

WATER PERMIT NO. 8667-3

Name of Applicant: Jim Kulish

Address: 29943 432nd Ave, Lesterville SD 57040

Phone: 605 660-3546

Amount of Water Claimed: 1.33 cfs

Total Acres: 110 acres

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 Lesterville

PRIORITY

Date Received: 10-3-22

Application/License Fee: \$950

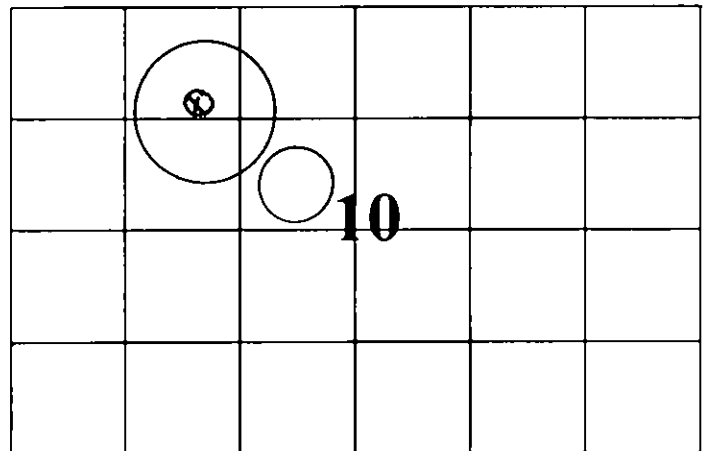
Corrected Application Received:

Period of Annual Use: May 1 – October 31

Remarks:

Diversion Point: NW 1/4 NW 1/4 Sec 10-T95N-R57W

Land to be Irrigated: NW 1/4 Sec 10-T95N-R57W



Depth of Well: 260

Well Driller: Christensen Well Drilling

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 10-3-22

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 8667-3**

Date of first receipt of application October 3, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8667-3 to Jim Kulish, 29943 432nd Ave, Lesterville SD 57040 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. 8667-3 appropriates 1.33 cubic feet of water per second from one well completed into the Lower James Missouri:Scotland Aquifer (260 feet deep) located in the NW 1/4 NW 1/4 Section 10 for irrigation of 110 acres located in the NW 1/4 Section 10; all in T95N-R57W. This site is located approximately 2 miles northeast of Lesterville 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 – October 31.
3. The date from which applicant may claim right is October 3, 2022.
4. The date of approval of Permit No. 8667-3 is December 12, 2022.
5. One-fifth of the construction is to be completed on or before June 12, 2025.
6. All construction is to be completed on or before December 12, 2027.
7. Water is to be put to beneficial use on or before December 12, 2031.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under Water Permit No. 8667-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. 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 Environment and Natural Resources

DEC 21 2022
date



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

OCT 03 2022

PAID

OCT 3 2022

Ck# 8036

Rec't#

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8667-3</u>	(office use only) Hydrologic Unit <u>10160001</u>	OFFICE OF WATER
	Basin <u>James R</u>		
	Newspaper <u>Press & Dakotan</u>		

Application For Permit To Appropriate Water For Irrigation

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

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

1. Name to Appear on Irrigation Permit JIM KULISH

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

Mailing Address 29943 432nd Ave Lesterville SD 57040
(Address) (City) (State) (Zip Code)

Phone _____ Mobile 605 660-3546 Email j6kulish@hotmail.com

2. Amount of water claimed 1.33 *CFS or 600 **GPM ***AF Total Acreage 110
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply well

4. Location of point of diversion one well in the NW 1/4 of the NW section
Section 10-T95N-R57W (example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W) County Yankton

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used Summer crop season May 1 - Oct 31

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

Land Description	Acres	Land Description	Acres
<u>NW 1/4 Sec 10-T95N-R57W</u>	<u>110</u>		

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

I, Jim Kulish, 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.

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 Christensen Well & Irrigation
(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:

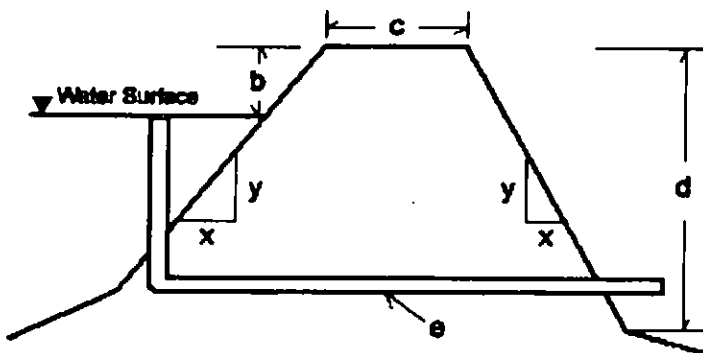
c) Well Depth (required) 260 Depth to Top of Water Bearing Material Depth to Water from Surface d) Distance to nearest domestic well on applicant's property Property owned by others **2. Wastewater Disposal System Information**a) Type of System (i.e. septic tank, drain field) b) System Capacity (gallons) Year Constructed c) Connected to the City of Sanitary System **3. Dugout Information**a) Surface Dimensions Depth b) Depth to water (ground surface to water level) **4. Water Storage Dams**

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

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

b) Freeboard c) Crest Width Crest Length d) Height e) Primary Outlet Capacity If pipe, diameter f) Secondary Spillway Capacity Spillway Width

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

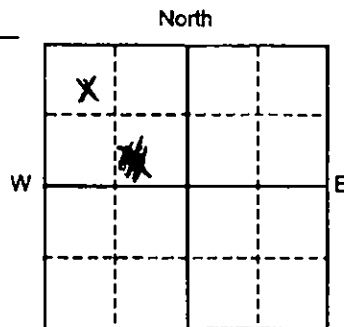
Upstream Downstream h) Surface Area of Impoundment i) Storage Acre Feetj) Drainage Area Above Dam Acres

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NW 1/4 Sec 10 Twp 95N Rg 57WCounty Yankton

Please mark well location with an "X"



Well Completion Date

3/22/22

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.):
4000 ft. from Septic tank (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
<u>800</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>200</u> FT	<u>28</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	<u>11</u>	Lb/gal	<u>0</u> Ft	<u>10</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure Pump w/ pressure
grouter

SCREEN:

☒ Perforated pipe ☐ Manufactured
Diameter 16 inches Length 60 FeetMaterial PVCSlot Size .085 Set From 200 Feet to 260 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: Kulish FarmsBusiness Name: Ron & JimAddress: 29945 432 AveCity, State, Zip: Lesterville, SD 57040

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>black top soil</u>	<u>0</u>	<u>9</u>
<u>blue clay</u>	<u>9</u>	<u>123</u>
<u>SAND & GRAVEL</u>	<u>123</u>	<u>127</u>
<u>GRAY CLAY</u>	<u>127</u>	<u>193</u>
<u>medium sand</u>	<u>193</u>	<u>210</u>
<u>coarse gravel</u>	<u>210</u>	<u>225</u>
<u>medium sand</u>	<u>225</u>	<u>253</u>
<u>GRAY CLAY</u>	<u>253</u>	<u>260</u>

STATIC WATER LEVEL 105 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: turbine pump with engine
☐ Baled
☐ Other

Pumping Level Below Land Surface

200 Ft. After _____ Hrs. pumped _____ GPM200 Ft. After 24 Hrs. pumped 800 GPMIf pump installed, pump rate: 6000 GPM

REMARKS

RECEIVED

OCT 03 2022

OFFICE OF
WATERThis well was drilled under license # 444 and this report is true and accurate.Drilling firm: Christensen Well & Irrigation

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Carol C. P.Date: 03-31-2022

RECEIVED

MAR 31 2022

WATER RIGHTS
PROGRAM



RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date October 3, 2022

RECEIVED OF Kulish Farms 29943 432nd Ave., Lesterville, SD 57040

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

Fee for Application for Permit No. <u>8667-3</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>8667-3</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
vm

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, September 29, 2022 9:33 AM
To: j6kuli@hotmail.com
Subject: Map for Water Permit Application
Attachments: 4127.pdf

Jim,
Attached is a map for Sec 10-T95N-R57W. Please outline the area you are proposing to irrigate and mark the well location with an "X".

The application fee is \$500 (0 – 60 acres), \$750 (61-120 acres), \$850 (121-180 acres) PLUS license fee of \$200. You mentioned 80 acres. The total fee for 80 acres would be \$950.

As I stated in our phone conversation, once the permit has been through the public notice process and approved, you will have 5 years to construct the project and another 4 years to put the water to beneficial use.

When the application is received, I will review it and contact you if more information is needed. Let me know if you have questions.

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

September 22, 2022

Kulish Farms
Ron & Jim Kulish
29945 432 Ave
Lesterville SD 57040

Dear Sirs:

A well driller's report filed by Christensen Well & Irrigation shows they completed a new well for you last spring (copy attached). The report indicates the well water will be used for irrigation.

Water Right No. 7538-3 held by Ron Kulish authorizes irrigation of 202 acres located in portions of Section 15-T95N-R57W. A review of our files does not show an irrigation permit located in Section 10-T95N-R57W. Possibly the legal description on the well completion report is incorrect, and if so, what is the correct legal description of the new well. Is this a replacement well?

If necessary, enclosed is an application form and instruction sheet to apply for a water permit for irrigation. The completed forms with the application fee and map can be returned to the "Water Rights Program, 523 E Capitol, Pierre SD 57501.

Please contact me or send an email regarding the status of this well. If you have any questions, let me know. We want to work with you to get the proper permitting in place.

Sincerely,

Karen Schlaak

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

enclosure



**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. 8667-3, Jim Kulish**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8667-3, Jim Kulish, 29943 432nd Avenue, Lesterville SD 57040.

The Chief Engineer is recommending APPROVAL of Application No. 8667-3 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. 8667-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. 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
November 18, 2022

**Report to the Chief Engineer on
Water Permit application No. 8667-3**

Jim Kulish
25th October 2022

Water Permit Application No. 8667-3 seeks to appropriate water at a maximum diversion rate of 1.33 cubic feet per second (cfs) from one well completed into the Lower James-Missouri: Scotland aquifer (260 feet deep) located in NW ¼ NW ¼ Section 10 for irrigation of 110 acres located in the NW ¼ Section 10; all in T95N-R57W. This site is located approximately two miles northeast of Lesterville, SD.

Aquifer: Lower James-Missouri: Scotland (LJM:S)

Hydrogeologic Characteristics

The Lower James-Missouri: Scotland aquifer management unit is a sand and gravel outwash underlying approximately 72,800 acres of Bon Homme, Hutchinson, and Yankton Counties that was deposited in the Quaternary Period (Hedges et al, 1982). It has a strong hydrologic connection to the main body of the Lower James-Missouri aquifer to the northeast and the Choteau: Tyndall aquifer management unit to the west and may have some hydrologic contact with the Codell Sandstone aquifer where the Lower James-Missouri: Scotland aquifer management unit contacts the underlying and adjacent portions of the Codell Sandstone aquifer (Christensen, 1974; Bugliosi, 1983).

The applicant submitted a well completion report for the production well, completed on March 22, 2022. The driller reported encountering blue clay from 9 to 123 feet below grade, sand & gravel from 123 to 127 feet below grade, gray clay from 127 to 193 feet below grade, medium sand from 193 to 210 feet below grade, coarse gravel from 210 to 225 feet below grade, medium sand from 225 to 253 feet below grade, gray clay from 253 to 260 feet below grade. The driller placed screen from 200 to 260 feet below grade. The saturated aquifer thickness of the well was 60 feet, with the depth to the top of aquifer material of 193 feet below grade, and static water level 105 feet below grade at the time of completion (Water Rights, 2022d). The elevation of aquifer materials encountered are consistent with nearby DNR observation wells completed into the Lower James-Missouri: Scotland aquifer management unit (Water Rights, 2022b). The Lower James-Missouri: Scotland aquifer management unit is under buried, confined conditions. At the time the well for this application was completed, the hydraulic head in the aquifer rose 88 feet above the top of the water bearing formation (i.e., the medium sand at 193 feet below grade).

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing 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. This report will only assess the availability of water and possibility of developing this application without unlawful impairment of existing domestic water uses and water rights.

Pursuant to SDCL 46-6-3.1, 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 the water to the groundwater source. An exception provides that the Water Management Board is not required to consider the balance of recharge and withdrawals if the application is for a water distribution system and the groundwater source is older or stratigraphically lower than the Greenhorn Formation. This application is not for a water distribution system and the Lower James-Missouri: Scotland aquifer management unit is younger and stratigraphically higher than the Greenhorn Formation. Therefore, the Water Management Board is required to find that average annual recharge exceeds average annual withdrawals to approve this application.

Availability of Water

Hydrologic Budget

Recharge

Recharge to the Lower James-Missouri: Scotland aquifer management unit is by infiltration of precipitation and possibly by groundwater inflow from bedrock and glacial aquifers when they are in contact with the aquifer management unit and the hydraulic head is higher than the Lower James-Missouri: Scotland aquifer management unit. Hedges et al (1985) used a flow-net analysis to estimate an average annual recharge to the entire Lower James-Missouri aquifer to be approximately 1.5 inches per year. The validity of a flow-net analysis depends on the validity of its assumptions. Hedges et al (1985) also recommended using a recharge rate ranging between 0.15 and 0.60 inches per year for buried, confined aquifers for water management purposes. By applying the various recharge rates over the estimated area of the aquifer (72,800 acres), the total average annual recharge can be estimated. Using the recharge rate from the flow-net analysis, the estimated average annual recharge could be as much as 9,100 acre-feet per year (ac-ft/yr). Using the more conservative recommended values, the average annual recharge to the Lower James-Missouri: Scotland aquifer management unit could range between 910 ac-ft/yr and 3,640 ac-ft/yr.

Discharge

Discharge from the Lower James-Missouri: Scotland aquifer management unit is likely by groundwater outflow to bedrock and glacial aquifers where they contact the Scotland management unit and the hydraulic head in the other aquifers is lower than the hydraulic head of the Lower James-Missouri: Scotland aquifer management unit, by evapotranspiration where the aquifer is at or near land surface, and by domestic and appropriative well withdrawals. There are 18 water rights/permits authorized to withdraw from the Lower James-Missouri: Scotland aquifer management unit and one pending application. Of those authorized, 18 are for irrigation, including the pending application, and one is for livestock watering use in an animal feeding operation (Water Rights, 2022c). Assuming the one water right authorized for livestock watering use in a livestock feeding operation pumps at its maximum withdrawal rate 60% of the time, it is estimated to withdraw approximately 48 ac-ft/yr. Figure 1 shows the reported irrigation withdrawals from the Lower James-Missouri: Scotland aquifer management unit (Water Rights, 2022a).

Irrigation Reported in Lower James-Missouri: South (1979 - 2021)

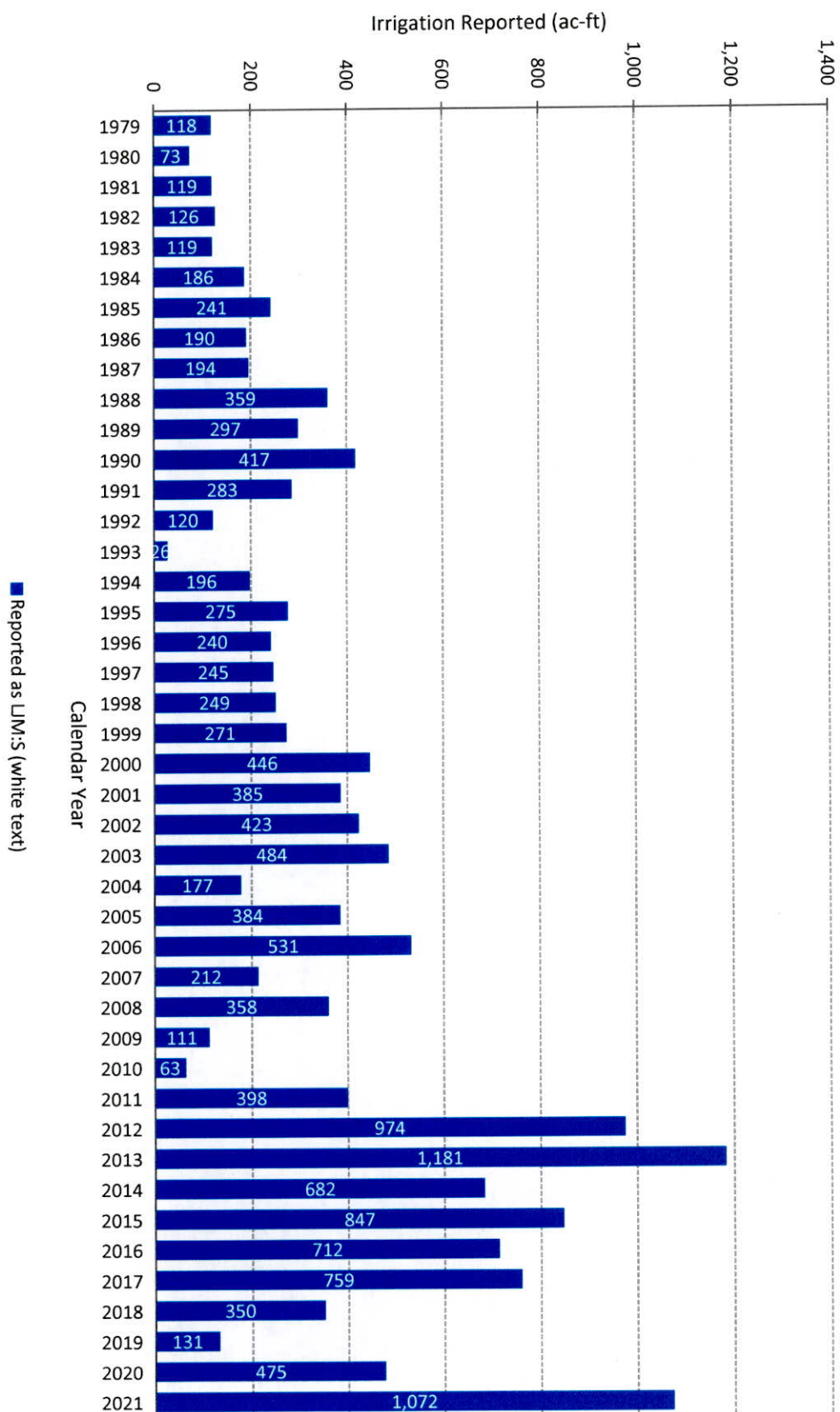


Figure 1: Irrigation reported in Lower James-Missouri: Scotland aquifer management unit from 1979 - 2021 (Water Rights, 2022a)

The average irrigation use reported over the entire period of record (1979 – 2021) is 361 ac-ft/yr (Water Rights, 2022a). However, due to changes in farming practice and an increase in the number of permits from 10 to 16 from 2012 to 2013, the average over the entire period of record may not be an accurate reflection of actual average annual withdrawal at the present time. The average irrigation reported as withdrawing from the Lower James-Missouri: Scotland aquifer management unit over the last 10 years of record (2012 – 2021) is 718 ac-ft/yr (Water Rights, 2022a). Water Permit, No. 8571-3, is new enough that its withdrawals are not reflected in the record of irrigation reported. Water Permit No. 8571-3 is authorized to irrigate 121 acres (Water Rights, 2022c). Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year. However, to account for fluctuation in wet and dry cycles from year to year, the one foot of water per acre per year application rate will be used to somewhat overestimate the annual withdrawal rate for this irrigation permit. If Water Permit No. 8571-3 irrigates one foot per acre per year, it will withdraw 121 ac-ft/yr. The true average annual withdrawal under Water Permit No. 8571-3 is likely to be less, based on Water Rights Staff experience. The 121 ac-ft/yr value will be used to estimate withdrawals under Water Permit No. 8571-3 until the withdrawals are reflected in the irrigation questionnaire summaries. There is also a pending Water Permit Application No. 8648-3 which can be approved no sooner than November 7th, 2022. Water Permit Application No. 8648-3 is requesting authorization to irrigate 281 acres (Water Rights, 2022c). However, Water Permit Application No. 8648-3 has been reporting withdrawals since 2008 as Water Permit No. 6980-3. Water Permit No. 6980-3 is authorized to irrigate 271 acres from the Lesterville aquifer and had an annual average irrigation report of 77 ac-ft/yr. If the applicant were to irrigate at the same rate with the 281 acres, then the annual average irrigation report would be 80 ac-ft/yr (Drennon, 2022). Finally, Water Permit Application No. 8667-3 plans to irrigate 110 acres, assuming one foot per acre per year is irrigated, the annual average irrigation report to 110 ac-ft/yr.

There are domestic wells completed into the Lower James-Missouri: Scotland aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2022d). 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 Lower James-Missouri: Scotland aquifer is present; 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: Scotland aquifer.

Summary of Hydrologic Budget

Average annual recharge to the Lower James-Missouri: Scotland aquifer management unit ranges from 910 ac-ft/yr to 3,640 ac-ft/yr using the method recommended by Hedges et al (1985) and could be as great as 9,100 ac-ft/yr. Table 1 summarizes average annual withdrawals from the aquifer management unit below, including estimated average annual withdrawals for this application (Water Rights, 2022c and 2022a). The total estimated average annual withdrawal from the Lower James-Missouri: Scotland aquifer management unit is 1,077 ac-ft/yr. However, the true average annual withdrawal for new and pending permits is likely to be less, based on Water Rights Staff experience. Based on the hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Table 1: Summary of appropriative withdrawals from the aquifer management unit (Water Rights, 2022c and 2022a)

Water Uses	Number	Est. Avg. Annual Use (ac-ft/yr)
Irrigation, Reporting	16	718
Irrigation, too new to report	1	121
Irrigation, pending application	1	80
Non-irrigation	1	48
Irrigation, this application	1	110
Total	20	1,077

Observation Wells

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires the Water Management Board to rely upon the record of observation wells, in addition to other information, in order to determine that recharge will exceed withdrawals in an aquifer to approve an application.

The Water Rights Program maintains 18 observation wells, shown in Figure 5, completed into the Lower James-Missouri: Scotland aquifer management unit. The nearest Lower James-Missouri: Scotland observation wells to this application are YA-80B located approximately 0.7 miles east, YA-80A located approximately 2.7 miles northeast, and YA-80C located approximately 2.9 miles southeast (Water Rights, 2022b). Figures 2 through 4 shows observation well water levels for Observation Wells YA-80B, YA-80A, and YA-80C respectively (Water Rights, 2022b). It is worth noting the hydrograph titles display DENR Water Rights Observation Well on the hydrographs when the titles should display DANR Water Rights Observation Well on hydrographs. The data from Figures 2 through 4 ranges from stable to rising trends over their periods of record. A majority of the observation wells in the Lower James Missouri: Scotland appear to have stable water levels, with a few wells that are on a slight rise or slight decline in hydraulic head. Figures 2 through 4 match up with the typical trend of the hydraulic head of the aquifer. In general, water levels rise during periods of higher-than-average precipitation and decline during periods of lower-than-average precipitation. Seasonal withdrawals are also reflected for summer water levels, as periodic dips in water level occurs in each hydrograph. Water levels in wells completed into confined aquifers are not necessarily reflections of available water, but of the hydraulic head in the aquifer. Water level fluctuations in this aquifer are dominated by the influence of climate, meaning water is naturally discharging from the aquifer. The Water Management Board considers recharge to and natural discharge from an aquifer to be available for capture. Therefore, based on observation well record, there is reasonable probability unappropriated water is available for this application.

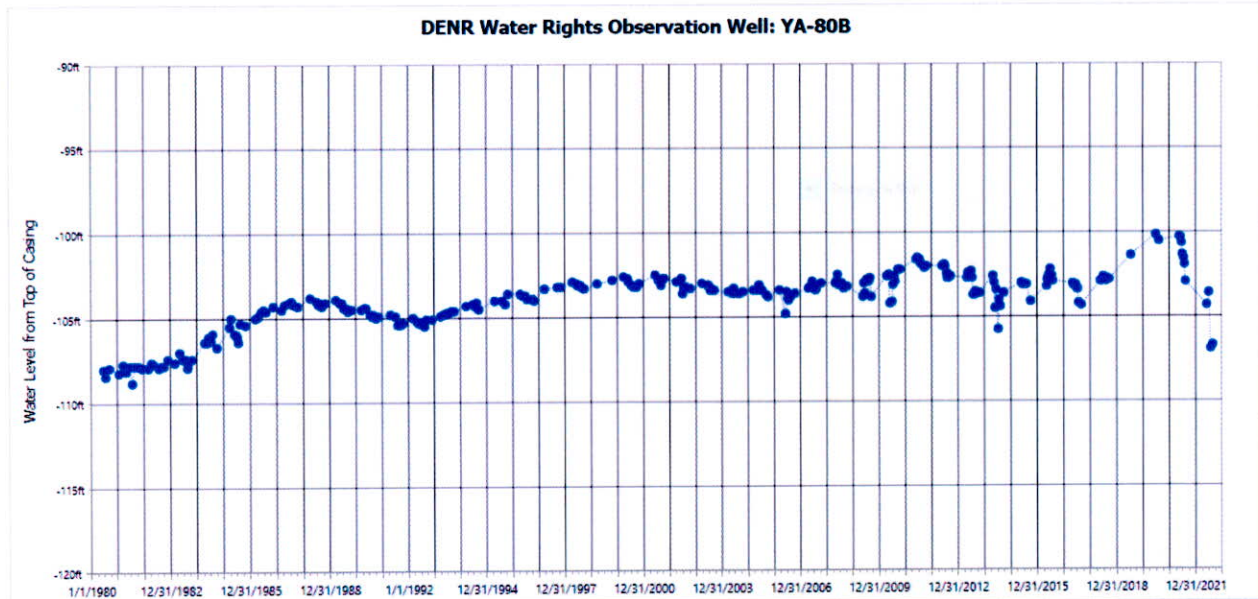


Figure 2: Hydrograph for observation well YA-80B (Water Rights, 2022b)

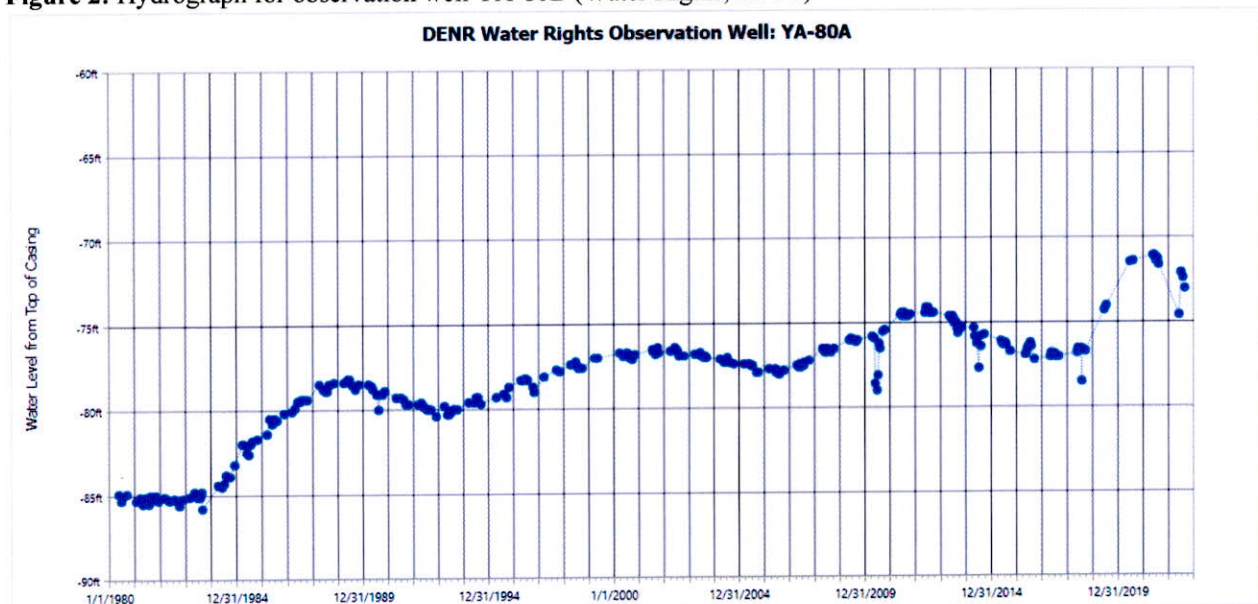


Figure 3: Hydrograph for observation well YA-80A (Water Rights, 2022b)

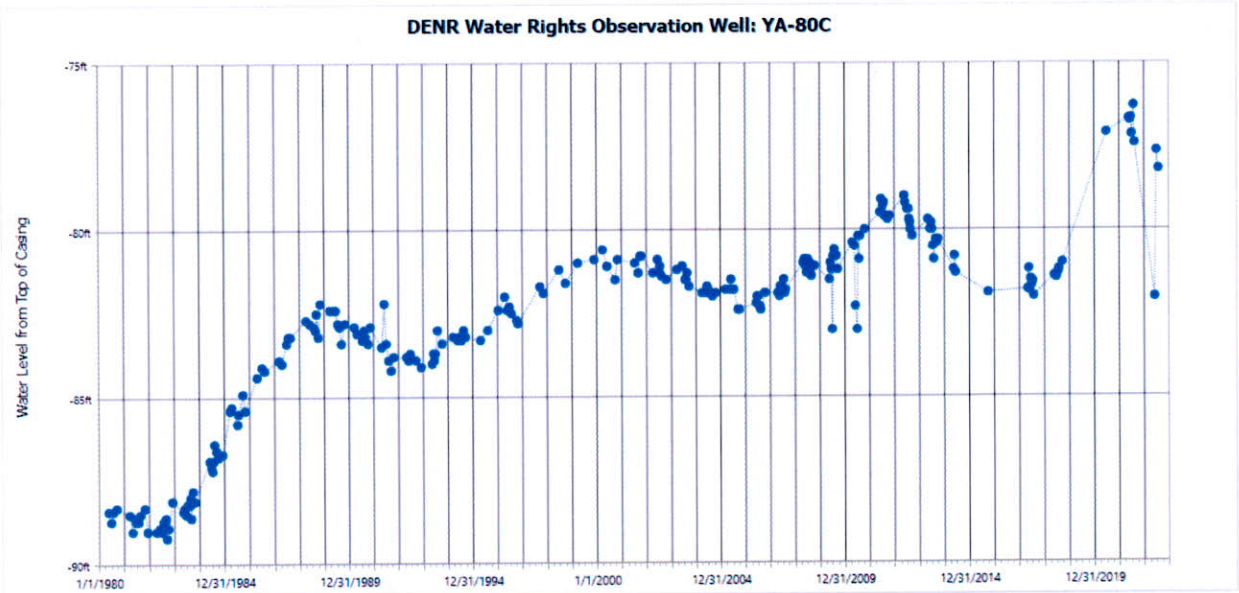


Figure 4: Hydrograph for observation well YA-80C (Water Rights, 2022b)

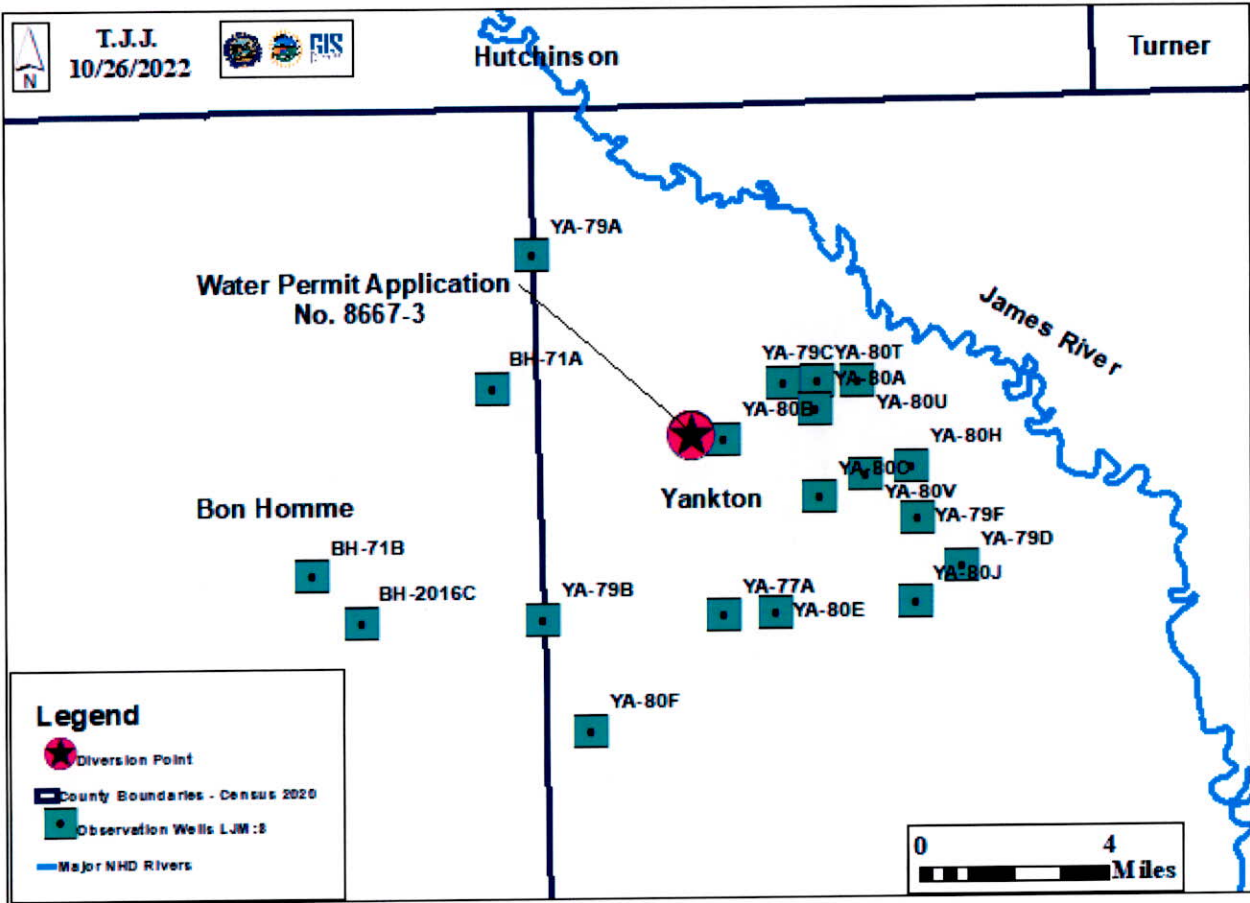


Figure 5: The Lower James Missouri: Scotland aquifer observation wells (Water Rights, 2022b and 2022c), and the location of proposed diversion point for Water Permit Application No. 8667-3.

Possibility of Unlawful Impairment of Existing Water Rights

The nearest water right/permit to this application in the same aquifer is Water Right No. 7538-3, shown on Figure 6, located approximately 1.7 miles south of this application and is held by Ron Kulish (Water Rights, 2022c). The nearest domestic well on file with the Water Rights Program that is likely to be in the same aquifer is located approximately 0.6 miles east of this application (Water Rights, 2022d).

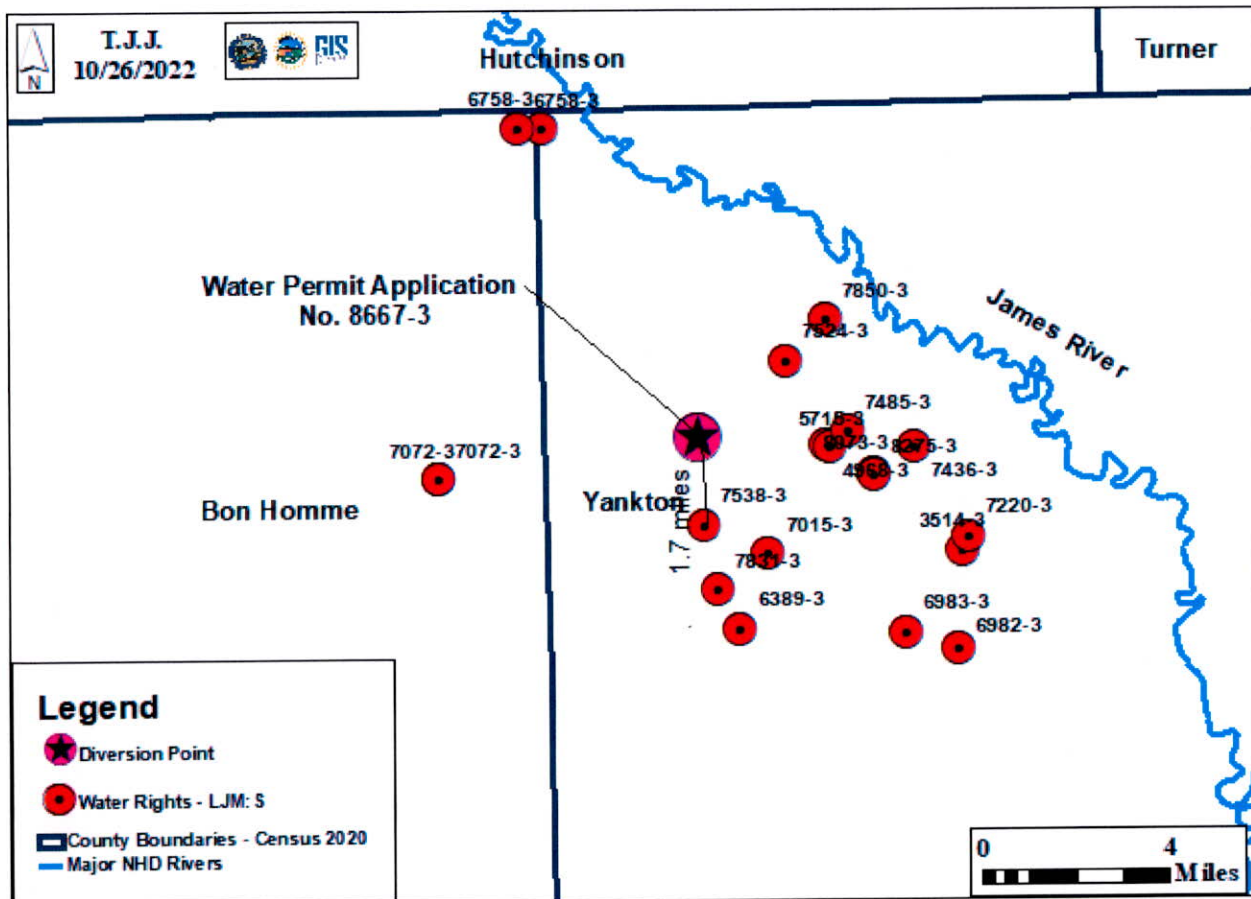


Figure 6: The Lower James Missouri: Scotland aquifer water rights/permits wells (Water Rights, 2022b and 2022c), and the location of proposed diversion point for Water Permit Application No.8667-3.

The Lower James Missouri: Scotland aquifer management unit is under buried, confined conditions and the well location was found to be under confined conditions. In an unconfined aquifer, drawdown created by pumping does not extend far from the pumped well. However, in a confined aquifer, drawdown from a pumping well can extend some distance from the well. 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 Lower James Missouri: Scotland aquifer at their location. There are no complaints on file with the Water Rights Program in Yankton County regarding adversely impacted domestic wells in this aquifer (Water Rights, 2022e). Therefore, based on the lack of complaints, presence of approximately 80 feet of hydraulic head above the top of the aquifer during the lowest measurement in a nearby observation well, and 60 feet of saturated thickness at the well site, there is reasonable probability this application can be developed without unlawful impairment of existing rights. However, out of an abundance of caution, a qualification should be added to the permit requiring the applicant to control their withdrawals such that senior water rights/permits holders and all domestic wells with adequate wells can access needed water.

Conclusions

1. Water Permit Application No. 8667-3 seeks to appropriate 1.33 cfs from one well completed into the Lower James Missouri: Scotland aquifer in the NW1/4 NW1/4 section 10 for irrigation of 110 acres located in the NW1/4 section 10; all in T95N-R57W.
2. Based on the hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for this application.
3. There is reasonable probability this application can be developed without unlawful impairment of existing water rights.



Tyler Jensen
Natural Resources Engineer I
SD DANR - Water Rights Program



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

References

- C. M. Christensen, "Geology and water resources of Bon Homme County, South Dakota; Part I: Geology," SD DANR Geological Survey Program, Vermillion, South Dakota, 1974. Bulletin 21 (Part 1).
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- L. S. Hedges, S. L. Burch, D. L. Iles, R. A. Barari and R. A. Schoon, "Evaluation of ground-water resources eastern South Dakota and upper Big Sioux River, South Dakota and Iowa, Tasks 1-4," U.S. Army Corps of Engineers, Omaha, Nebraska, 1982.
- L. S. Hedges, J. Allen and D. E. Holly, "Evaluation of ground-water resources eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa; Task 7: Ground Water Recharge," U.S. Army Corps of Engineers, Omaha, Nebraska, 1985.
- SDGS, 2022. South Dakota Geological Survey Lithologic Logs Database. Accessed October 31, 2022. <http://cf.sddanr.net/lithdb/>.
- Water Rights, 1995. Findings of Fact, Conclusions of Law, and Final Decision in the Matter of Water Permit Application No. 2313-2, Coca-Cola Bottling Company of the Black Hills. DANR-Water Rights Program file for Water Right No. 2313-2. Pierre, SD.
- Water Rights, 2021a. "1979-2022 Irrigation Summaries by Aquifer", SD DANR-Water Rights Program, Joe Foss Building, Pierre, SD.
- Water Rights, 2022b. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2022e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, November 22, 2022 7:47 AM
To: j6kuli@hotmail.com
Subject: Water Permit Application No. 8667-3
Attachments: 4450.pdf

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

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

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



AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

JIM KULISH
29943 432ND AVE
LESTERVILLE SD 57040

RECEIVED

DEC 05 2022

OFFICE OF
WATER

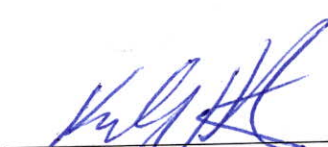
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

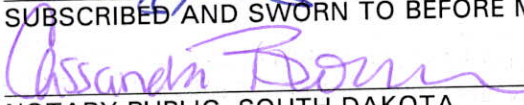
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND 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 1st DAY OF December, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$39.36 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: 12/01/2022

FILED ON: 12/01/2022


SUBSCRIBED AND SWORN TO BEFORE ME THIS 1st DAY OF December, 2022


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

Ad text : NOTICE OF APPLICATION
NO. 8667-3 to Appropriate Water

Notice is given that Jim Kulish, 29943 432nd Ave, Lesterville SD 57040 has filed an application for a water permit to appropriate 1.33 cubic feet of water per second from one well completed into the Lower James Missouri:Scotland Aquifer (260 feet deep) located in the NW 1/4 NW 1/4 Section 10 for irrigation of 110 acres located in the NW 1/4 Section 10; all in T95N R57W. This site is located approximately 2 miles northeast of Lesterville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8667-3 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 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 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 December 12, 2022.

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

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by December 12, 2022.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of \$39.36 and can be viewed free of charge at www.sdpublicnotices.com.

Published December 1, 2022.

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, November 22, 2022 7:44 AM
To: Cassandra Brockmoller (cassandra@yankton.net)
Subject: 8667-3, Jim Kulish
Attachments: 8667-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on December 1, 2022.

Jim Kulish, 29943 432nd Ave, Lesterville SD 57040 (605 660-3546) 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.**

November 22, 2022

Jim Kulish
29943 432nd Ave
Lesterville SD 57040

Dear Mr. Kulish:

Water Permit Application No. 8667-3 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 and 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. 8667-3 to Appropriate Water

Notice is given that Jim Kulish, 29943 432nd Ave, Lesterville SD 57040 has filed an application for a water permit to appropriate 1.33 cubic feet of water per second from one well completed into the Lower James Missouri:Scotland Aquifer (260 feet deep) located in the NW 1/4 NW 1/4 Section 10 for irrigation of 110 acres located in the NW 1/4 Section 10; all in T95N-R57W. This site is located approximately 2 miles northeast of Lesterville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8667-3 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 December 12, 2022.

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

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by December 12, 2022.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of_



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and NATURAL RESOURCES**

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

DEC 21 2022

Jim Kulish
29943 432nd Ave
Lesterville SD 57040

Dear Mr. Kulish:

Enclosed is Water Permit No. 8667-3 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



**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
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.: 8667-3

Name of Applicant: Jim Kulish

Date of Posting: 11/29/2022

Date of Removal: 12/21/2022



Ron Duvall, Water Rights Permitting Administrator

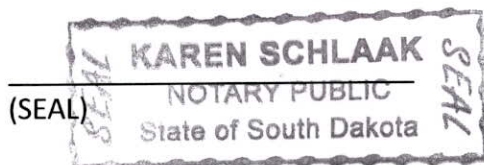
12/21/22

Date

Subscribed and sworn to before me, a notary public, this 21st day of dec, 2022.



Notary Public - South Dakota
My commission expires: 4/1/2025



8667-3
RECEIVED

MAR 13 2023

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEOFFICE OF
WATERDate 1-10-2023TO: Water Rights Program, DANR
523 E. Capitol
Pierre, SD 57501-3181FROM: Jim Kulish

(name)

29943 43rd Ave

(address)

Lehterville SD 57040

(city, state, zip)

605-660-3546

(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. 8667-3 states that the water use system is to be constructed by 12-12-2027, and water is to be put to beneficial use by 12-12-2031.

(date)

(date)

The water use system was completed on 1-10-2023.

(date)

Applying the water to beneficial use was completed on 1-17-2023.

(date)

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

Jim Kulish

(signature)





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

March 13, 2023

8667-3

Jim Kulish
29943 432nd Ave
Lesterville SD 57040

Dear Mr. Kulish:

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

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

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

Sincerely,

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