

WATER PERMIT NO. 8989-3

Name of Applicant: Larry Donnelly

Address: 47423 324th Street, Elk Point SD 57025

Phone: 712-899-8465

Amount of Water Claimed: 1.78 cfs

Total Acres: 60

Source of Water Supply: Groundwater

Water to be used for: Irrigation

County: Union

Type of Waste Disposal System:

Location: Approx. half a mile north of Elk Point

PRIORITY Date Received: 09-30-25

Application/License Fee: \$700.00

Corrected Application Received: 10-07-25

Period of Annual Use: May 1 – September 30

Remarks: Requesting a diversion rate greater than the statutory limit.

Diversion Point: W 1/2 SE 1/4 Sec 13-T91N-R50W

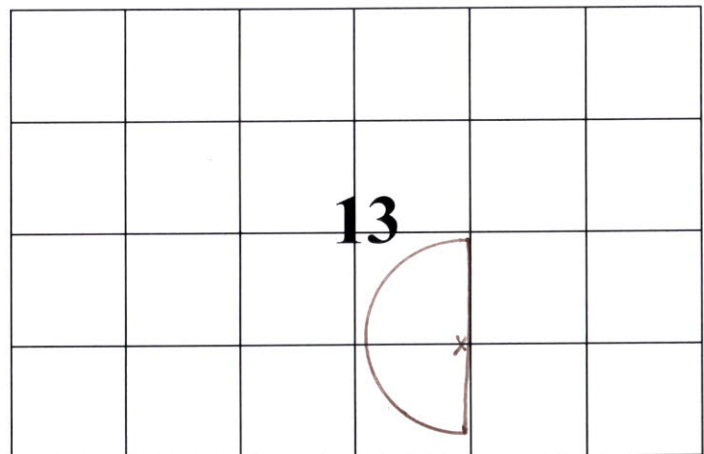
Land to be Irrigated: W 1/2 SE 1/4 Sec 13-T91N-R50W

Depth of Well: 130

Well Driller:

Remarks:

Type of Map: aerial



Reviewed and the Number Assigned on: 10-14-25

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8989-3

Date of first receipt of application September 30, 2025.

The Acting Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8989-3 to Larry Donnelly, 47423 324th Street, Elk Point SD 57025, 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. 8989-3 appropriates 1.78 cubic feet of water per second from one well completed into the Missouri: Elk Point Aquifer (approximately 99 feet deep) located in the approximate center of the SE 1/4 Section 13 for irrigation of 60 acres located in the W 1/2 SE 1/4 Section 13; all in T91N-R50W. This site is located approximately one-half mile northwest of Elk Point 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: May 1 – September 30.
3. The date from which applicant may claim right is September 30, 2025.
4. The date of approval of Permit No. 8989-3 is December 22, 2025.
5. One-fifth of the construction is to be completed on or before June 22, 2028.
6. All construction is to be completed on or before December 22, 2030.
7. Water is to be put to beneficial use on or before December 22, 2034.
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. 8989-3 is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this Permit must control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. 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. 8989-3 authorizes a maximum diversion rate of 1.78 cfs to irrigate 60 acres with an annual volume not to exceed 2 acre-feet of water per acre per year.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Adam Mathiowetz
Adam Mathiowetz, PE
Acting Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

03/02/2026
date



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8989-3</u>	(office use only) Hydrologic Unit <u>10170203</u>
	Basin <u>Big Sioux River</u>	
	Newspaper <u>Elk Point So. Union Leader - Courier</u>	
	<u>Daily Press & Dakotan</u>	

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SEP 30 2025

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 Larry Donnelly

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

Mailing Address 47423 324th St Elk Point SD 57025
(Address) (City) (State) (Zip Code)

Phone _____ Mobile (712) 899-8465 Email _____

2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 60
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply 1 Ground Water Well

4. Location of point of diversion 1 Well W1/2 SE1/4 section 13-T91N-R50W

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Union

5. County or counties where water will be used Union

6. Annual period during which water is to be used May 1 - September 30

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
NW SE S13 T91N R50W	30		
SW SE S13 T91N R50W	30		

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

1 Well in West1/2 of SE1/4 section13-T91N-R50W to supply water to 1 center pivot. The pivot will irrigate 60 acres in W1/2 SE1/4 S13-T91N-R50W, Union County.

I, Larry Donnelly Owner, 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.

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)

Supplemental Information

(type or print)

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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 _____
(if yes, please provide copies of logs)

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

For either Existing or Proposed Wells:

c) Well Depth (required) 130 Depth to Top of Water Bearing Material 50 Depth to Water from Surface 24

d) Distance to nearest domestic well on applicant's property N/A Property owned by others 1050'

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)

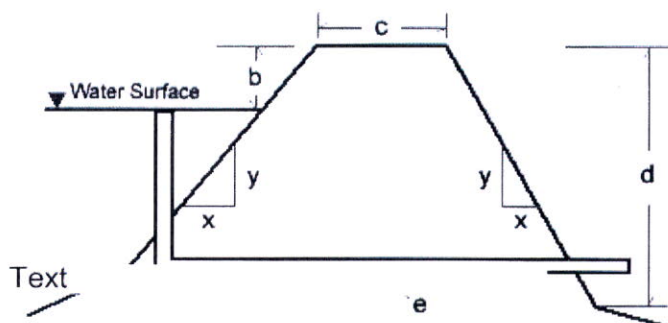
Upstream _____

Downstream _____

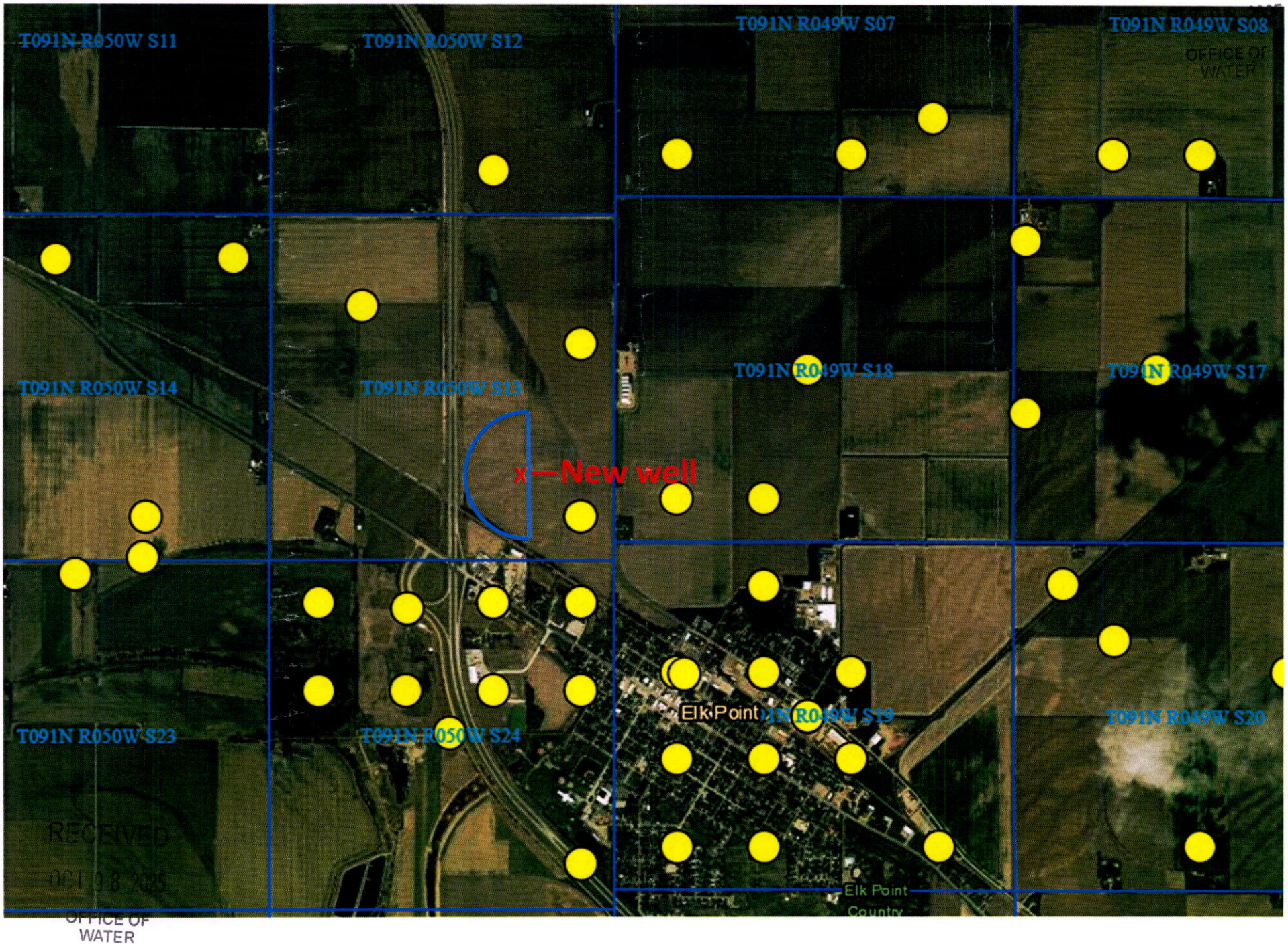
h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Larry Donnally—Water Permit Map— Union County—W1/2 SE1/4 S13 T91N R50W





Map Summary Report - Sallys South



Project Name - Larry donnelly - Sally's Spring
Version Name - Larry donnelly - Sally's Spring...



HEINE ELECTRIC & IRRIGATION - 307 S. Robinson Ave, Hartington, NE, 68739-5139, United States

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OFFICE OF
WATER



Map Summary Report - Sallys South



Project Name - Larry donnelly - Sally's Spring

Version Name - Larry donnelly - Sally's Spring...

Field Name	Design Name	Machine Category	Machine Area (ac)	No.of Towers	Total Machine Length (ft)	Total Irrigated Area (ac)
Pivot_1_92202513345787	Sallys South	Large Field Electrical Pivot 8000	32.72	5	947.12	39.85

Total Project Irrigated Area (ac): 39.85

(Sallys South)	Spans and Overhang	Corner	Endgun*	Bender / DropSpan	Polygon
Irrigated Area using (ac)	32.6	0	7.25	0	0.00

* Estimated

Total Span Length (ft) 900.00

Overhang Length (ft) 45.00

Flex/Transition/Other Lengths (ft) 2.12

S.No	Diameter	Length (ft)	Cable Size	Motor Options	Tire Size	Bender / DropSpan	Profile	Wheel Track (ft)
1	6 5/8	180.00	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	11.2 x 24 New Tubeless	None	Standard	180.08
2	6 5/8	180.00	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	11.2 x 24 New Tubeless	None	Standard	360.08
3	6 5/8	180.00	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	11.2 x 24 New Tubeless	None	Standard	540.08
4	6 5/8	180.00	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	11.2 x 24 New Tubeless	None	Standard	720.08
5	6 5/8	180.00	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	11.2 x 24 New Tubeless	None	Standard	899.82

Primary Endgun

Endgun Angles (Sallys South)	Endgun 1	Endgun 2	Endgun 3
Start Angle	179.95 deg	230.00 deg	287.00 deg
End Angle	200.00 deg	254.00 deg	0.59 deg

Field Name	Latitude	Longitude	Pivot Road Angle	Pivot Road Offset	Start Angle	End Angle
Pivot_1_92202513345787	42.695972825913024	-96.69303503263902	179.95 deg	-	179.95 deg	0.59 deg

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OCT 08 2025

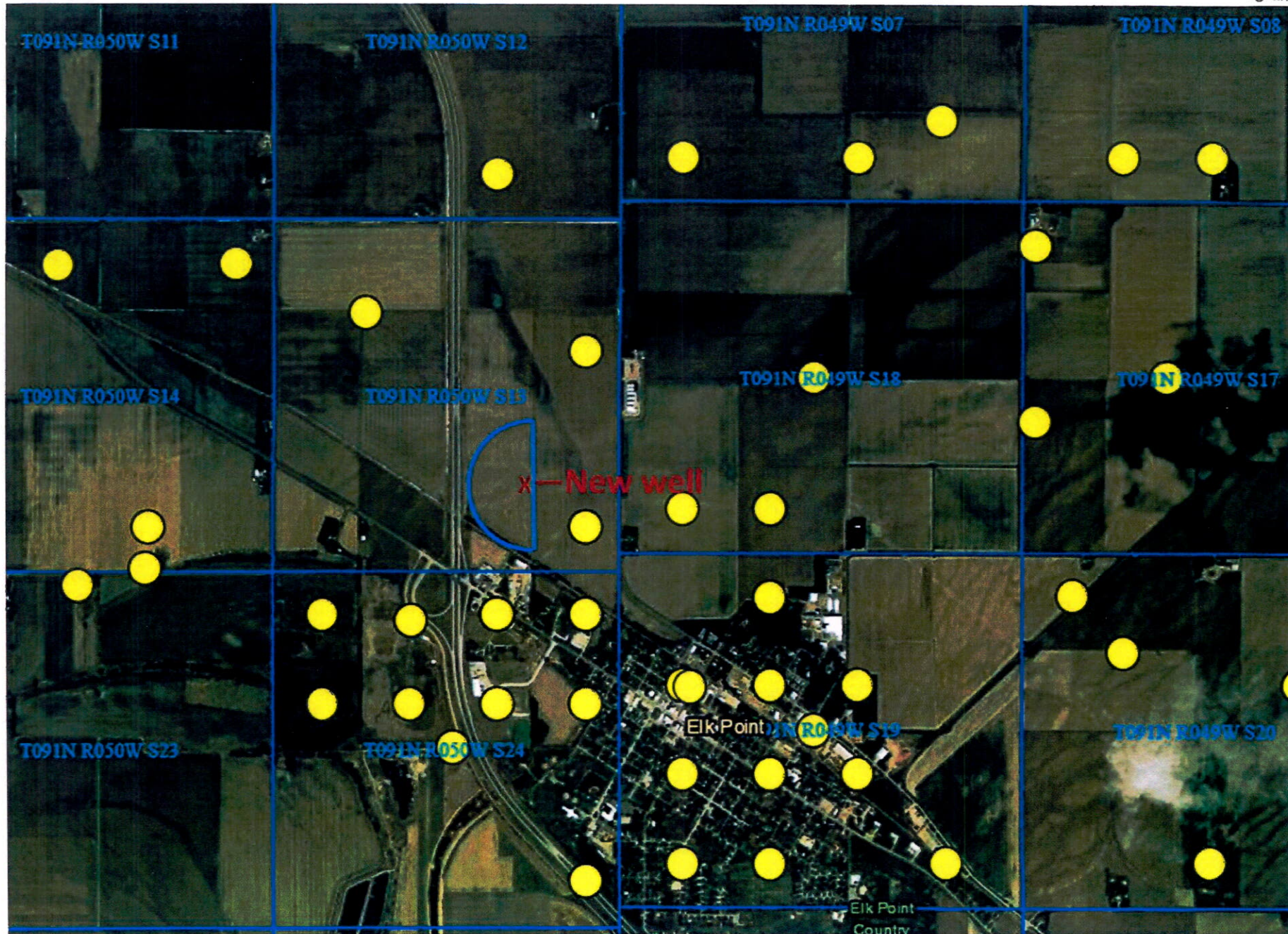
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WATER

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SEP 30 2025

Larry Donnally—Water Permit Map— Union County—W1/2 SE1/4 S13 T91N R50W

Water Rights
Program





Map Summary Report - Sallys South



Project Name - Larry donnelly - Sally's Spring

Version Name - Larry donnelly - Sally's Spring_

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Water Rights
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HEINE ELECTRIC & IRRIGATION - 307 S. Robinson Ave, Hartington, NE, 68739-5139, United States



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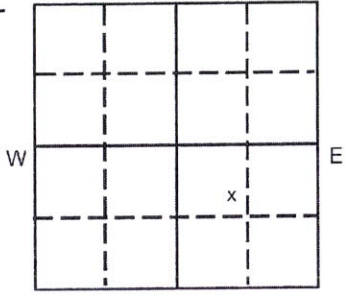
Water Rights Program



8989-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

2024

Location <u>NW ¼ SE ¼</u> Sec <u>13</u> Twp <u>91N</u> Rg <u>50W</u> County <u>UNION</u> GPS Coordinates Lat: <u>42.697569</u> Lon: <u>-96.693150</u> Please mark well location with an "X" on section grid  North W E 1 Mile Well Completion Date <u>10/13/2025</u> Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.) ? _____ ft. from _____ (identify source)	Well Owner: <u>LARRY DONNELLY</u> Business Name: _____ Address: <u>47423 324TH ST</u> City, State, Zip: <u>ELK POINT, SD 57025</u> WELL LOG: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">FORMATION</th> <th colspan="2">DEPTH</th> </tr> <tr> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr><td>TOP SOIL</td><td>0.0</td><td>3.0</td></tr> <tr><td>TAN STIFF CLAY</td><td>3.0</td><td>18.0</td></tr> <tr><td>GRAY FINE SAND</td><td>18.0</td><td>42.0</td></tr> <tr><td>GRAY CLAY</td><td>42.0</td><td>58.0</td></tr> <tr><td>SAND GRAVEL ROCKS</td><td>58.0</td><td>99.0</td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> STATIC WATER LEVEL <u>19.5</u> FEET If flowing: closed in pressure _____ PSI GPM flow _____ through _____ Inch pipe Controlled by ☐ Valve ☐ Reducers ☐ Other _____ Reduced flow rate _____ GPM Can well be completely shut in? _____ WELL TEST DATA: ☐ Pumped Describe: _____ ☐ Bailed ☐ Air ☐ Other _____ Pumping Level Below Land Surface _____ Ft. After _____ Hrs. pumped _____ GPM _____ Ft. After _____ Hrs. pumped _____ GPM If pump installed, pump rate: _____ GPM	FORMATION	DEPTH		FROM	TO	TOP SOIL	0.0	3.0	TAN STIFF CLAY	3.0	18.0	GRAY FINE SAND	18.0	42.0	GRAY CLAY	42.0	58.0	SAND GRAVEL ROCKS	58.0	99.0															
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PROPOSED USE: ☐ Domestic/Stock ☐ Municipal ☐ Business ☐ Monitoring Well ☒ Irrigation ☐ Industrial ☐ Institutional ☐ Test Hole ☐ Dewatering Well ☐ Geothermal ☐ Other _____ METHOD OF DRILLING: ROTARY CASING DATA: ☐ Steel ☒ Plastic ☐ Other If other describe _____ <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>PIPEWEIGHT</th> <th>DIAMETER</th> <th>FROM</th> <th>TO</th> <th>HOLE DIAMETER</th> </tr> </thead> <tbody> <tr> <td>SDR26 LB/FT</td> <td>16 IN</td> <td>0 FT</td> <td>79 FT</td> <td>22 IN</td> </tr> <tr> <td>LB/FT</td> <td>IN</td> <td>FT</td> <td>FT</td> <td>IN</td> </tr> <tr> <td>LB/FT</td> <td>IN</td> <td>FT</td> <td>FT</td> <td>IN</td> </tr> </tbody> </table> GROUTING DATA: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Grout Type</th> <th>No. of Sacks</th> <th>Grout Weight</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>groutwellDF</td> <td></td> <td>Lb/gal</td> <td>0.0 Ft</td> <td>18.0 Ft</td> </tr> <tr> <td>groutwellDF</td> <td></td> <td>Lb/gal</td> <td>45.0 Ft</td> <td>55.0 Ft</td> </tr> </tbody> </table> Describe grouting procedure <u>TREMIE</u> SCREEN: ☐ Perforated pipe ☒ Manufactured Diameter <u>16</u> Inches Length <u>20.0</u> Feet Material <u>PVC</u> Slot Size <u>.060</u> Set From <u>79.0</u> Feet to <u>99.0</u> Feet Other information _____	PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER	SDR26 LB/FT	16 IN	0 FT	79 FT	22 IN	LB/FT	IN	FT	FT	IN	LB/FT	IN	FT	FT	IN	Grout Type	No. of Sacks	Grout Weight	From	To	groutwellDF		Lb/gal	0.0 Ft	18.0 Ft	groutwellDF		Lb/gal	45.0 Ft	55.0 Ft	RECEIVED OCT 21 2025 OFFICE OF WATER REMARKS <u>ELEVATION: 1125</u> This well was drilled under license # <u>810</u> And this report is true and accurate. Drilling firm: <u>4 Boys TT, LLC dba Heine Electric & Irrigation</u> Signature of License Representative: _____ Signature of Well Owner or Equitable Property Holder: _____ Date: <u>10-21-2025</u>
PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER																																
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WAS A PACKER OR SEAL USED? ☐ Yes ☒ No If so, what material? _____ Describe packer(s) and location _____ DISINFECTION: Was well disinfected upon completion? ☒ Yes, How? <u>HTH TABLETS</u> ☐ No, Why Not? _____ Lab sample sent to for water quality analysis _____	Please return White Copy to DANR Water Rights 523 E. Capitol Ave., Pierre SD 57501																																			

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date October 14th, 2025

RECEIVED OF Larry Donnelly 47423 324th Street Elk Point SD 57025

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

Fee for Application for Permit No. <u>8989-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>500.00</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>8989-3</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>700.00</u>

sk

By

Mark Mayer

Chief Engineer

**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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



**RECOMMENDATION OF ACTING CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8989-3, Larry Donnelly**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Acting Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8989-3, Larry Donnelly, 47423 324th Street, Elk Point SD 57025.

The Acting Chief Engineer is recommending APPROVAL of Application No. 8989-3 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. 8989-3 is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this Permit must control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. 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. 8989-3 authorizes a maximum diversion rate of 1.78 cfs to irrigate 60 acres with an annual volume not to exceed 2 acre-feet of water per acre per year.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Mark Mayer, PE
Director of Office of Water
December 3, 2025

Report to the Chief Engineer
On Water Permit Application No. 8989-3

Larry Donnelly

December 2, 2025

Water Permit Application No. 8989-3 proposes to divert water at a maximum instantaneous diversion rate of 1.78 cubic feet of water per second (cfs) from one well completed into the Missouri: Elk Point aquifer (99 feet deep) located in the approximate center of the SE $\frac{1}{4}$ of Section 13 for the irrigation of 60 acres located in the W $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 13; all in T91N-R50W. The applicant is requesting a diversion rate greater than the statutory limit of 1.0 cfs per 70 acres. The site of interest is located in Union County approximately one-half mile northwest of Elk Point, SD.

AQUIFER: Missouri: Elk Point (M: EP)

HYDROGEOLOGY:

The Missouri: Elk Point aquifer is a glacial outwash deposit consisting of fine sand to very coarse gravel (Niehus, 1997). The Missouri: Elk Point aquifer underlies approximately 219,100 acres in Clay, Union, and Yankton Counties in South Dakota, and the aquifer contains approximately 3,287,100 acre-feet of recoverable water in storage (Hedges et al., 1982). The Missouri: Elk Point aquifer is hydrologically connected to the Lower Vermillion-Missouri, and Lower James-Missouri aquifers, and the Big Sioux, James, Missouri, and Vermillion Rivers (Niehus, 1994; Stephens, 1967).

In Union County, the average saturated thickness of the Missouri: Elk Point aquifer is approximately 84 feet, with a documented maximum aquifer thickness of approximately 146 feet (Niehus, 1997). The Missouri: Elk Point aquifer is generally under confined conditions in the northwestern part of the aquifer and unconfined conditions in the southern part of the aquifer, and the direction of groundwater movement in the aquifer is generally from the northwest to the southeast (Niehus, 1994 and 1997).

A water well completion report was submitted with Water Permit Application No. 8989-3. The report lists, "top soil" from 0 to 3 feet below the ground surface, "tan stiff clay" from 3 to 18 feet, "gray fine sand" from 18 to 42 feet, "gray clay" from 42 to 58 feet, and "sand gravel rocks" from 58 to 99 feet below the ground surface (Water Rights, 2025d). The well was screened from 79 to 99 feet and had a static water level of approximately 19.5 feet at the time of well completion (October 13, 2025) (Water Rights, 2025d). Based on the submitted well completion report, the Missouri: Elk Point aquifer is confined at the existing well site for this application (Water Rights, 2025c and 2025d). However, it is likely the well will behave more like it is completed into an unconfined aquifer due to the proximity of unconfined conditions and the fact the nearby confining clay layers are sandy and gravelly; therefore, somewhat transmissive of water. The Missouri: Elk Point aquifer is known to have interbedded clay lenses that can be

relatively small in extent further supporting the well is likely to behave like an unconfined aquifer well (SDGS, 2025; Water Rights, 2025d).

Figure 1 displays a map of the approximate Missouri: Elk Point aquifer extent (modified from Hedges et al., 1982) and the location of the existing well site for Water Permit Application No. 8989-3 (Water Rights, 2025c and 2025d).

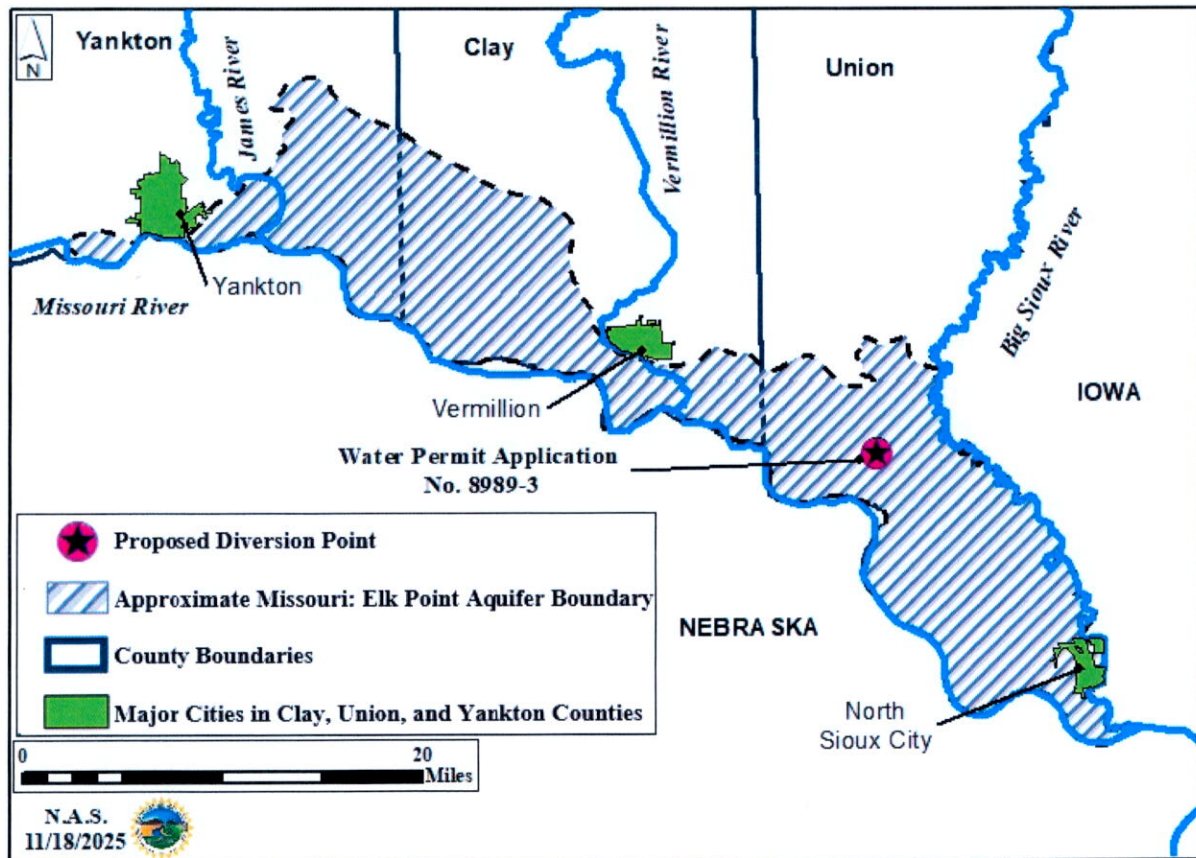


Figure 1. Map of the approximate Missouri: Elk Point aquifer extent modified from Hedges and others (1982) with the location of the existing well site for Water Permit Application No. 8989-3 (Water Rights, 2025c)

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. 8989-3 proposes to appropriate water from the Missouri: Elk Point aquifer. 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. An application may be approved; however, 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 for use by water distribution systems.” 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 the infiltration of precipitation where the aquifer is at or near the ground surface, seepage from the Big Sioux, James, Missouri, and Vermillion Rivers, inflow from the Lower Vermillion-Missouri and Lower James-Missouri aquifers at the northern extent of the Missouri: Elk Point aquifer and inflow from the Big Sioux aquifer at the extreme northeastern extent of the Missouri: Elk Point aquifer, and from the underlying Dakota aquifer in Union County (Condley and Lamkey, 2022; Niehus, 1994 and 1997).

Several studies have been completed to estimate average annual recharge to the Missouri: Elk Point aquifer (Condley and Lamkey, 2022; Hedges et al., 1985; Mathiowetz, 2022; Stephens, 1967; Stonesifer, 2013). A discussion of these studies is available in the hydrologic budget section within the report for Water Permit No. 8614-3 - Lewis & Clark Regional Water System completed by Mathiowetz (2022). Collectively, the estimated average annual recharge rate to the Missouri: Elk Point aquifer is approximately 130,770.3 acre-feet per year assuming full development of the existing future use and water rights/permits currently held by Lewis & Clark Regional Water System (Mathiowetz, 2022 and 2023). Due to proximity of the Lewis & Clark Regional Water System’s Missouri: Elk Point aquifer wells to the Missouri River, the highly transmissive aquifer materials, and large authorized diversion rate, the pumping occurring at the Lewis & Clark Regional Water System is inducing recharge into the aquifer. The scale of this induced recharge is significant enough that it must be accounted for as described by Mathiowetz (2022).

Discharge

Discharge from the Missouri: Elk Point aquifer is primarily through well withdrawals, evapotranspiration where the aquifer is at or near the ground surface, outflow to the Big Sioux and Missouri Rivers during periods of low flow and stage, and leakage to the underlying Dakota aquifer (Niehus, 1994 and 1997; Water Rights, 2025d).

Currently, there are 650 water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer, plus one pending application – Water Permit Application No. 8980-3 requesting to irrigate 160 acres, plus an additional six future use permits reserving water. The six future use permits (Nos. 5832-3, 6237-3, 6869-3, 6869A-3, 7208-3, and 8754-3) collectively reserve 21,021 acre-feet of water annually from the Missouri: Elk Point aquifer (Water Rights, 2025c). For the purpose of estimating average annual withdrawals, the future use permits are assumed to be fully developable for a total of 21,021 acre-feet per year.

Table 1 summarizes the 44 non-irrigation water rights/permits (including two irrigation water permits, see paragraph below) authorized to appropriate water from the Missouri: Elk Point aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. Historically, average water use by non-irrigation appropriations limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at their respective permitted diversion rate. Water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. These are standard methods used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer (Water Rights, 2025c). These methods are likely an overestimation of withdrawals. Three municipal water rights were identified as being connected to a rural water system and likely maintain their wells for standby purposes (Drinking Water Program, 2025; Water Rights, 2025c); as such, the average annual water use for these water rights has been estimated to be zero acre-feet per year on Table 1.

Water Right No. 5437-3 was licensed for a reduced diversion rate which prevents pumping the allotted volume of water specified on the permit (Water Rights, 2025c). The estimated average annual withdrawal rate for Water Right No. 5437-3 was approximated assuming pumping 60% of full time at the respective licensed diversion rate method (Table 1).

Water Permit No. 5998-3 is permitted for the irrigation of turf and Water Permit No. 5998A-3 extends the amount of time allowed for water to be put to beneficial use as authorized by Water Permit No. 5998-3 (Water Rights, 2025c). The estimated use for these two irrigation permits is included with the non-irrigation water rights/permits listed on Table 1, as the permit holder is not required to submit an annual irrigation questionnaire. However, Water Permit No. 5998-3 is authorized for use in a rural water system and the permit holder reports the annual use by Water Permit No. 5998-3 with their other rural water system Missouri: Elk Point aquifer permits, listed on Table 2 (Water Rights, 2025c).

Water Permit No. 7059-3 is permitted for recreational use to maintain the water level of a small lake with a surface area of 17.6 acres (Water Rights, 2025c). It is assumed that the only consumptive use of this water is due to evaporation; however, it is likely there is some seepage

through the bottom of the pond (Water Rights, 2025c). Annual evaporation of water from shallow lakes is estimated to be approximately 42 inches per year at the location of the authorized diversion point for Water Permit No. 7059-3 (NOAA, 1982; Water Rights, 2025c), and normal annual total precipitation at the Sioux City, Iowa airport was determined to be approximately 29.27 inches over a 30-year period of record (1991 to 2020) (Arguez et al., 2020), which results in the lake fluctuating approximately 12.73 inches per year on average. To maintain the water level of the small lake, the estimated use of Water Permit No. 7059-3 is approximately 18.7 acre-feet per year. Overall, the average annual withdrawal rate for the 44 non-irrigation water rights/permits (including the two irrigation permits not required to submit an annual irrigation questionnaire) authorized to appropriate water from the Missouri: Elk Point aquifer is approximately 69,427 acre-feet per year (Table 1) (Water Rights, 2025c and 2025f).

Report on Water Permit Application No. 8989-3

Table 1. Estimated annual use for the non-irrigation water rights/permits (plus two irrigation water permits for Clay RWS) authorized to divert water from the Missouri: Elk Point aquifer (Drinking Water Program, 2025; Water Rights, 2025c and 2025f)

Permit No.	Name	Status	Priority Date	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet/year)	Total Estimated Use (acre-feet/year)
4501-3	Eddie Wohl	LC	03/27/1980	COM	0.05		21.7
5616-3	Cimpls Inc	LC	01/31/1992	COM	0.44		191.2
5827-3	Don Lantis	LC	06/08/1994	COM	0.022		9.6
5953-3	H & K Oil Co	LC	08/19/1996	COM	0.037		16.1
6151-3	Vernon & Norma Vakoc	LC	10/04/1999	COM	0.67		291
6580-3	West Shores Acres LLC	LC	01/28/2005	COM	0.10		43.5
8031-3	Dakota Protein Conversion Inc	PE	06/18/2014	COM	0.22		95.6
8147-3	Doug Lafleur	PE	04/06/2015	COM, LCO	1.0	160	160
8381-3	RP Constructors	PE	11/19/2018	COM	0.04	1	1
8403-3	Stockmen's Livestock Inc	LC	06/27/2019	COM	1.06	40	40
8415-3	3 Sons Properties	PE	11/14/2019	COM	0.10	25	25
8435-3	Sioux City Insulation	PE	07/30/2012	COM	0.33	1	1
8844-3	GrowMark Inc	PE	03/22/2024	COM, IND	0.67	3.68	3.68
7388-3	Clay RWS Inc	PE	07/30/2012	DOM, IRR	2.0		381
5998-3	Clay RWS Inc	PE	04/21/1997	IRR, DOM	2.2		
5998A-3	Clay RWS Inc	PE	04/21/1997	IRR, DOM	0.0		
5490-3	USGS CERC Field Research Station	LC	11/15/1990	FWP	0.09		39.1
5907-3	US Fish and Wildlife Service	LC	01/26/1996	FWP	3.78		1,643
6733-3	US Fish and Wildlife Service	LC	06/07/2006	FWP	1.11		482.5
7094-3	US Fish and Wildlife Service	LC	12/01/2008	FWP	2.67		1,160
5021-3	Vishay-Dale Electronics Inc	LC	05/04/1984	IND	0.10		43.5
5388-3	LG Everist Inc	LC	01/30/1990	IND	0.45		195.6
5453-3	AaLadin Industries Inc	LC	05/24/1990	IND	0.05		21.7
5593-3	Vishay-Dale Electronics Inc	LC	10/31/1991	IND	0.056		24.3
6170-3	Knife River	LC	01/03/2000	IND	0.222		96.5
1255-3	City of Elk Point	LC	01/01/1914	MUN	1.13		491.1
143-3	City of Vermillion	LC	01/21/1956	MUN	1.78		773.7
147-3	City of Vermillion	LC	01/01/1935	MUN	2.66		1,254
6236-3	City of Vermillion	LC	11/06/2000	MUN	2.6	1,161	
6354-3	City of Vermillion	LC	08/12/2002	MUN	0.022		10
1965-3	Town of Gayville	LC	01/01/1914	MUN	0.37		0*
4207-3	Town of Jefferson	LC	01/01/1916	MUN	0.90		391
5118-3	Town of Gayville	LC	01/28/1987	MUN	0.33		0*
5437-3	Dakota Dunes Community Improvement District	LC	04/12/1990	MUN	3.33		1,447
5782-3	City of North Sioux City	LC	08/12/1993	MUN	1.14		495.5
8212-3	City of Yankton	LC	03/25/2016	MUN	20.12	6,050	6,050
7059-3	WE Investments LLC	PE	08/28/2008	REC	3.11		18.7
8744-3	Dakota Bay	PE	03/29/2023	REC	1.55	28.6	28.6
6736-3	Lewis and Clark RWS	PE	07/08/1994	RWS	27.85	20,165	53,442
7207-3	Lewis and Clark RWS	PE	07/08/1994	RWS	20	12,000	
8613-3	Lewis and Clark RWS	PE	07/16/2007	WDS	29.8	13,000	
8614-3	Lewis and Clark RWS	PE	03/04/2022	RWS	0.0	8,277	
5581-3	Larson's Landing	LC	07/30/1991	SHD	0.089		38.7
5592-3	East Winds Court Inc	LC	10/09/1991	SHD	0.11		0*
						TOTAL:	69,427
*Identified as being connected to a RWS; therefore, water use from aquifer is presumed to be zero acre-feet/year							
COM: Commerical; DOM: Domestic; FWP: Fish and Wildlife Propagation; IND: Industrial; IRR: Irrigation; LCO: Livestock Confinement Operation;							
MUN: Municipal; REC: Recreation; RWS: Rural Water System; SHD: Suburban Housing Development							

Of the 44 non-irrigation water rights/permits (including the two irrigation permits not required to submit an annual irrigation questionnaire), there are 16 non-irrigation water rights/permits that are required to report their annual usage from the Missouri: Elk Point aquifer (Water Rights, 2025c and 2025f).

Two of the non-irrigation water rights/permits that are required to report (Nos. 8031-3 and 8435-3) are currently under development and have not reported any withdrawals from the Missouri: Elk Point aquifer to the DNR-Water Rights Program (Water Rights, 2025c). The remaining fourteen non-irrigation water rights/permits that are required to report their annual usage from the Missouri: Elk Point aquifer are shown on Table 2 (Water Rights, 2025c and 2025f). The reported usage (as shown on Table 2) for Permit Nos. 8381-3, 8403-3, and 8415-3 (approved in 2018 and 2019) is not necessarily reflective of the future usage of these permits based on information within their respective water permit files (Water Rights, 2025c), and only have four years of reported withdrawals (Water Rights, 2025f). Therefore, the estimated use for Permit Nos. 8031-3, 8415-3, 8435-3, 8381-3, 8403-3, and 8614-3 will be based on the method used previously to estimate non-irrigation use: water rights/permits limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at the respective permitted diversion rate; water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. The estimated average annual withdrawal rates for these permits are listed on Table 1.

The reported use for the City of Yankton (8212-3) and Lewis and Clark Regional Water System (6736-3, 7207-3, 8613-3, and 8614-3) (as shown on Table 2) is steadily increasing (Water Rights, 2025f), as these water users are continually undergoing development (8614-3 was approved in 2023) (Water Rights, 2025c). It is likely these water users will use their entire respective annual volume limitation in the future; therefore, the average annual withdrawal rate for these water rights/permits is assumed to be their entire respective annual volume listed on Table 1 (Water Rights, 2025c).

The annual withdrawal rate for Clay Rural Water System Inc (Permit Nos. 5998-3, 5998A-3, and 7388-3) averaged over the last ten years (approximately 381 acre-feet per year) is more reflective of current usage than the entire period of record of reported withdrawals because the first few years of reported values were during the construction period (Water Rights, 2025c and 2025f). The average annual withdrawal rate based off the reported annual withdrawal rates averaged from 2015 to 2024 on Table 2 for these water permits will be used in this analysis.

The annual withdrawal rates for Doug Lafleur (8147-3) and the City of Vermillion (147-3, 6236-3) on Table 2 are relatively steady over their respective periods of record (Water Rights, 2025c and 2025f); therefore, the average annual withdrawal rate based on the reported values from each of these water users (as shown on Table 2) is reasonably reflective of the future withdrawals likely to be made by these appropriative users. The average annual withdrawal rate based off the reported annual withdrawal rates averaged over the period of record on Table 2 for these water rights/permits will be used in this analysis.

Table 2. Non-irrigation water rights/permits required to report their respective annual use from the Missouri: Elk Point aquifer (Water Rights, 2025c and 2025f)

	Three Sons' Properties LLC	RP Constructors	Stockmen's Livestock Inc	Clay RWS Inc	Doug Lafleur	City of Vermillion	City of Yankton	Lewis and Clark RWS
	8415-3	8381-3	8403-3	5998-3, 5998A-3, 7388-3	8147-3	147-3, 6236-3	8212-3	6736-3, 7207-3, 8613-3, 8614-3
2003				238		1,363		
2004				483		1,226		
2005				21		1,247		
2006				170		1,252		
2007				217		1,344		
2008				213		1,199		
2009				215		1,140		
2010				183		1,071		
2011				137		1,127		92
2012				525		1,317		3,836
2013				301		1,183		9,368
2014				307		1,121		11,532
2015				278	202	1,161		15,591
2016				231	202	1,175	66	17,091
2017				276	202	1,215	531	18,051
2018				305	98	1,168	504	18,143
2019		0.0171	1	292	135	1,440	1,370	20,397
2020		0.0224	4.2	461	121	1,373	2,923	21,039
2021		0.2332	5.5	486	170	1,378	3,065	23,537
2022		0.0252	5.7	550	142	1,394	3,405	24,693
2023	0.8	0.0313	6.4	495	161	1,368	3,157	26,801
2024	0.38	0.0246	12.4	437	168	1,316	3,157	28,571
Max (acre-feet)	0.8	0.2	12.4	550	202	1,440	3,405	28,571
Min (acre-feet)	0.38	0.0171	1	21	98	1,071	66	0
Avg (acre-feet)	0.59	0.059	5.87	310	160	1,254	2,020	17,053
RWS: Rural Water System								

Currently, there are 608 irrigation water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer (Water Rights, 2025c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire since 1979. The estimated average annual withdrawal rate for the Missouri: Elk Point aquifer irrigation water rights/permits that have reported over the period of record (1979 to 2024) is approximately 19,589 acre-feet per year (Table 3) (Water Rights, 2025a). A more recent average period is likely to better reflect the current development of irrigation water rights/permits; thus, the average annual withdrawal rate for irrigation appropriations from 2015 to 2024 is approximately 25,765 acre-feet per year (Table 3) (Water Rights, 2025a).

The usage for two irrigation water permits (Nos. 5998-3 and 5998A-3) was accounted for on Table 1 with the non-irrigation water rights/permits, as the permit holder is not required to report their respective annual irrigation usage (Water Rights, 2025c), resulting in only 606 of the Missouri: Elk Point aquifer irrigation water rights/permits being currently required to submit an annual irrigation questionnaire (Water Rights, 2025c).

Additionally, Water Right No. 6110-3 is authorized to divert water from a well completed into the Dakota aquifer and pump the water into two ponds that receive incidental surface runoff and possible groundwater inflow from the Missouri: Elk Point aquifer (Water Rights, 2025c). Water

Right No. 6110-3 is included in the 608 irrigation water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer; however, the estimated use for this permit is assumed to be negligible to the overall hydrologic budget due to the minimal amount of water from the Missouri: Elk Point aquifer the permit holder is expected to withdraw. When omitting Water Right No. 6110-3 and Water Permit Nos. 5998-3 and 5998A-3 from this analysis of Missouri: Elk Point aquifer irrigation water rights/permits, 605 water rights/permits remain.

Table 3 lists 599 water rights/permits as reporting in 2024 (Water Rights, 2025a and 2025c). Sixteen water rights/permits (Nos. 977A-3, 1624-3, 1646-3, 2947-3, 3628-3, 5435-3, 6679-3, 6993-3, 7297-3, 7301-3, 7578-3, 7580-3, 7749-3, 7773-3, 7980-3, and 8595-3) that were incorporated into another water right in 2024 (Water Rights, 2025c), resulting in only 583 of the water rights/permits reporting on the 2024 irrigation questionnaire as being currently active.

The 583 water rights/permits (currently active) listed as reporting on the 2024 IQ includes Water Right No. 2763-3 which was divided to reflect new partial ownership (2763-3A and 2763-3B) in 2025 but is still a current water right for the remaining portions, resulting in 585 active water rights/permits (Water Rights, 2025c).

Water Right No. 3127-3 was not listed as reporting in 2024 and was divided to reflect new partial ownership (3127-3A and 3127-3B) in 2023, resulting in 587 active water rights/permits (Water Rights, 2025c). The same case occurred for Water Right No. 7608-3 (not included as reporting) and was divided to reflect new partial ownership (7608-3A and 7608-3B) in 2024, resulting in 589 active water rights/permits (Water Rights, 2025c).

Sixteen water permits/rights did not submit an irrigation questionnaire form in 2024 that are currently active, accounting for the difference between the 589 currently active water rights/permits that reported in 2024, and the 605 irrigation water rights/permits currently required to submit an annual irrigation questionnaire and annual use being estimated in this analysis (Water Rights, 2025a and 2025c). Of these sixteen permits, thirteen were issued between 2023 to 2025 and have not yet submitted an irrigation questionnaire. The remaining rights are Water Right No. 5935-3, which is not required to submit an irrigation questionnaire, and Water Right Nos. 1006-3 and 1007-3 whose holders did not submit an irrigation questionnaire in 2024 for an unknown reason. Overall, these eighteen water permits/rights are authorized to irrigate approximately 2,239.2 acres (Water Rights, 2025c).

Table 3. Reported historic irrigation use from Missouri: Elk Point aquifer (Water Rights, 2025a)

Year	No. of Permits Reporting	Reported Pumpage (acre-feet)
1979	259	10,258
1980	263	14,937
1981	297	13,931
1982	269	19,143.1
1983	273	11,081
1984	281	9,605.5
1985	282	14,020.7
1986	286	6,324.8
1987	281	13,369
1988	282	28,558.1
1989	292	25,904.3
1990	297	19,508
1991	300	18,877.7
1992	295	1,895
1993	298	1,475.2
1994	295	10,314.9
1995	292	18,761.3
1996	296	9,473.6
1997	305	17,236
1998	313	11,079.5
1999	308	14,877
2000	309	26,551
2001	313	19,115.2
2002	315	23,326.9
2003	314	27,007
2004	322	24,309
2005	335	24,206.1
2006	353	27,943.3
2007	366	30,652
2008	396	16,439
2009	410	6,346
2010	419	2,906.9
2011	431	12,330
2012	445	56,994.7
2013	543	35,090.5
2014	557	12,423.5
2015	563	17,884.1
2016	564	27,869.3
2017	567	37,209.9
2018	570	9,160.7
2019	575	8,736.3
2020	570	26,601
2021	572	40,503.4
2022	579	44,925
2023	599	32,338
2024	599	26,708.5
Min	259	1,475.2
Max	599	56,994.7
Avg (1979 to 2024)	384	19,589
Avg (2015 to 2024)	576	25,765

Farmer (2018a, 2018b, and 2021) analyzed the amount of water pumped per permitted acre for the period 1979 through 2005. This period was chosen due to the relatively stable number of permitted acres across the entire period. There was a continual annual increase in the number of permitted acres from 2006 through 2013/2014. From 2013/2014 through 2021, the total number of permitted acres had been relatively stable (Mathiowetz, 2022; Water Rights, 2025c). Farmer (2021) determined that it would be best to separate the review of pumpage per permitted acres between crops, such as corn and soybeans, and turf, such as golf courses and lawn irrigation, to describe the pumpage more accurately per permitted acres. Turf irrigation typically requires more water per acre annually than crop irrigation. Mathiowetz (2022) determined over the entire period of record (1979 through 2021), the crop application rate per permitted acre is 0.331 feet per year (3.97 inches per year), and 0.908 feet per year for turf (10.9 inches per year) (Water Rights, 2025a and 2025c).

Currently, there are 84,278.89 acres authorized to be irrigated from the Missouri: Elk Point aquifer, with 819.6 of those acres authorized for turf irrigation, plus one pending application requesting to crop irrigate 160 acres - Water Permit Application No. 8980-3 (Water Rights, 2025c). Table 4 contains the turf irrigation permits with their respective authorized permitted acres and an estimated average annual use based on Mathiowetz's (2022) application rate per permitted acre (Water Rights, 2025c). By multiplying the application rate of 0.908 feet per acre per year (Mathiowetz, 2022), by the 819.6 acres permitted for turf irrigation (Water Rights, 2025c), the annual use for turf irrigation yields approximately 744.2 acre-feet per year (Table 4). By multiplying the application rate of 0.331 feet per acre per year (Mathiowetz, 2022), by the 83,459.29 acres (total acres minus turf irrigated acres) acres being crop irrigated, plus 160 acres for the pending application (Water Rights, 2025c), the average annual use for crop irrigation yields approximately 27,678 acre-feet per year. Collectively, the average annual use from the Missouri: Elk Point aquifer for both crop and turf irrigation water rights/permits utilizing Mathiowetz's (2022) application rates is approximately 28,422.2 acre-feet per year.

Table 4. Water rights/permits authorized for irrigation of turf (Water Rights, 2025c)

Permit No.	Name	Status	County	Acres	Total Estimated Use (acre-feet/year)
1294-3	Recreation Development Assn. Inc.	LC	Union	102	92.6
2011-3	TR Golf LLC	LC	Union	95	86.3
5786-3	Dakota Dunes Golf Course	LC	Union	173	157.1
5998-3	Clay Rural Water System Inc	PE	Union	300	272.4
5998A-3	Clay Rural Water System Inc	PE	Union	0	0
5935-3	Ted Waite	LC	Union	1	0.908
5936-3	Applied Engineering	LC	Yankton	1.8	1.6
8010-3	Ryan Rusher	LC	Yankton	2.5	2.3
8029-3	Dakota Dunes Comm Improvement District	PE	Union	17.8	16.2
8040-3	Heine Electric & Irrigation Inc	LC	Clay	1	0.908
8354-3	TR Golf LLC	PE	Union	30	27.24
8407-3	Gayville-Volin School District 63-1	LC	Yankton	4.5	4.1
8530-3	National Field Archery Association Foundation	LC	Yankton	16	14.5
8560-3	TR Golf LLC	PE	Union	65	59
8727-3	TR Golf LLC	PE	Union	10	9.1
			TOTAL:	819.6	744.2

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, 2025d). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget. Additionally, with the development of rural water systems in areas where the Missouri: Elk Point aquifer is the uppermost aquifer available; 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.

Hydrologic Budget Summary

The average annual recharge rate to the Missouri: Elk Point aquifer is approximately 130,770.3 acre-feet per year.

The estimated average annual withdrawal rate for the water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer is approximately 118,890 acre-feet per year (including the estimated use for Water Permit Application Nos. 8980-3 and 8989-3, if approved) (listed on Table 5). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the Missouri: Elk Point aquifer for the proposed appropriation.

Table 5. Estimated use from Missouri: Elk Point aquifer (Water Rights, 2025a, 2025c, and 2025f)

Type of Water Right/Permit	Estimated Use (acre-feet/year)
Future Use Reservations	21,021
Non-Irrigation	69,427
Irrigation (Mathiowetz's (2022) turf and crop application rates) (including pending Water Permit App No. 8980-3)	28,422
Application No. 8989-3 (if approved, assuming Mathiowetz's (2022) crop application rate of 0.331 per acre)	20
TOTAL:	118,890

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.

Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DANR-Water Rights Program monitors 36 observation wells completed into the Missouri: Elk Point aquifer (Water Rights, 2025b). The three closest observation wells to the well the applicant proposes to use are UN-87G (approximately 1.7 miles north), UN-77M

(approximately 1.7 miles east), and UN-78A (approximately 2.1 miles southeast) (Water Rights, 2025b). The hydrographs for these observation wells are displayed in Figure 2 (Water Rights, 2025b). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing that were then converted to elevation from NGVD29.

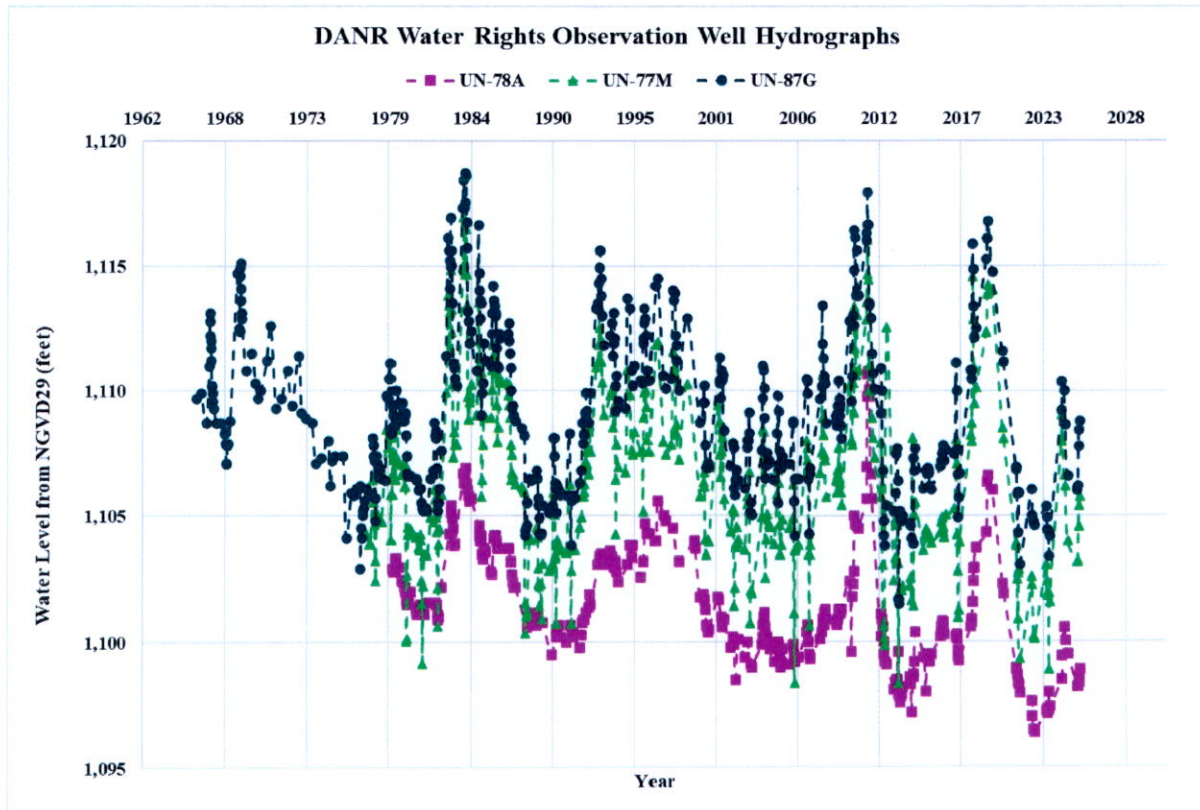


Figure 2. Hydrograph for observation well UN-78A, UN-77M, and UN-87G (Water Rights, 2025b)

Most hydrographs for observation wells completed into the Missouri: Elk Point aquifer display a generally stable to slightly increasing trend, except for several Missouri: Elk Point aquifer observation wells close to the Missouri River whose respective hydrographs show a gradual long-term downward trend. The same trends are displayed in Figure 2 (Water Rights, 2025b) but is less pronounced than what is seen on hydrographs for observation wells completed closer to the Missouri River. This downward trend is caused by entrenchment of the Missouri River riverbed and in some places a widening of the channel leading to lower water levels despite the river having the same rate of flow (Elliott and Jacobson, 2022). The lowering of the water level in the Missouri River downstream of the Gavins Point Dam and the subsequent lowering of the water level of Missouri: Elk Point aquifer observation wells in proximity to the river show the strong hydrologic connection between the Missouri River and the Missouri: Elk Point aquifer. This is demonstrated by the very similar water levels between the aquifer and river as shown in the hydrographs in Figures 2 and 3. The lowering of the water levels in the aquifer, especially in

proximity to the Missouri River, is not a sign of over appropriation of the Missouri: Elk Point aquifer.

To demonstrate the connection between the aquifer and the Missouri River, consider the United States Geological Survey (USGS) Stream Gage #06467500, located on the Missouri River at Yankton, SD below Gavins Point Dam. The hydrograph for this gage is shown in Figure 3 (USGS, 2025). By comparing the hydrograph for Stream Gage #06467500 to the observation well hydrographs of the Missouri: Elk Point aquifer (Figure 2), both show the river and aquifer react to climatic conditions by rising and falling over similar trends and similar magnitudes for the observation wells closest to the river (USGS, 2025; Water Rights, 2025b). Additionally, during flood events (such as, the years 2011 and 2019), the water level in the Missouri: Elk Point aquifer, especially where in closer proximity to the Missouri River (as seen in the hydrograph for YA-80KA), rises very quickly beyond what is typically seen for glacial outwash aquifers that are only responding to the infiltration of precipitation (Water Rights, 2025b). This indicates there is a hydrologic connection between the Missouri: Elk Point aquifer and the Missouri River. Therefore, when the elevation of the water in the Missouri River is higher than the elevation of water in the aquifer, the river will recharge the aquifer. In contrast, when the elevation of water is higher in the Missouri: Elk Point aquifer, the aquifer naturally discharges to the Missouri River. The observation well water levels simply show the connection between the river and the aquifer and how the aquifer reacts to climatic conditions without showing any long-term effects from pumping. Therefore, based on the observation well record, there is a reasonable probability unappropriated water is available for this proposed appropriation.

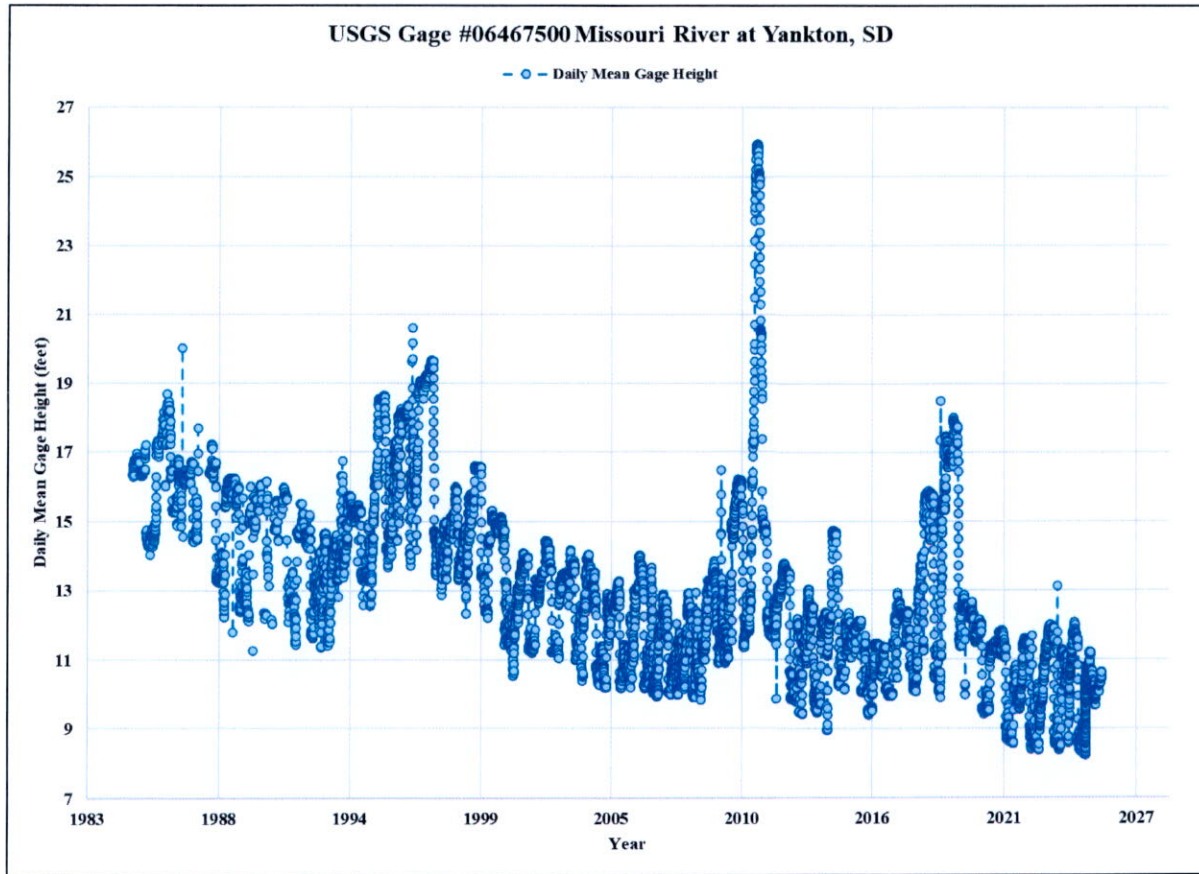


Figure 3. Hydrograph for USGS Stream Gage #06467500 Missouri River at Yankton, SD from 1985 to 2025 (USGS, 2025)

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 650 water rights/permits authorized to appropriate water from the Missouri: Elk Point aquifer, plus one additional pending permit and six additional future use permits reserving water (Water Rights, 2025c). The closest water right/permit to the existing well site is Water Right No. 2370-3, which is held by Edmund & Jacqueline Curry. The diversion point for Water Right No. 2370-3 is located approximately 0.4 miles east of the existing well proposed to be used by this application (Figure 4) (Table 6) (Water Rights, 2025c).

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) located approximately 0.3 miles southeast of the existing well site (Water Rights, 2025d). There could potentially be other domestic wells completed into the Missouri: Elk Point aquifer near the well the applicant proposes to use that are not on file with the DANR-Water Rights Program. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

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Table 6. Water rights/permits authorized to withdraw water from the Missouri: Elk Point aquifer within approximately one mile of the existing well site, as shown in Figure 4 (Water Rights, 2025c)

Permit No.	Name	Status	Use	Authorized Acres if IRR	Authorized Diversion Rate (cfs)
322-3	Fred Jorgensen & Son	LC	IRR	138.6	1.98
1133-3	JJ Curry & Sons	LC	IRR	130	1.86
1530-3	Edmund L Curry	LC	IRR	275	3.33
2370-3	Edmund & Jacqueline Curry	LC	IRR	235	2
2750-3	Lawrence Donnelly	LC	IRR	128	1.8
3673-3	Cloverleaf Farms Inc	LC	IRR	40	0.57
3910-3	Hugh Morris	LC	IRR	130	1.87
4438-3	Kenneth Jolin	LC	IRR	99	1.41
6598-3	Curry Seed Company	LC	IRR	124	1.78
8351-3	Boyd Reimnitz	PE	IRR	65	1.5
LC: Licensed Water Right; PE: Water Permit; FU: Future Use; IRR: Irrigation; MUN: Municipal					

The Missouri: Elk Point aquifer ranges from confined to unconfined aquifer conditions, but is primarily under unconfined conditions (Niehus, 1994 and 1997). Based on the submitted well completion report, the Missouri: Elk Point aquifer is confined at the existing well site for this application (Water Rights, 2025c and 2025d). However, the well is likely to behave more like an unconfined aquifer well due to the sandy nature of the overlying clay and the proximity of unconfined aquifer conditions. Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer; however, in a confined aquifer, drawdown from pumping could extend a distance from the diversion point. The exact drawdown behavior of a well cannot be known without an aquifer performance test. Examination of the hydrographs for observation wells completed into the Missouri: Elk Point aquifer show no signs of being significantly impacted by drawdown caused by pumping, despite usually being located within a mile of several high-yield wells (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) (Water Rights, 2025b and 2025c).

Within approximately one mile of the existing well site, the Missouri: Elk Point aquifer has a saturated aquifer thickness ranging between approximately 40 to 100 feet (Water Rights, 2025d). This would generally allow for enough 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). Any drawdown as a result of the proposed diversion for this application is not expected to unlawfully impair nearby adequate wells. In Clay, Union, and Yankton Counties, there are no substantiated complaints on file with the DNR-Water Rights Program regarding well interference for adequate wells completed into the Missouri: Elk Point aquifer (Water Rights, 2025e).

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.”

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Missouri: Elk Point aquifer at their location. However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the saturated thickness of the Missouri: Elk Point aquifer near the existing well site, and the lack of well interference complaints from the Missouri: Elk Point aquifer in the area, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment to existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments to existing users with adequate wells.

SDCL 46-5-6:

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of 1.0 cfs per 70 acres, or “the equivalent thereof.” The statute does provide that: “The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires...”

If approved, Water Permit Application No. 8989-3 would authorize a maximum instantaneous diversion rate of 1.78 cfs from one well for the irrigation of 60 acres, which equates to a rate of 2.08 cfs per 70 acres. The applicant did not provide a reason for the exceedance, but it appears to be due to the potential of irrigating the proposed area with a center pivot that does not make a full rotation. A center pivot making a partial rotation uses water at the same rate as a center pivot making a full rotation while irrigating fewer acres. This reason falls within SDCL 46-5-6 which

allows the Water Management Board to allow a greater diversion rate and has been accepted by the Water Management Board and the Water Rights Program in the past.

CONCLUSIONS:

1. Water Permit Application No. 8989-3 proposes to divert water at a maximum instantaneous diversion rate of 1.78 cfs from one well completed into the Missouri: Elk Point aquifer (99 feet deep) for the irrigation of 60 acres. The site of interest is located in Union County approximately one-half mile northwest of Elk Point, SD.
2. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8989-3 will not unlawfully impair adequate wells for existing water rights/permit holders and domestic users.
4. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres due to the partial rotation of the center pivot. This reason falls within SDCL 46-5-6 which allows the Water Management Board to allow a greater diversion rate and has been accepted by the Water Management Board and the Water Rights Program in the past.

Nakaila Steen

Nakaila Steen
Natural Resources Engineer III
SD DANR - Water Rights Program

Reviewed by:

Adam Mathiowetz

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

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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

September 30, 2025

Laura Bies
lbies@heineEI.com
4 Boys TT, LLC dba Heine Electric & Irrigation

Ms. Bies:

As requested by email on September 30, 2025, pursuant to South Dakota Well Construction Standard 74:02:04:21, 4 Boys TT, LLC dba Heine Electric & Irrigation is authorized to construct a test well prior to approval of a water permit on behalf of water permit applicant Larry Donnelly. The test well is to be located in the W ½ SE ¼ Section 13-T91N-R50W in Union County. The target aquifer is the Missouri: Elk Point aquifer with an estimated total well depth of 130 ft. All test wells must be constructed in accordance with the SD Well Construction Standards. Any test holes or test wells that are abandoned must be plugged pursuant to the SD Well Construction Standards.

Authorization must be obtained before water from the well can be used in excess of domestic use as defined by South Dakota Codified Law 46-1-6(7) or for uses other than domestic use. All test or permanent wells to be constructed under this test well permission must be constructed using the methods described in Administrative Rule of South Dakota (ARSD) 74:02:04:28. Approval of this test well does not assure issuance of a water permit. Following review of a Water Permit Application and assessing the availability of water, the potential impacts to existing users, the beneficial use, and the public interest of a permit, the Chief Engineer will make a recommendation to the Water Management Board regarding the application. The recommendation to approve, deny, or defer the application will be publicly noticed and an opportunity afforded for the public to intervene. A public hearing may be required to consider the water permit. If you have questions regarding permitting, please call Amanda Dewell at (605) 773-3352.

Sincerely,


for Mark Mayer, PE
Director of Office of Water
SD DANR
(605)773-3352

CC: Larry Donnelly
47423 324th St
Elk Point SD 57025

Rodriguez, Rachel

From: Mathiowetz, Adam (DENR)
Sent: Tuesday, September 30, 2025 1:54 PM
To: Laura Bies
Cc: Dewell, Amanda; Rodriguez, Rachel
Subject: RE: [EXT] Test well for Larry Donnelly in Union County
Attachments: Heine Electric for Donnelly test well 09-30-2025.pdf

Laura,

Attached is a scan of the test well permission letter. A copy is in the mail to Mr. Donnelly as well.



Adam Mathiowetz, PE
Engineer, Water Rights Program
Department of Agriculture and Natural Resources
523 E. Capitol Ave. Pierre SD, 57501
605.773.3352
danr.sd.gov

From: Laura Bies <lbies@heineEI.com>
Sent: Tuesday, September 30, 2025 1:20 PM
To: Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us>; Newling, Travis <Travis.Newling@state.sd.us>
Subject: [EXT] Test well for Larry Donnelly in Union County

Good Afternoon,

Attached is a copy of the permit Larry Donnelly is going to be sending in, in hopes to be irrigating in the spring of 2026.

We would like to drill a test well where the map indicates this fall. We understand this is no guarantee the water rights will be approved.

Thanks,

Laura Bies



31585 460th Ave
Vermillion, SD 57069
Office 605.670.9567
lbies@heineEI.com

Rodriguez, Rachel

From: Dewell, Amanda
Sent: Wednesday, October 1, 2025 11:43 AM
To: Rodriguez, Rachel
Subject: FW: [EXT] Test well for Larry Donnelly in Union County
Attachments: Heine Electric for Donnelly test well 09-30-2025.pdf; Scanned Document_20250930_112023.pdf

Rachel, did you receipt in the application from Adam's original email? If so, can you make sure the test well permission letter is added to the file?

Amanda Dewell
DANR - Water Rights Program
Permitting Administrator
Main Phone: 605 773-3352
Website: danr.sd.gov



From: Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us>
Sent: Tuesday, September 30, 2025 1:54 PM
To: Laura Bies <lbies@heineEI.com>
Cc: Dewell, Amanda <Amanda.Dewell@state.sd.us>; Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: RE: [EXT] Test well for Larry Donnelly in Union County

Laura,

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Adam Mathiowetz, PE
Engineer, Water Rights Program
Department of Agriculture and Natural Resources
523 E. Capitol Ave. Pierre SD, 57501
605.773.3352
danr.sd.gov

From: Laura Bies <lbies@heineEI.com>
Sent: Tuesday, September 30, 2025 1:20 PM
To: Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us>; Newling, Travis <Travis.Newling@state.sd.us>
Subject: [EXT] Test well for Larry Donnelly in Union County

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Laura Bies



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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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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.**

December 3, 2025

Larry Donnelly
47423 324th Street
Elk Point SD 57025

Dear Mr. Donnelly:

Water Permit Application No. 8989-3 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 Southern Union County Leader-Courier printed at Elk Point (Ph # 605 356-2632) and the Daily Press & Dakotan printed at Yankton SD (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 Acting 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,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Acting Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish the Notice on December 11 or 12, 2025. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 8989-3 to Appropriate Water

Notice is given that Larry Donnelly, 47423 324th Street, Elk Point SD 57025, has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well completed into the Missouri: Elk Point Aquifer (approximately 99 feet deep) located in the approximate center of the SE 1/4 Section 13 for irrigation of 60 acres located in the W 1/2 SE 1/4 Section 13; all in T91N-R50W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately one-half mile northwest of Elk Point SD.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 8989-3 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 Acting 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 Acting Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Acting Chief Engineer. The Acting 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 Acting 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 December 22, 2025.

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 Acting Chief Engineer. The comment shall be filed on a form provided by the Acting Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Acting 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 December 22, 2025.

If the applicant does not contest the recommendation of the Acting Chief Engineer and no petition to oppose the application is received, the Acting 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 _

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, December 3, 2025 8:34 AM
To: Kelly Kronaizl
Subject: 8989-3 Larry Donnelly - Public Notice
Attachments: 8989-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on December 12, 2025, in the Daily Press & Dakotan.

Larry Donnelly, 47423 324th Street, Elk Point SD 57025, 712-899-8465, 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 Ave, Pierre SD 57501.

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, December 3, 2025 8:33 AM
To: Shannon Jost
Subject: 8989-3 Larry Donnelly - Public Notice
Attachments: 8989-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on December 11, 2025.

Larry Donnelly, 47423 324th Street, Elk Point SD 57025, 712-899-8465, 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 Ave, Pierre SD 57501.

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

JAN 12 2026

OFFICE OF
WATER

DANR
523 E CAPITOL AVE
PIERRE SD 57501-3182

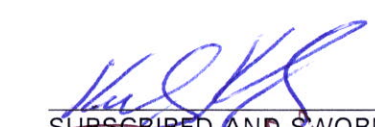
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

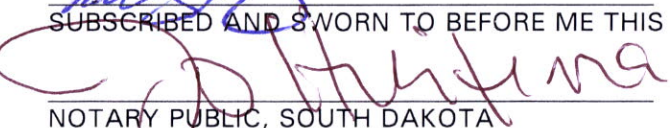
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION NO.

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 12th DAY OF December, 2025
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$48.56 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: 12/12/2025

FILED ON: 01/05/26


SUBSCRIBED AND SWORN TO BEFORE ME THIS 5th DAY OF January, 2026


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/15/2028



NOTICE OF APPLICATION NO. 8989-3 to Appropriate Water

Notice is given that Larry Donnelly, 47423 324th Street, Elk Point SD 57025, has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well completed into the Missouri: Elk Point Aquifer (approximately 99 feet deep) located in the approximate center of the SE 1/4 Section 13 for irrigation of 60 acres located in the W 1/2 SE 1/4 Section 13; all in T91N-R50W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately one-half mile northwest of Elk Point SD.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 8989-3 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 Acting Chief Engineers 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 Acting Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Acting Chief Engineer. The Acting 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 Acting 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 December 22, 2025.

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 Acting Chief Engineer. The comment shall be filed on a form provided by the Acting Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Acting 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 December 22, 2025.

If the applicant does not contest the recommendation of the Acting Chief Engineer and no petition to oppose the application is received, the Acting 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 \$48.56 and can be viewed free of charge at www.sdpublicnotices.com

Published December 12, 2025

RECEIVED

JAN 12 2026

**OFFICE OF
WATER**

RECEIVED

JAN 02 2026

OFFICE OF
WATER

AFFIDAVIT OF PUBLICATION

State of South Dakota)

:ss

County of Union)

Shannon L. Jost,

the publisher of the Leader-Courier, deposes and says that

The Leader-Courier

is a legal weekly newspaper of a general circulation, printed and published in Elk Point, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice 8989-3

Larry Donnelly

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Elk Point, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 11 day of December, 2025

and that the succeeding publications were

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

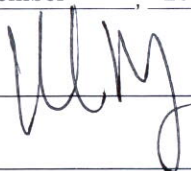
that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 48.50, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or 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 other person whomsoever.



Subscribed and sworn to before me

this 11 day of December, 2025



Notary Public

NOTICE OF APPLICATION NO. 8989-3 TO APPROPRIATE WATER

Notice is given that Larry Donnelly, 47423 324th Street, Elk Point SD 57025, has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well completed into the Missouri: Elk Point Aquifer (approximately 99 feet deep) located in the approximate center of the SE 1/4 Section 13 for irrigation of 60 acres located in the W 1/2 SE 1/4 Section 13; all in T91N-R50W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately one-half

mile northwest of Elk Point SD. Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 8989-3 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 Acting 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 Acting

Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Acting Chief Engineer. The Acting 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 Acting 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 December 22, 2025.

The petition shall include a statement describing the unique injury upon approval of the ap-

plication 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.

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If the applicant does not con-

test the recommendation of the Acting Chief Engineer and no petition to oppose the application is received, the Acting 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 December 11, 2025
Approximate cost of \$48.50 and may be viewed free of charge at www.sdpublicnotices.com

50-1-134

NOTICE
DEC 11 2025

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, December 3, 2025 9:33 AM
To: 'lbies@heineEl.com'
Subject: 8989-3 Larry Donnelly - Public Notice
Attachments: 8989-3 Rec.pdf; 8989-3 Ltr.pdf; 8989-3 PubNotice.pdf

Good morning,

Attached is a copy of the report, acting chief engineer's recommendation, and information regarding the public notice for Mr. Donnelly's water permit application. Since his application does not have an email listed, I am sending this information to you in the hope that you may have Mr. Donnelly's email address you can forward him this information. In addition, this information is also being mailed today to Mr. Donnelly's mailing address.

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

MAR 02 2026

Larry Donnelly
47423 324th Street
Elk Point SD 57025

Dear Mr. Donnelly:

Enclosed is Water Permit No. 8989-3 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,

Adam Mathiowetz, PE
Acting Chief Engineer
Water Rights Program

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8989-3

Name of Applicant: Larry Donnelly

Date of Posting: 12/8/2025

Date of Removal: 3/2/2026

Amanda Dewell, Permitting Administrator

3/2/2026

Date

Subscribed and sworn to before me, a notary public, this 2nd day of Mar, 2026.

Notary Public - South Dakota

My commission expires:

Rachel Rodriguez
My Commission Expires
May 16, 2029

(SEAL)

