- 2) The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in

Section 9-T93N-R53WNW1/4SW1/4 34 acresNE1/4SW1/4 34 acresSW1/4SW1/4 34 acresSE1/4SW1/4 34 acres

comprising a total of 136 acres of land and the license should be issued for 1.78 cfs.

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

F. Comments or other permit(s) associated with the project: The pump and motor information was obtained from Sam Heine Well Co. The well driller did not send me a well completion report, but they did note that they encountered sand/gravel from 26 feet to 120 feet, so the well is probably 120 feet deep.

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

Date report completed: July 20, 2023



DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES
JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

JUL 21 2023

Ralph & Lucille Marquardt
PO Box 1040
Yankton SD 57078

8615-3

Dear Mr. & Ms. Marquardt:

Enclosed is Water License No. 8615-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8615-3**

(1) Ralph & Lucille Marquardt; PO Box 1040, Yankton SD 57078, made Application No. 8615-3, March 18, 2022, for a water permit to divert 2.0 cubic feet of water per second from groundwater, one well (Missouri: Elk Point Aquifer), Clay County, South Dakota for irrigation purposes. Permit No. 8615-3, with a priority date of March 18, 2022, was approved May 31, 2022, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 31, 2027, and for the application to beneficial use of water on or before May 31, 2031.

(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 are entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,380 ft E & 1,370 ft N of the SW corner of Section 9, T93N, R53W (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
(Latitude 42.88477 Longitude -97.11717)

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

Section 9, T93N, R53W			
NW $\frac{1}{4}$ SW $\frac{1}{4}$	34.0 acres	SW $\frac{1}{4}$ SW $\frac{1}{4}$	34.0 acres
NE $\frac{1}{4}$ SW $\frac{1}{4}$	34.0 acres	SE $\frac{1}{4}$ SW $\frac{1}{4}$	34.0 acres
TOTAL: 136.0 acres			

(4) Pursuant to South Dakota Water Law 46-5-30.1 Ralph & Lucille Marquardt, the holders and/or owners of Water Right No. 8615-3 are issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from groundwater, one well (Missouri: Elk Point Aquifer) with a priority date of March 18, 2022, 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. 8615-3 and subject to the following qualifications:

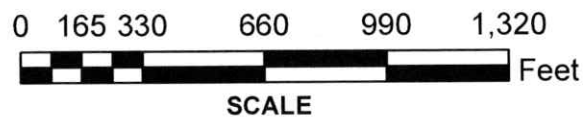
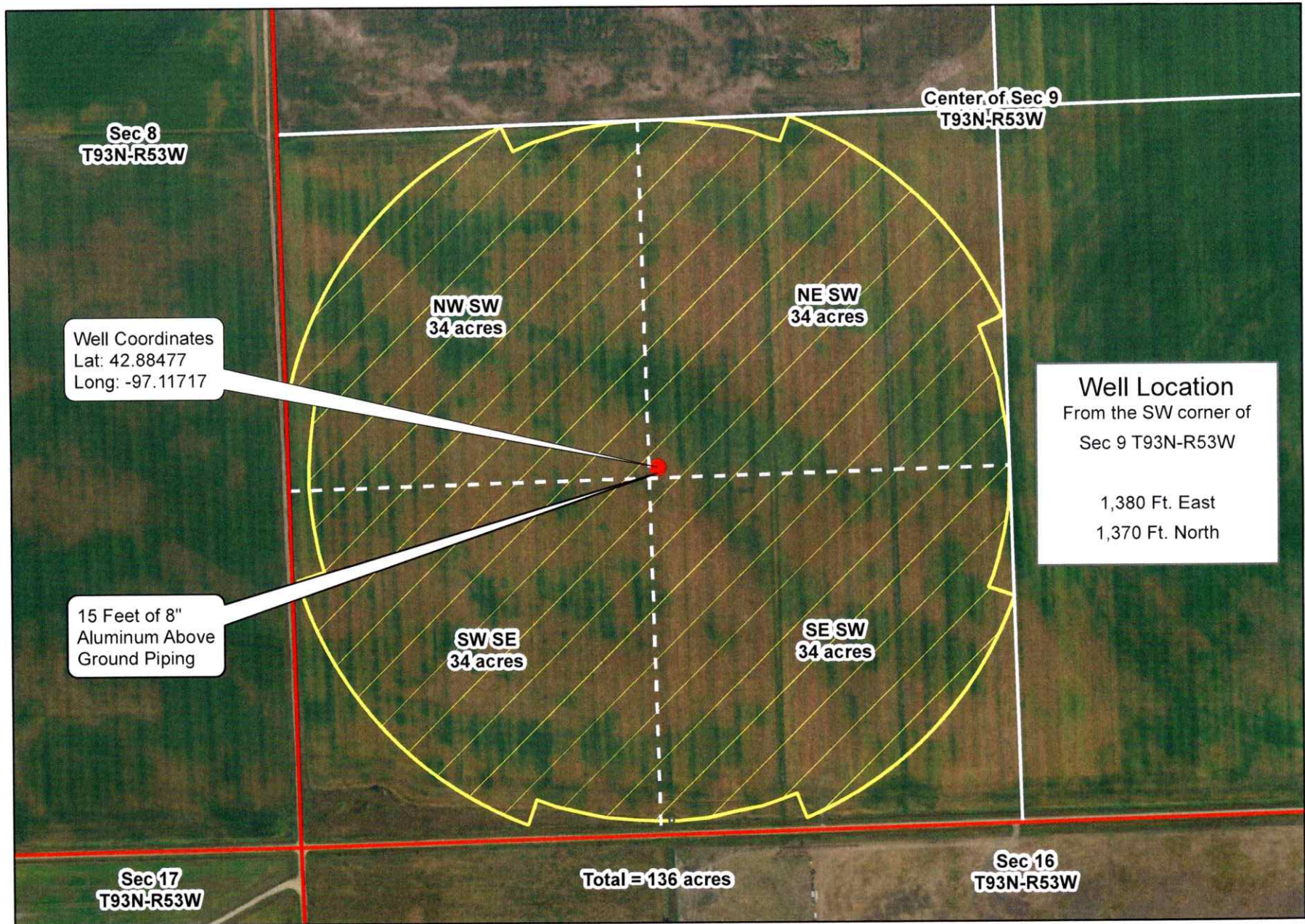
1. The well approved under Water Permit No. 8615-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8615-3 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 grouter (bottom to top) pursuant to Section 74:02:04:28.
3. This Right is approved subject to the irrigation water use questionnaire being submitted each year.


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

JUL 21 2023
date



Water Permit No. 8615-3



Keith DeJong
Keith DeJong, PE Ret.
Staff Engineer
August 23, 2022

RECEIVED

MAR 27 2025

8615-3

NOTICE OF TRANSFER OF OWNERSHIP

OFFICE OF
WATER

For assistance call (605) 773-3352

Mail to: SD DANR, Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

Water Right/Permit No. 8615-3

Date: 3/21/25

PAID

MAR 27 2025

Ck# 004628

Rec't# _____

I/We request that Water Right/Permit No. 8615-3 formerly owned by:
Ralph & Lucille Marquardt - Yankton SD

be transferred to:

New Owner Name: Dakota RE Holdings LLC

Address: 601 Brickell Key Dr #700 mobile: 773-960-2515

City, State, Zip Miami FL 33131 email: matthewlebenson@gmail.com

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

SW 1/4 Section 9, T93N, R53W - 136 acres

*3.31.25 EMAILED SHANNON

- ☒ I understand that the validity of Water Right/Permit No. 8615-3 has not been determined by this transfer action. If I have any questions on validity, I understand that only the Water Management Board has the authority to determine if a water right/permit is valid (see note below).

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

A fee of Fifty Dollars (\$50.00) is included to cover the filing fee as required by SDCL 46-2-13.

I, Matthew Lebenson, the new owner, certify that the above information is true and correct.

Matthew Lebenson

(signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five-year construction period has expired. Once a water permit is developed, an inspection is conducted to issue a water right license for the project as developed. A water permit/right may be cancelled for one or more of the following reasons:

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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date March 27th, 2025

RECEIVED OF Dakota RE Holdings LLC 601 Brickell Key Dr #700 Miami FL 33131

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$ _____
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form <u>#8615-3 & 8920-3</u>	<u>\$100.0</u>
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law) TOTAL	<u>\$100.00</u>

By


Chief Engineer