

WATER PERMIT NO. 8535-3

Name of Applicant: Jay Cutts

Address: 44681 309th St, Mission Hill SD 57046

Phone: 605 661-9071

Amount of Water Claimed: 1.78 cfs

Total Acres: 92

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: 2 miles northeast of Yankton

PRIORITY

Date Received: 8-2-21

Application/License Fee: \$ 950

Corrected Application Received:

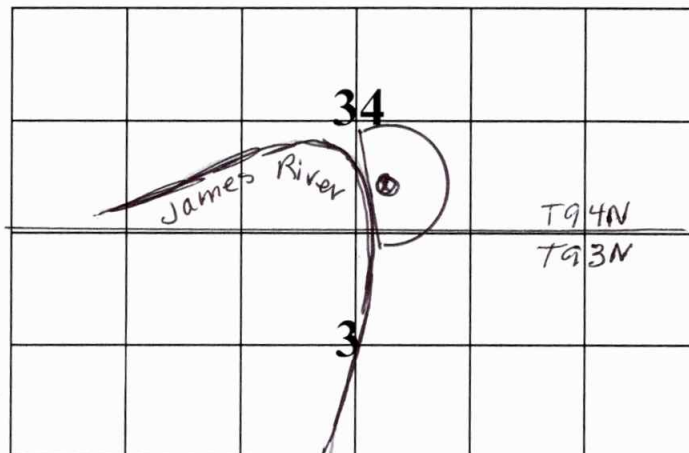
Period of Annual Use: May 1 – August 31

Remarks: Same lands were originally covered by Water Right No. 6621-3 from the James River.

Applicant is requesting diversion rate greater than statutory limit.

Diversion Point: W 1/2 SE 1/4 Sec 34-T94N-R55W

Land to be Irrigated: E 1/2 NE 1/4, Govt Lots 1 & 2 Sec 34-T94N-R55W and Govt Los 1 & 2, Sec 3-T93N-R55W



Depth of Well: NA

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Bracken Capen

Reviewed and the Number Assigned on: 8-2-21

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8535-3

Date of first receipt of application August 2, 2021.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8535-3 to Jay Cutts, 44681 309th St, Mission Hill SD 57046 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. 8535-3 appropriates 1.78 cubic feet of water per second (cfs) from one well completed into the Lower James Missouri Aquifer (75 feet deep) located in Government Lot 1 (SW 1/4 SE 1/4) Section 34-T94N-R55W for irrigation of 92 acres located in the E 1/2 SE 1/4, Government Lots 1 & 2 (W 1/2 SE 1/4) Section 34-T94N-R55W and Government Lot 1, Tract 1 (NW 1/4 NE 1/4) and Government Lot 2, Tract 2 (NE 1/4 NE 1/4) Section 3-T93N-R55W. Irrigation of this acreage was originally authorized by Water Right No. 6621-3 from the James River. The James River diversion point is no longer being utilized. This site is located approximately 2 miles northeast of Yankton 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 – August 31.
3. The date from which applicant may claim right is August 2, 2021.
4. The date of approval of Permit No. 8535-3 is October 18, 2021.
5. One-fifth of the construction is to be completed on or before April 18, 2024.
6. All construction is to be completed on or before October 18, 2026.
7. Water is to be put to beneficial use on or before October 18, 2030.
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. 8535-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit 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. 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. 8535-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 92 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: Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

OCT 28 2021
date



FORM 2: Application for irrigation in South Dakota

(type or print)

AUG 02 2021

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8535-3</u>	(office use only) Hydrologic Unit <u>10160011</u>	WATER RIGHTS PROGRAM
	Basin <u>James River</u>		
	Newspaper <u>Daily Press & Dakotan</u>		

PAID

AUG 2 2021

Ck# 6414

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 Jay Cutts

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

Mailing Address 44681 309th ST Mission Hill SD 57046

(Address)

(City)

(State)

(Zip Code)

Phone 6056619071 Mobile _____ Email _____2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 92

(*Cubic Feet per Second)

(**Gallons per Minute)

(***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well4. Location of point of diversion 42 54' 43.19N 97 19' 33.92W

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

Sec 34 T94N R55W (Gov't Lot 1) County Yankton5. County or counties where water will be used Yankton6. Annual period during which water is to be used May - August

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
<u>Sec 34 T94N R55W</u>		<u>Government Lot 2</u>	<u>34</u>
<u>SE 1/4 SE 1/4</u>	<u>20</u>		
<u>NE 1/4 SE 1/4</u>	<u>16</u>	<u>Government Lot 1 Tract 1 Sec 3 93N55W</u>	<u>3.5</u>
<u>Government Lot 1</u>	<u>16</u>	<u>" Lot 2 Tract 2 " " "</u>	<u>2.5</u>

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

Replacing diversion point in James River - Riverbank no longer
stable or ~~not~~ Accessable

Requesting diversion rate greater than statutory limit

I, Jay Cutts, 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.

Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(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) 75 Depth to Top of Water Bearing Material 35 Depth to Water from Surface 19d) Distance to nearest domestic well on applicant's property 1 3/4 mi Property owned by others 3/4 mi**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)

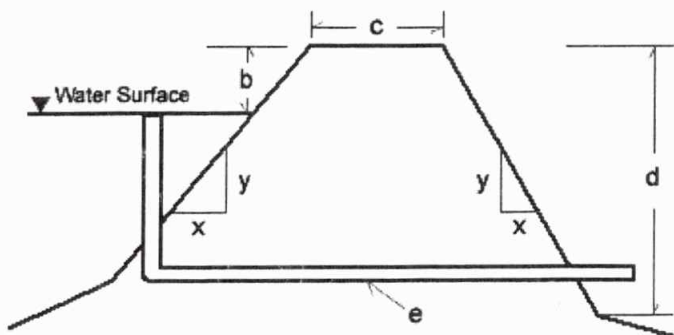
Upstream _____

Downstream _____

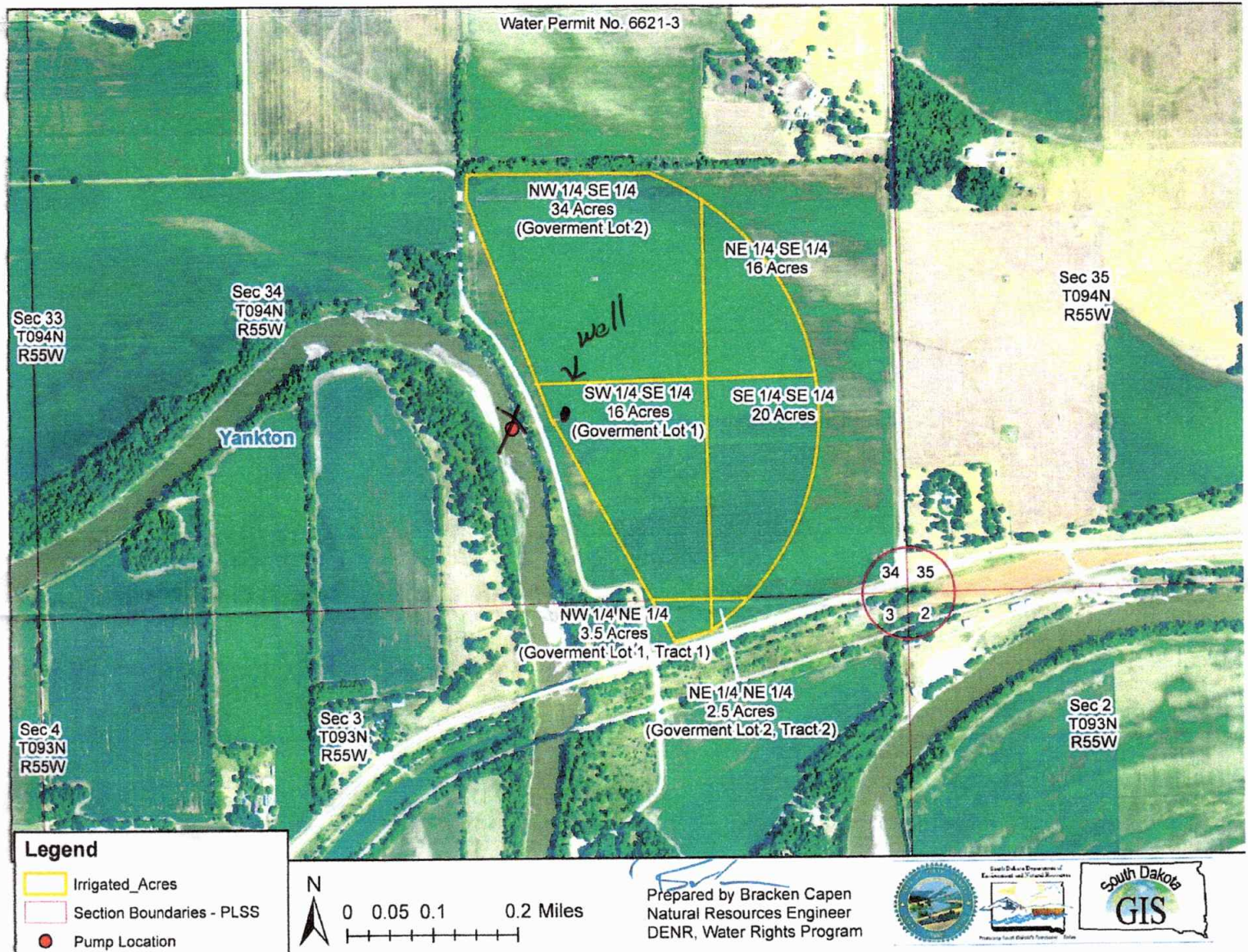
h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Water Permit No. 6621-3



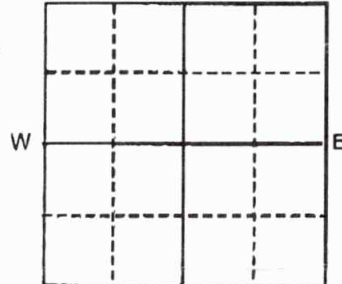
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW 1/4 S6 1/4 Sec 39 Twp 44 Rg 55County YANKTON 

North

Please mark well location with an "X"



Well Completion Date

7-01-20



Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?

300 ft. from JAMES RIVER (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	16 IN	0 FT	35 FT	28 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	46	Lb/gal	0 Ft	35 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 16 Inches Length 40 Feet
 Material PVC
 Slot Size .80 Set From 35 Feet to 75 Feet
 Other information
WAS A PACKER OR SEAL USED? ☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? CHLORINE☐ No, Why Not?

Lab to which water quality sample sent for analysis

Well Owner: Jay Cutts

Business Name:

Address: 446B1 309Th StCity, State, Zip: Mission Hill  SD  57046

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	5
BROWN CLAY	5	35
GRAVEL AND ROCKS	35	75

STATIC WATER LEVEL 19 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: Cleaned up Fast!☐ Balled☐ Other

Pumping Level Below Land Surface

24 Ft. After 4 Hrs. pumped 1200 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Very Rockyl

42°54'43.19" N

97°19'33.92" W

This well was drilled under license # 773 and this report is true and accurate.Drilling firm: Quality Well Service LLC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date: 11-11-20

NOV 12 2020

WATER RIGHTS PROGRAM

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date August 2, 2021

RECEIVED OF Cutts Farms 44681 309th St Mission Hill SD 57046

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

Fee for Application for Permit No. <u>8535-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>750.00</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>8535-3</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>950.00</u>

By *Eric Gronlund*
Chief Engineer
EM



**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. 8535-3, Jay Cutts**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 8535-3, Jay Cutts, 44681 309th St, Mission Hill SD 57046.

The Chief Engineer is recommending APPROVAL of Application No. 8535-3 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. 8535-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit 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. 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. 8535-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 92 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.

Eric Gronlund, Chief Engineer
September 20, 2021

Report to the Chief Engineer
On Water Permit Application No. 8535-3

Jay Cutts

August 30, 2021

Water Permit Application No. 8535-3 proposes to appropriate water at a maximum instantaneous diversion rate of 1.78 cubic feet per second (cfs) from one well completed into the Lower James Missouri aquifer (75 feet deep). The well is located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 34-T94N-R55W for the irrigation of 92 acres located in the E $\frac{1}{2}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ (Govt. Lots 1 and 2) of Section 34-T94N-R55W and in the NW $\frac{1}{4}$ E $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ (Govt. Lots 1 and 2) of Section 3-T93N-R55W.

The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. Irrigation of this acreage was originally authorized by Water Right No. 6621-3 from the James River. The James River diversion point is no longer being utilized. The site is located in Yankton County approximately two miles northeast of Yankton, South Dakota.

AQUIFER: Lower James Missouri (LJM)

HYDROGEOLOGY:

The Lower James Missouri aquifer is comprised of deposits of glacial outwash composed of uniform medium to coarse sands and gravels (Bugliosi, 1986; Tipton, 1983). The glacial outwash was deposited by meandering streams and as result, the deposits can be absent in some areas of the aquifer (Tipton, 1983). The Lower James Missouri aquifer is typically overlain by sandy till apart from areas of the Missouri River and James River valleys where it is overlain by alluvium or numerous feet of soil; however, the aquifer can normally be encountered within 100 feet below the land surface (Tipton, 1983). The Lower James Missouri aquifer is underlain by till, the Niobrara Formation, the Carlile Shale, and the Sioux Quartzite (Lindgren and Hansen, 1990).

The Lower James Missouri aquifer can be under unconfined conditions; however, since the aquifer can be buried by as much as 355 ft of till, this can create buried-unconfined or confined conditions (Lindgren and Hansen, 1990). The Lower James Missouri aquifer is hydraulically connected to the Lower James Missouri: Scotland, Choteau: Tyndall, Dakota, Niobrara, Missouri: Elk Point aquifers and other bedrock aquifers, glacial aquifers, and surface water features (Bugliosi, 1986; Lindgren and Hansen, 1990; Stonesifer, 2014). The saturated thickness of the Lower James Missouri aquifer can range from approximately 50 to 150 ft (Bugliosi, 1986). The flow of groundwater in the Lower James Missouri aquifer is commonly to the south toward the James and Missouri River (Bugliosi, 1986; Hedges et. al, 1982; Lindgren and Hansen, 1990). The Lower James Missouri aquifer underlies approximately 191,700 acres and contains approximately 2,795,400 million acre-feet (ac-ft) of recoverable water in storage within Clay, Hutchinson, and Yankton Counties in South Dakota (Hedges et. al, 1982). The approximate areal extent of the Lower James Missouri aquifer along with the location of the proposed diversion point are shown in Figure 1.

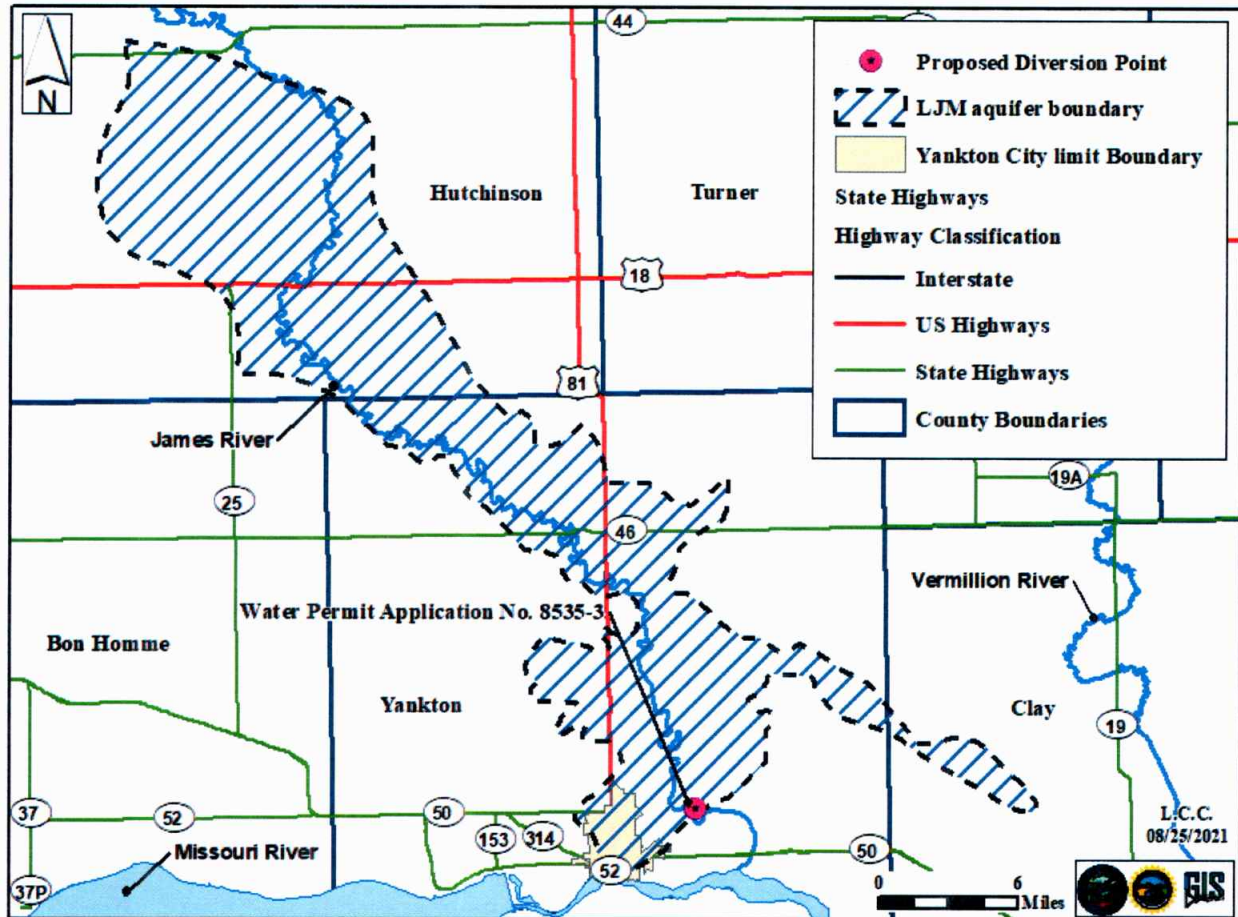


Figure 1: Map of the approximate areal extent of the Lower James Missouri aquifer including the proposed diversion point location of Water Permit Application No. 8535-3 (Hedges et al., 1982; Water Rights, 2021b and 2021c).

A well completion report was submitted with Water Permit Application No. 8535-3. The report lists “topsoil” from 0 to 5 feet below the land surface, “brown clay” from 5 to 35 feet (primarily alluvium), and “gravel and rocks” from 35 to 75 feet. The static water level in the well was 19 feet below the land surface at the time of well completion (July 2020). This results in a saturated thickness of 56 feet at the proposed diversion point. The Lower James Missouri aquifer is unconfined at the proposed diversion point based on the submitted well completion report, water levels, and lithologic logs on file for nearby observation wells (SDGS, 2021; Water Rights, 2021b and 2021d).

South Dakota Codified Law (SDCL) 46-5-6

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of 1 cfs for every 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....” Water Permit Application No. 8535-3 proposes to divert water at a maximum rate of 1.78 cfs for the irrigation of 92 acres or at a rate of 1.35 cfs per 70 acres. The applicant is requesting a diversion rate greater than the statutory limit due to the irrigation method to be used. While no reason was

specifically provided by the applicant, the center pivot to be used would be making a partial rotation. A partial rotation center pivot system still requires the same diversion rate as a center pivot making a full rotation. The request by the applicant is reasonable and has been historically accepted as a valid reason for exceeding the statutory limitation by the Water Rights Program and the Water Management Board.

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 Lower James Missouri aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8535-3 proposes to appropriate water from the Lower James Missouri 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 Lower James Missouri 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 Lower James Missouri aquifer must be considered.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Lower James Missouri aquifer in Yankton County is primarily through seepage from streams and by infiltration of precipitation where the aquifer is at or near land surface (Bugliosi, 1986; Lindgren and Hansen, 1990). Other sources of recharge to the Lower James Missouri aquifer are from the Sioux Quartzite, Choteau, Dakota, and Niobrara aquifers in places where it is hydraulically connected to the Lower James Missouri aquifer (Lindgren and Hansen, 1990).

The recharge rate to the Lower James Missouri was estimated by Hedges and others (1985) by utilizing observation well data and flow-net analysis. Utilizing flow-net analysis, the annual

recharge rate to the Lower James Missouri aquifer was estimated to be approximately 1.5 in/yr (Hedges et al., 1985). The areal extent of the Lower James Missouri aquifer was estimated to be approximately 191,700 acres in total (Hedges et al., 1982). Therefore, the estimated recharge to the Lower James Missouri aquifer is approximately 23,963 acre-feet/year (ac-ft/yr). Observation well data was utilized to estimate the annual recharge rate to the unconfined portions of the Lower James Missouri aquifer. The annual recharge rate to the Lower James Missouri aquifer that was estimated from the observation well data was approximately 3.9 in/yr. The areal extent of the unconfined portions of the Lower James Missouri aquifer was estimated to be approximately 82,200 acres (Stonesifer, 2014). Therefore, the estimated recharge to the unconfined portions of the Lower James Missouri aquifer is approximately 26,715 ac-ft/yr. The areal extent that was estimated for the unconfined portions of the Lower James Missouri aquifer included sections of the Plum Creek and Choteau: East aquifers that were identified by Hedges et al. (1982). This implies that the estimated areal extent of the unconfined portions of the Lower James Missouri aquifer is estimated to be greater than the actual extent. The recharge estimate should be considered a likely maximum recharge rate for the Lower James Missouri aquifer. Thus, the estimated annual recharge to the Lower James Missouri aquifer ranges between approximately 23,963 to 26,715 ac-ft/yr.

Discharge

Discharge from the Lower James Missouri aquifer is primarily through leakage to the James River, evapotranspiration where the aquifer is at or near land surface, groundwater outflow to nearby aquifers, and well withdrawals (Bugliosi, 1986; Lindgren and Hansen, 1990). Currently, there are 133 water rights/permits authorized to appropriate water from the Lower James Missouri aquifer, plus two pending applications - Water Permit Application No. 8524-3 is estimated to use 72 ac-ft/yr on average and Water Permit Application No. 8534-3 is estimated to use 23 ac-ft/yr on average from the Lower James Missouri aquifer for irrigation purposes (Water Rights, 2021c). Of the 133 water rights/permits, 125 are for irrigation purposes and eight are for commercial (COM), industrial (IND), or domestic (DOM) use (Water Rights, 2021c). There are no future use permits reserving water from the Lower James Missouri aquifer currently. The non-irrigation water rights/permits authorized to withdraw from the Lower James Missouri aquifer are identified in Table 1 and the reported annual irrigation withdrawals from the Lower James Missouri aquifer are shown in Table 2.

Table 1: Estimated annual water use for non-irrigation water rights/permits authorized to appropriate water within the Lower James Missouri aquifer (Water Rights, 2021c).

Permit No.	Name	County	Status	Use	Div. Rate (cfs)	Estimated Volume (ac-ft/yr)
840-3	Stuelpnagels Inc	YA	LC	COM	1.11	482.2
1288-3	National Food Stores Inc	YA	LC	IND	0.16	69.5
4556-3	Concrete Materials	YA	LC	COM	0.44	191.1
6264-3	Yankton Land & Cattle Co	YA	LC	COM, LCO	0.56	243.3
6320-3	Wolf Creek Htrn Brth	HT	LC	COM, DOM	0.08	34.8
6925-3	Tschetter Colony	HT	LC	COM, LCO	0.07	30.4
7827-3	Maxwell Colony	HT	PE	COM, LCO	0.33	143.4
8412-3	Concrete Materials Company	YA	LC	IND	7.80	400*
YA: Yankton; HT: Hutchinson; LC: Licensed Water Permit; PE: Water Permit					TOTAL	1,595
COM: Commercial; IND: Industrial; LCO: Livestock Confinement Operation; DOM: Domestic						
*Limited by annual volume						

The estimated average annual withdrawals for the eight non-irrigation water rights/permits authorized to appropriate water from the Lower James Missouri aquifer can be determined by their limiting diversion rate or annual volume. The amount of water that can be withdrawn was estimated by assuming the non-irrigation water rights/permits limited by an annual volume will withdraw their entire appropriated volume every year. It is estimated that the non-irrigation water rights/permits limited only by a diversion rate will pump at their maximum permitted diversion rate for 60 percent of the time. Overall, the estimated average annual withdrawal rate for the Lower James Missouri aquifer for non-irrigation water rights/permits is approximately 1,595 ac-ft/yr (Table 1) (Water Rights, 2021c).

Table 2: Reported historic irrigation use from the Lower James Missouri aquifer (Water Rights, 2021a).

Year	No. of Permits Reporting	Reported Pumpage (acre-feet)	Year	No. of Permits Reporting	Reported Pumpage (acre-feet)
1979	25	706	2002	53	4,061.52
1980	26	1,372	2003	53	2,843.15
1981	32	1,954	2004	47	2,886.65
1982	28	1,427.2	2005	48	2,866.63
1983	34	1,426	2006	50	3,630.92
1984	34	1,546	2007	56	3,425.91
1985	33	1,724	2008	79	4,494.03
1986	37	1,179.6	2009	84	1,463.27
1987	37	1,236	2010	85	665.37
1988	38	3,104.3	2011	89	4,147.47
1989	38	2,441.8	2012	93	13,058.45
1990	42	3,345.1	2013	118	7,855.75
1991	49	2,882	2014	125	3,347.27
1992	52	1,279	2015	127	4,822.86
1993	53	256.4	2016	126	5,747.01
1994	45	1,918.2	2017	126	5,727.12
1995	41	1,483.3	2018	126	1,035.87
1996	49	2,103	2019	127	328.01
1997	50	2,320	2020	121	3,864.53
1998	53	2,787	Min	25	256
1999	50	2,102.2	Max	53	3,751
2000	51	3,751.1	Avg	41	1,969
2001	53	2,940.1	Avg (2008-2020)	115	4,351

The average annual withdrawal rate within the Lower James Missouri aquifer for irrigation water rights/permits that have reported over the period of record is approximately 1,969 ac-ft/yr (Table 2) (Water Rights, 2021a). Since the number of irrigation water rights/permits authorized to appropriate water from the Lower James Missouri aquifer has continued to increase over the period of record, the estimated average annual withdrawal rate for irrigation appropriations for the entire period of record may not accurately reflect the current level of development. The average annual withdrawal rate for irrigation appropriations from 2008 to 2020 better represents the current level of irrigation development in the Lower James Missouri aquifer. The average annual withdrawal rate for irrigation appropriations from the Lower James Missouri aquifer from 2008 to 2020 is approximately 4,351 ac-ft/yr (Table 2) (Water Rights, 2021a).

There are domestic wells completed into the Lower James Missouri aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2021d). Withdrawals from domestic wells on an average annual basis are not considered to be a significant portion of the hydrologic budget as a due to their relatively low diversion rates. Additionally, with the development of rural water systems in areas where the Lower James Missouri 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 Lower James Missouri aquifer.

Hydrologic Budget Summary

The estimated average annual withdrawals from the Lower James Missouri aquifer totals approximately 6,133 ac-ft/yr (irrigation: 4,351 ac-ft/yr; non-irrigation: 1,595 ac-ft/yr; pending applications: 95 ac-ft/yr; Water Permit Application No. 8535-3 (if approved) (assuming an application rate of 1 ft/ac): 92 ac-ft/yr). The estimated average annual recharge to the Lower James Missouri at minimum is 23,963 ac-ft/yr and 26,715 ac-ft/yr at maximum. Overall, the estimated average annual recharge rate to the Lower James Missouri 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 DANR-Water Rights Program monitors 33 observation wells completed into the Lower James Missouri aquifer (Water Rights, 2021b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. There are three observation wells within approximately four miles of the proposed diversion point. The closest observation well to the proposed diversion point is observation well YA-78I (approximately 3 miles northeast). The hydrographs for these three observation wells are displayed in Figures 2 through 4 (Water Rights, 2021b).

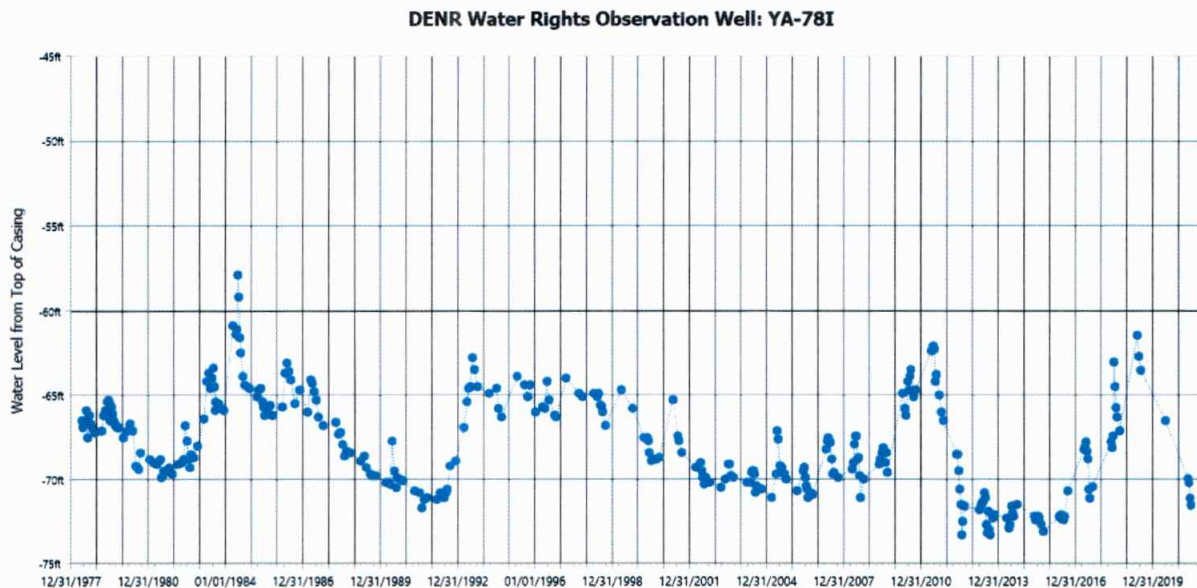


Figure 2: Hydrograph of the Lower James Missouri aquifer observation well YA-78I, located approximately 3 miles northeast of the proposed diversion point (Water Rights, 2021b).

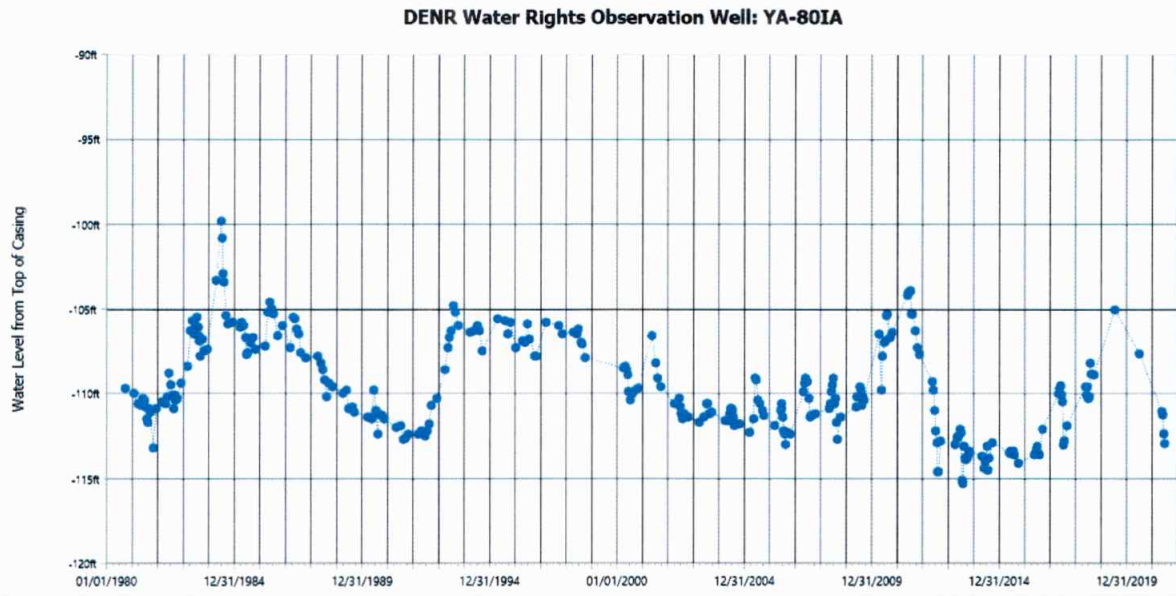


Figure 3: Hydrograph of the Lower James Missouri aquifer observation well YA-80IA, located approximately 3.5 miles northeast of the proposed diversion point (Water Rights, 2021b).

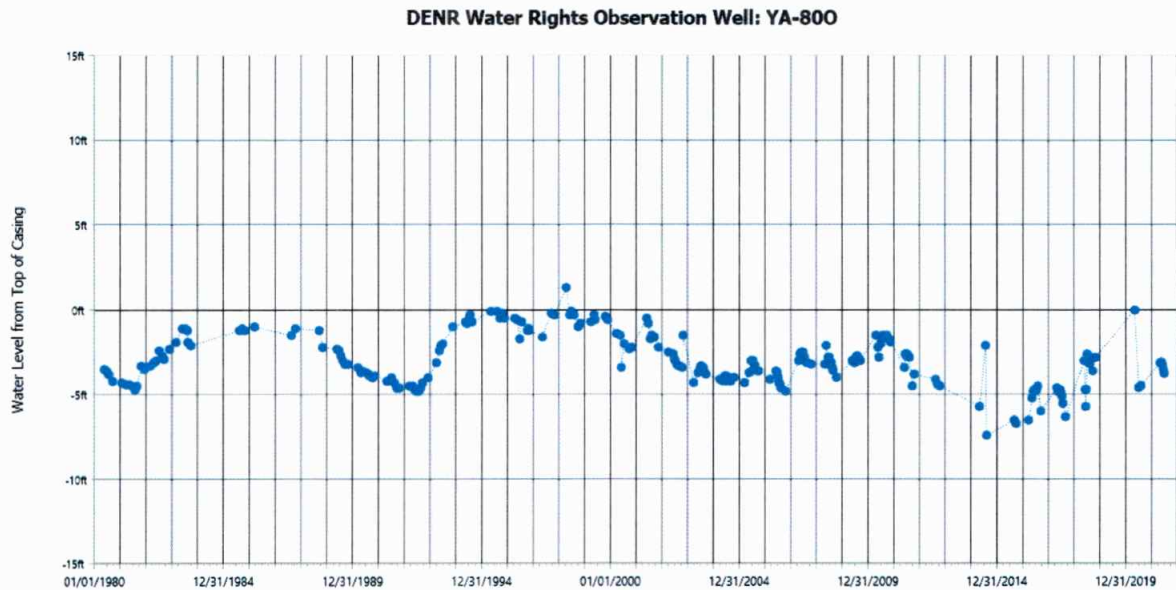


Figure 4: Hydrograph of the Lower James Missouri aquifer observation well YA-80O, located approximately 4 miles northwest of the proposed diversion point (Water Rights, 2021b).

Observation wells YA-80IA and YA-78I present a slight decreasing trend in their static water levels. This decreasing trend has been attributed to separate events occurring in the northern and southern portions of the Lower James Missouri aquifer. In the northern portion of the aquifer, the decreasing trend was attributed to the development of the aquifer for appropriative use over the previous decade (Mathiowetz, 2021). However, this slightly decreasing trend is not indicative of the aquifer being over appropriated. It is instead an indication that the artesian head in that area is reaching a new equilibrium with the increased withdrawals in that area. This decreasing trend

can be seen in certain observation wells such as HT-81D and HT-83D. In the southern portion of the aquifer, the decreasing trend was attributed to the increased entrenchment on the Missouri River below Gavin's Point dam (Stonesifer, 2014). The Lower James Missouri and Missouri: Elk Point aquifers, and the Missouri River are all in hydraulic connection (Bugliosi, 1986; Lindgren and Hansen, 1990; Stonesifer, 2014). The lowering of the water level in the southern Lower James Missouri aquifer is because of the entrenchment below Gavin's Point dam and thus the subsequent lowering of the Missouri River, and then the James River as a result. This decrease in water level can be seen on the hydrographs for wells completed into the Lower James Missouri and Missouri: Elk Point aquifers (Water Rights, 2021b).

Although water levels have slightly decreased within the Lower James Missouri aquifer, the hydrographs for the five nearest observation wells to the diversion point demonstrate that the aquifer responds well to climatic conditions of water levels, rising during wet periods and declining during dry periods. The water levels indicate that any drawdowns from pumping are temporary because the water levels typically recover to pre-pumping levels after the irrigation season. This recovery of the aquifer indicates that the amount of recharge and natural discharge from the Lower James Missouri aquifer governs the long-term fluctuations within the aquifer instead of pumping. By recognizing that both recharge to and natural discharge from an aquifer can be captured from pumping, the observation well hydrographs document unappropriated water is available for this proposed appropriation.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 133 water rights/permits authorized to appropriate water from the Lower James Missouri aquifer, including two pending applications to appropriate water from the Lower James Missouri aquifer- Water Permit Application No. 8524-3 and Water Permit Application No. 8534-3 (Water Rights, 2021c). There are 25 water rights/permits authorized to appropriate water from the Lower James Missouri aquifer within approximately three miles of the proposed diversion point (Water Rights, 2021c). The 25 Lower James Missouri water rights/permits are shown in Figure 5 and identified in Table 3. The nearest water right/permit (not held by the applicant) to the proposed diversion point completed into the Lower James Missouri aquifer is Water Right No. 4556-3 located approximately 1 mile northwest of the proposed diversion point.

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Lower James Missouri aquifer, with the closest domestic well on file (not held by the applicant) approximately 168 feet northwest of the proposed diversion point (Water Rights, 2021d). There could potentially be other domestic wells completed into the Lower James Missouri aquifer near the proposed diversion point that are not on file with the DANR-Water Rights Program.

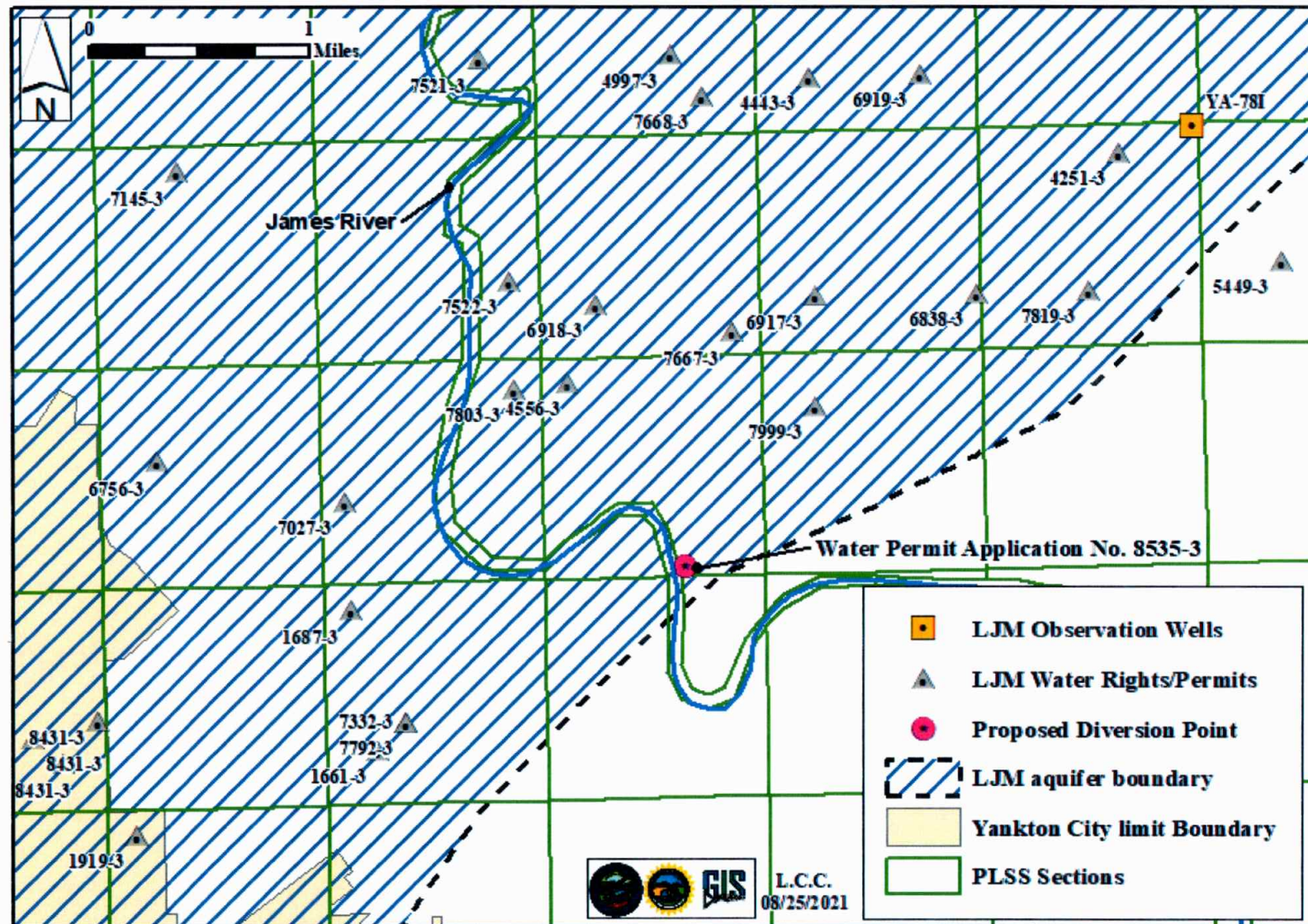


Figure 5: Map of the site location of Water Right Permit Application No. 8535-3, nearby observation wells, and nearby water rights/permits completed into the Lower James Missouri aquifer (Water Rights, 2021b and 2021c).

Table 3: Water rights/permits from the Lower James Missouri aquifer within approximately three miles of the proposed diversion point (Water Rights, 2021c).

Permit No.	Name	Use	Status	Rate (cfs)	Acres
1661-3	Gurney Seed & Nursery	IRR	LC	2.85	200
1687-3	John Frick	IRR	LC	1.2	83
1919-3	Dakota Acres	IRR	LC	2.23	156.7
4251-3	Morris Nelson	IRR	LC	1.56	152
4443-3	Dennis & Darrell Nelson	IRR	LC	1.78	148
4556-3	Concrete Materials	COM	LC	0.44	N/A
4997-3	Dale Hebda	IRR	LC	0.28	32
5449-3	Heine Farms	IRR	LC	1.3	91
6756-3	Nelson Family Partnership	IRR	LC	2.22	164
6838-3	Karl M Schenk	IRR	LC	2	120
6917-3	Karl M Schenk	IRR	LC	1.78	140
6918-3	Karl M Schenk	IRR	LC	1.33	55
6919-3	John & Jacqueline Smith	IRR	LC	2	327
7027-3	Jack Frick	IRR	PE	1.89	160
7145-3	Delos Warriner	IRR	PE	1.78	140
7332-3	Rudolph Hill Farm LLLP	IRR	PE	2	157.8
7521-3	John & Jacki Smith	IRR	PE	1.44	101
7522-3	John & Jacki Smith	IRR	PE	1.33	94
7667-3	Karl M Schenk	IRR	PE	0.67	32
7668-3	Karl M Schenk	IRR	LC	1.33	80
7792-3	Rudolph Hill Farm LLLP	IRR	PE	N/A	21.8
7803-3	Ralph Marquardt	IRR	PE	156	68
7819-3	Karl M Schenk	IRR	LC	1.78	70
7999-3	Karl M Schenk	IRR	PE	N/A	96
8431-3	Hillcrest Golf And Country Club	IRR	LC	3.67	127
COM: Commercial; IRR: Irrigation					
LC: Licensed Water Right; PE: Permitted Water Right.					

The Lower James Missouri aquifer is generally under confined conditions but can be unconfined in portions of the aquifer (Lindgren and Hansen, 1990). The proposed diversion point is expected to be under unconfined conditions based on the submitted well completion report and lithologic logs on file for the nearby observation wells (Water Rights, 2021d). Observation well data (see Figures 2 through 4) documents minimal drawdown from withdrawals of existing wells near the proposed diversion point. Therefore, pumping from the proposed 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 Yankton County, there have been no complaints submitted to the DANR-Water Rights Program regarding potential well interference for wells completed into the Lower James Missouri aquifer (Water Rights, 2021e).

Within approximately three miles of the proposed diversion point for this application, the Lower James Missouri aquifer has saturated aquifer thickness ranging from approximately 40 to 60 feet, with the depth to the top of aquifer materials ranging from approximately 25 to 140 feet below land surface, and static water levels at well completion varying from approximately 10 to 100 feet below land surface (SDGS, 2021; Water Rights 2021b and 2021d). 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).

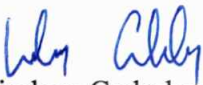
The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management 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 Lower James Missouri aquifer. Additionally, the Lower James Missouri well that the applicant proposes to use is an existing well that has been in place and is presumed to have been in use since completion of the well in July 2020, without any reported well interference complaints on file with the DANR -Water Rights Program (Water Rights, 2021d and 2021e). 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. 8535-3 proposes to appropriate water at a maximum instantaneous diversion rate of 1.78 cfs from one well completed into the Lower James Missouri aquifer (75 feet deep) for the irrigation of 92 acres. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. The site is located in Yankton County approximately two miles northeast of Yankton, South Dakota.
2. Irrigation of this acreage was originally authorized by Water Right No. 6621-3 from the James River. The James River diversion point is no longer being utilized.
3. There is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer for this proposed appropriation based on the hydrologic budget and observation well data.
4. There is a reasonable probability this diversion will not unlawfully impair adequate wells authorized by existing water rights or domestic use wells.


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

Reviewed by:


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. US. Geological Survey, Huron, South Dakota.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A., 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
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Water Rights, 2021c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2021d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2021e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

JAY CUTTS
44681 309TH STREET
MISSION HILL SD 57046

RECEIVED
OCT - 8 2021
WATER RIGHTS
PROGRAM

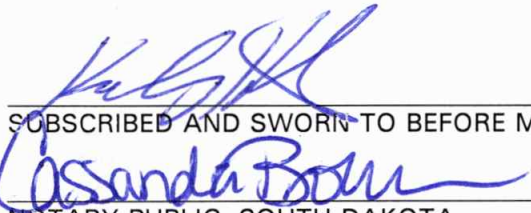
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

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
10+6 NOTICE OF APPLICATIO

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 6th DAY OF October, 2021
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$38.56 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: 10/06/2021

FILED ON: 10/06/2021


SUBSCRIBED AND SWORN TO BEFORE ME THIS 6th DAY OF October, 2021

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



Ad text : 10+6

NOTICE OF APPLICATION NO. 8535-3 to Appropriate Water

Notice is given that Jay Cutts, 44681 309th St, Mission Hill SD 57046 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well completed into the Lower James Missouri Aquifer (75 feet deep) located in Government Lot 1 (SW 1/4 SE 1/4) Section 34-T94N-R55W for irrigation of 92 acres located in the E 1/2 SE 1/4, Government Lots 1 & 2 (W 1/2 SE 1/4) Section 34-T94N-R55W and Government Lot 1, Tract 1 (NW 1/4 NE 1/4) and Government Lot 2, Tract 2 (NE 1/4 NE 1/4) Section 3-T93N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. Irrigation of this acreage was originally authorized by Water Right No. 6621-3 from the James River. The James River diversion point is no longer being utilized. This site is located approximately 2 miles northeast of Yankton SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8535-3 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 October 18, 2021.

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 October 18, 2021.

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 \$38.56.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, September 28, 2021 1:08 PM
To: Sam Berres
Subject: 8535-3, Jay Cutts
Attachments: 8535-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on October 6, 2021 in the Press & Dakotan.

Jay Cutts, 44681 309th St, Mission Hill SD 57046 (605 661-9071) 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 NEWSPAPER RIGHT AWAY.**

September 28, 2021

Jay Cutts
44681 309th St
Mission Hill SD 57046

Dear Mr. Cutts:

Water Permit Application No. 8535-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Press & Dakotan printed at Yankton SD (Ph # 605 665-7811). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

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. 8535-3 to Appropriate Water

Notice is given that Jay Cutts, 44681 309th St, Mission Hill SD 57046 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well completed into the Lower James Missouri Aquifer (75 feet deep) located in Government Lot 1 (SW 1/4 SE 1/4) Section 34-T94N-R55W for irrigation of 92 acres located in the E 1/2 SE 1/4, Government Lots 1 & 2 (W 1/2 SE 1/4) Section 34-T94N-R55W and Government Lot 1, Tract 1 (NW 1/4 NE 1/4) and Government Lot 2, Tract 2 (NE 1/4 NE 1/4) Section 3-T93N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. Irrigation of this acreage was originally authorized by Water Right No. 6621-3 from the James River. The James River diversion point is no longer being utilized. This site is located approximately 2 miles northeast of Yankton SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8535-3 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 October 18, 2021.

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 October 18, 2021.

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_



**DEPARTMENT of AGRICULTURE
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523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

OCT 28 2021

Jay Cutts
44681 309th St
Mission Hill SD 57046

Dear Mr. Cutts:

Enclosed is Water Permit No. 8535-3 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

8535-3

RECEIVED

DEC - 1 2021

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

Date

11-20-21

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

FROM:

Jay Cutler

(name)

44681 309th ST

(address)

Mission H. 11 SD 57046

(city, state, zip)

(phone)

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

Water Permit No. 8535.3 states that the water use system is to be constructed by 10-18-24, and water is to be put to beneficial use by 10-18-30.

(date)

(date)

The water use system was completed on

7-2-21

(date)

Applying the water to beneficial use was completed on

7-2-21

(date)

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

Jay Cutler
(signature)





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

December 3, 2021

8535-3

Jay Cutts
44681 309th St
Mission Hill SD 57046

Dear Mr. Cutts:

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 the irrigation system authorized under Water Permit no. 8535-3.

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



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

6621-3, 8535-3

August 3, 2022

Jay Cutts
44681 309th St
Mission Hill SD 57046

Dear Mr. Cutts:

The irrigation season is in full swing. This has led to the Department of Agriculture and Natural Resources (DANR) fielding inquiries regarding end gun overspray on to roads. This is a reminder that a water right holder is not allowed to operate an irrigation system in violation of state water law, which includes end gun overspray upon land not authorized by the water right.

DANR received an inquiry alleging the irrigation system located in the SE 1/4 Section 34-T94N-R55W had irrigation water from the end gun hitting the east/west road. The water rights for this system are held in your name under Water Right No. 6621-3 and Water Permit No. 8535-3.

Please take steps to ensure end gun stops are functioning properly so there is not direct overspray on to the road. If you don't believe your irrigation system is causing the overspray, or if you have any questions, please contact me at (605) 773-3352 or by email at ron.duvall@state.sd.us

Thank you for your cooperation,

Ron Duvall
Water Rights Program, DANR

Water Rights Program - File Documentation

NAME: Chris Nelson (605 661-7417)

ADDRESS: Yankton

DATE: 8-3-22

RE: Overspray complaint

COMMENTS:

Chris Nelson area landowner, called to report overspray on the east-west road south of the pivot located in the SE 1/4 Section 34-T94N-R55W.

This system is authorized by Water Right No. 6621-3 (James River) and Water Permit No. 8535-3 (groundwater) held by Jay Cutts.

I told Mr. Nelson that we would send Jay Cutts a letter today. Mr. Nelson said he was concerned because he was following a motorcycle that hit the wet road and had difficulty maintaining balance.



Karen Schlaak
Water Rights Program

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8535-3

I have this day, November 6, 2023, made a thorough examination of the water use system owned by Jay Cutts, 44681 309th St., Mission Hill, SD 57046, holder of Permit No. 8535-3, bearing the priority date of August 2, 2021. This permit authorizes the diversion of 1.78 cu. ft. per second of the waters of groundwater (Lower James Missouri: Aquifer) authorizing the irrigation of 92 acres located in Yankton County.

Inspection contacts: Jay Cutts

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Quality Well Service LLC
- 2) No. of Wells: 1
- 3) Depth(s): 75 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 16 inches
- 2) Length: 35 feet
- 3) Type: Plastic

Screen:

- 1) Diameter: 16 inches
- 2) Length: 40 feet
- 3) Type: PVC
- 4) Static water level: 19 feet

Pump:

- 1) Make: Borer Wholesale
- 2) Model No.: 12MS AM
- 3) Capacity: 900 GPM

Motor:

- 1) Make: BMR
- 2) Model No.: 5404HSWP1-PF
- 3) Horsepower rating: 40 hp

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

- 1) Type: Aluminum Size: 8 inches Length: 10 feet

C. Works used to apply water to beneficial use:

Center Pivot:

- 1) Make: Valley
- 2) Pivot length: 1,550 feet
- 3) End Gun: 100 feet
- 4) Number of towers: 11
- 5) End gun: Yes
- 6) Capacity: 900 GPM

Chemigation Equipment:

- 1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: No
2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
3) Exceptions to compliance are: The system uses 2.01 cfs instead of 1.78 cfs.

E. Condition and Location:

- 1) The system is in good condition with the point(s) of diversion located as follows:
The well is 2,100 feet west and 1,100 feet north of the southeast corner of Section 34-T94N-R55W (Latitude 42.91200, Longitude -97.32607- SW1/4 of the SE1/4).
2) The works are capable of diverting and conveying to the places of use 2.01 cu. ft. per second of water from the well which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows:

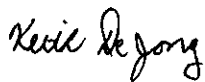
<u>Section 34-T94N-R55W</u>	
<u>NW1/4SE1/4</u>	<u>34 acres</u>
<u>NE1/4SE1/4</u>	<u>16 acres</u>
<u>SW1/4SE1/4</u>	<u>16 acres</u>
<u>SE1/4SE1/4</u>	<u>20 acres</u>

<u>Section 3-T93N-R55W</u>	
<u>NW1/4NE1/4</u>	<u>3.5 acres</u>
<u>NE1/4NE1/4</u>	<u>2.5 acres</u>

comprising a total of 92 acres of land and the license should be issued for 1.78 cfs.

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

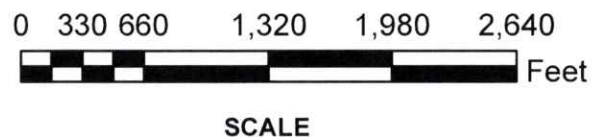
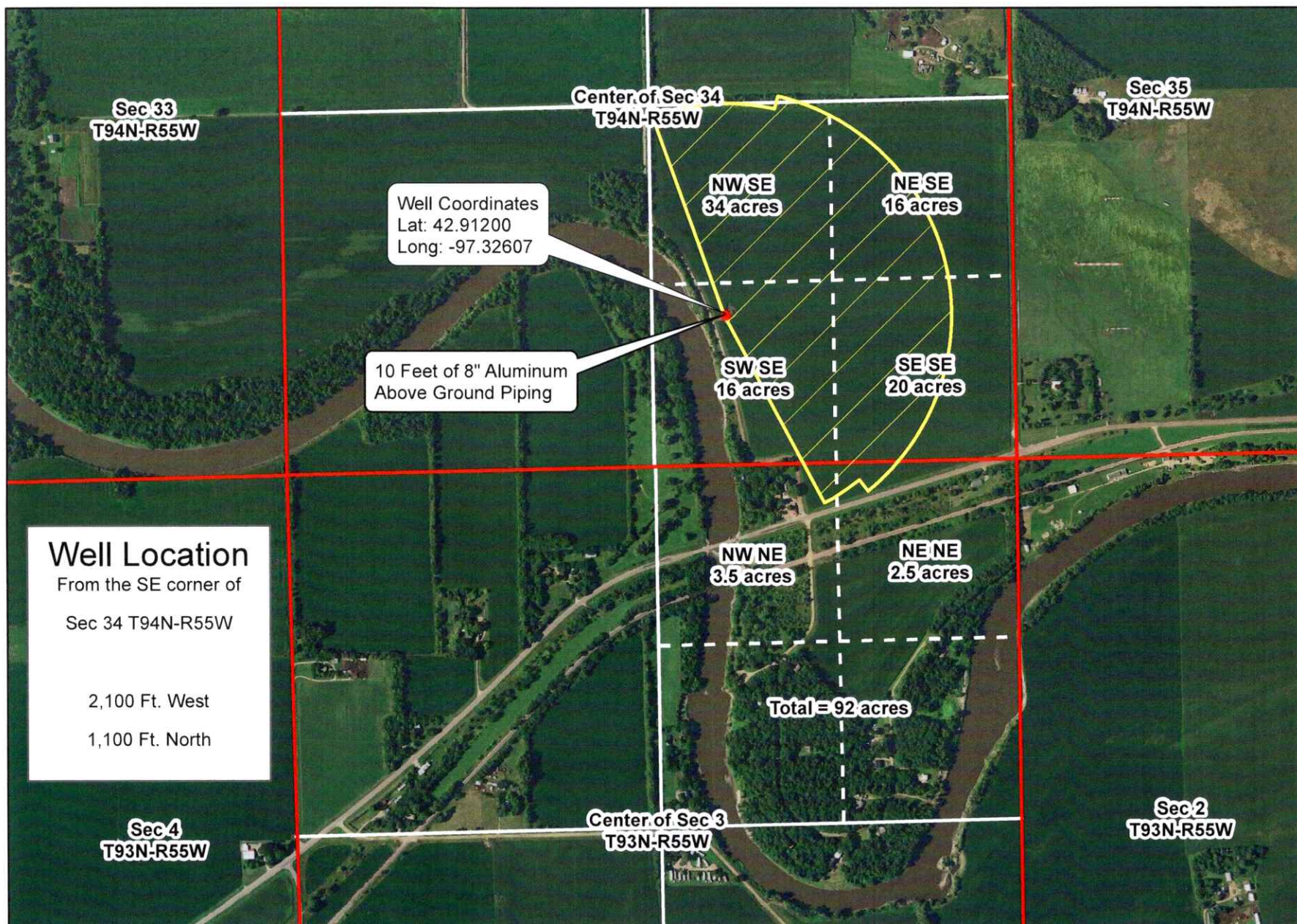
F. Comments or other permit(s) associated with the project: This permit replaces cancelled Water Right No. 6621-3, which drew water from the James River and used the same pivot. This new permit obtains water from a new well. The pump and pivot are rated for 2.01 cfs instead of 1.78 cfs as allowed by the permit.



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

Date report completed: November 6, 2023

Water Permit No. 8535-3



Keith DeJong
Keith DeJong, PE Ret.
Staff Engineer
November 6, 2023

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8535-3**

(1) Jay Cutts; 44681 309th St, Mission Hill SD 57046, made Application No. 8535-3, August 2, 2021, for a water permit to divert 1.78 cubic feet of water per second from groundwater, one well (Lower James Missouri Aquifer), Yankton County, South Dakota for irrigation purposes. Permit No. 8535-3, with a priority date of August 2, 2021, was approved October 18, 2021, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 18, 2026, and for the application to beneficial use of water on or before October 18, 2030.

The permit holder submitted a Notice of Completion of Works and Application of Water to Beneficial Use form on November 20, 2021. The Notice stated the diversion system was completed and the water was placed to beneficial use on July 2, 2021.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 2,100 ft W & 1,100 ft N of the SE corner of Section 34, T94N, R55W (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
(Latitude 42.91200 & Longitude -97.32607) Government Lot 1

(3) The amount of appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – August 31.

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

Section 34, T94N, R55W
Government Lots 1 & 2
NE $\frac{1}{4}$ SE $\frac{1}{4}$ 16 acres
NW $\frac{1}{4}$ SE $\frac{1}{4}$ 34 acres
SW $\frac{1}{4}$ SE $\frac{1}{4}$ 16 acres
SE $\frac{1}{4}$ SE $\frac{1}{4}$ 20 acres

Section 3, T93N, R55W
Government Lot 1, Tract 1 & Lot 2 Tract 2
NW $\frac{1}{4}$ NE $\frac{1}{4}$ 3.5 acres
NE $\frac{1}{4}$ NE $\frac{1}{4}$ 2.5 acres

TOTAL: 92.0 acres

(5) Pursuant to South Dakota Water Law 46-5-30.1 Jay Cutts, the holder and/or owner of Water Right No. 8535-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from groundwater, one well (Lower James Missouri Aquifer), with a priority date of August 2, 2021, 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. 8535-3 and subject to the following qualifications:

1. The well approved under Water Right No. 8535-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Water Right 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.

continued

2. Pursuant to SDCL 46-5-6 which allows for a greater diversion rate is the method of irrigation, time constraints, or type of soils so requires, Water Right No. 8535-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 92 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
3. The Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

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

NOV 09 2023

date



8021-3 + 8535-3



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

NOV 09 2023

8021-3
8535-3

Jay Cutts
44681 309th St
Mission Hill SD 57046

Dear Mr. Cutts:

Enclosed are Water License Nos. 8021-3 & 8535-3. These are the final water right documents completing your process of obtaining Water Rights. Included with your licenses are maps prepared by the staff engineer who conducted the field investigations.

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

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

Sincerely,

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

NOTE: The investigation found your irrigation system covered under No. 8535-3 is capable of diverting 2.01 cubic feet of water per second (cfs) which is equivalent to approximately 900 gallons per minute. Permit No. 8535-3 authorized 1.78 cfs (equivalent to approximately 800 gpm). Diversion of water under this water license is limited to 1.78 cfs.

enclosures