

WATER PERMIT NO. 8611-3

Name of Applicant: Chase I. Jensen

Address: 21324 479th Ave, Aurora SD 57002 Phone: 605 690-4970

Amount of Water Claimed: 1.14 cfs Total Acres: 80 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Brookings

Type of Waste Disposal System:

Location: 3 miles east of Aurora SD

PRIORITY Date Received: 3-15-22 Application/License Fee: \$ 950

Corrected Application Received: Period of Annual Use: May 1 – Sept 30

Remarks:

Diversion Point: SE 1/4 SW 1/4 Sec 32-T110N-
R48W

Land to be Irrigated: E 1/2 SW 1/4 Sec 32-T110N-
R48W

Depth of Well: 122

Well Driller:

Remarks:

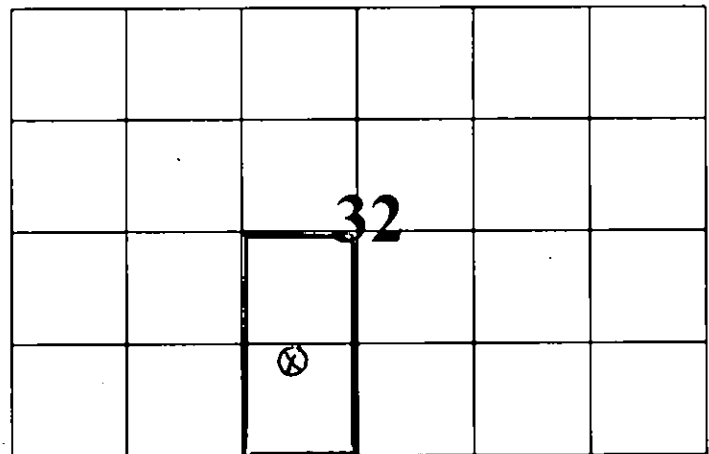
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 3-15-22

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 8611-3**

Date of first receipt of application March 15, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8611-3 to Chase L. Jensen, 21324 479th Ave, Aurora SD 57002 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. 8611-3 appropriates 1.14 cubic feet of water per second from one well to be completed into the Rutland Aquifer (approximately 122 feet deep) located in the E 1/2 SW 1/4 Section 32 for irrigation of 80 acres located in the E 1/2 SW 1/4 Section 32; all in T110N-R48W. This site is located approximately 3 miles east of Aurora SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is March 15, 2022.
4. The date of approval of Permit No. 8611-3 is June 6, 2022.
5. One-fifth of the construction is to be completed on or before December 6, 2024.
6. All construction is to be completed on or before June 6, 2027.
7. Water is to be put to beneficial use on or before June 6, 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. 8611-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8611-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

JUN 28 2022
date



MAR 15 2022

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8611-3</u>	(office use only) Hydrologic Unit <u>10170202</u>	WATER RIGHTS PROGRAM
	Basin <u>Sioux River</u>		
	Newspaper <u>Brookings Register</u>		

PAID

MAR 15 2022

Ck# 1583

Rec't# _____

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 Chase L. Jensen

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

Mailing Address 21324 47th Ave Aurora SD 57002
(Address) (City) (State) (Zip Code)Phone 605-693-4364 Mobile 605-690-4970 Email jensenproduce@gmail.com2. Amount of water claimed 1.14 *CFS or 513 **GPM NA ***AF Total Acreage 80
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply New Well4. Location of point of diversion 1 new well / E 1/2 of SW 1/4 Section 32
(example - 3 wells in SW 1/4 NE 1/4 section i2-T104N-R53W)T110-R48W County Brookings5. County or counties where water will be used Brookings6. Annual period during which water is to be used May 1 - September 307. 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
South 2/3's of	80		
80 acres			
Farm land			
E 1/2 SW 1/4 Sec 32 - T110N-R48W	80		

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

- I would like to dig a new well in order to irrigate high valued crops (Fruits/Vegetables) for our Produce Business.

- Project would consist of new well, pump, Traveling gun system.

I, Chase L. Jensen 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 Kaiser Well Drilling
(if yes, please provide copies of logs)b) If existing wells, how many Provide copy of log(s), if available. Drilled by

For either Existing or Proposed Wells:

c) Well Depth (required) 122' Depth to Top of Water Bearing Material 108' Depth to Water from Surface 14'd) Distance to nearest domestic well on applicant's property 3300' Property owned by others

(WA) 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

(NA) 3. Dugout Information

a) Surface Dimensions Depth b) Depth to water (ground surface to water level)

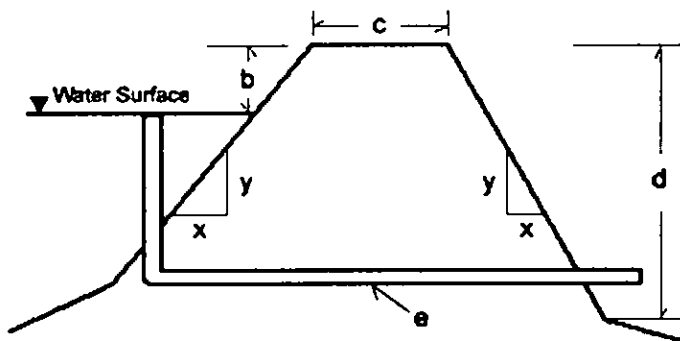
(NA) 4. Water Storage Dams

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

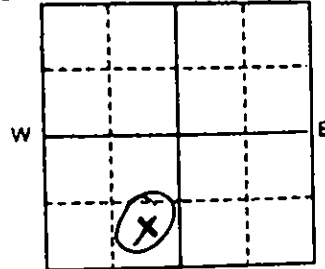
g) X & Y Slope (e.g. 3 to 1 is a typical slope)

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

SOUTH DAKOTA WATER WELL COMPLETION REPORT

Location DE 1/2 SW 1/4 Sec 32 Twp 110N Rg 48WCounty Brookings ☐ North

Please mark well location with an "X"



Well Completion Date

8-4-2021

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

DIRECT ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
 If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
sch40 LB/FT	3 IN	0 FT	108 FT	6 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
GrtWeldf	5	50 Lb/gal	0 Ft	110 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

PRESSURE PULL

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 3 Inches Length 10 Feet
Material PVCSlot Size 60 Set From 112 Feet to 122 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?
☒ No, Why Not? **TEST HOLE ONLY**
 Lab to which water quality sample sent for analysis
Well Owner: Chase JensenBusiness Name: Jensen Sweet Corn & ProduceAddress: 21324 479th AveCity, State, Zip: Aurora ☒ SD ☒ 57002

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	2
YELLOW CLAY	2	4
MIXED GRAVEL-YELLOW	4	16
YELLOW CLAY	16	18
BLUE CLAY	18	108
GRAY FINE-MED	108	122

STATIC WATER LEVEL 14 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: AIR 100+☐ Bailed☐ Other

Pumping Level Below Land Surface

20 Ft. After 4 Hrs. pumped 100 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

This well was drilled under license # 689 and this report is true and accurate.Drilling firm: KAISER WELL DRILLING INC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: _____

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date March 15, 2022

RECEIVED OF Jensen Sweet Corn & Produce 21324 479th Ave., Aurora SD 57002

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

Fee for Application for Permit No. <u>8611-3</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>8611-3</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. 8611-3, Chase L Jensen**

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. 8611-3, Chase L Jensen, 21324 479th Avenue, Aurora SD 57002.

The Chief Engineer is recommending APPROVAL of Application No. 8611-3 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. 8611-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8611-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
May 19, 2022

**Report to the Chief Engineer on
Water Permit Application No. 8611-3**

Chase L. Jensen
29 April 2022

Water Permit Application No. 8611-3 seeks to appropriate 1.14 cubic feet of water per second (cfs) from one new well to be completed into the Rutland aquifer (approximately 122 feet deep) located in the E ½ SW ¼ Section 32 for irrigation of 80 acres located in the E ½ SW ¼ Section 32; all in T110N-R48W, 5th Principal Meridian. This site is located approximately 3 miles east of Aurora, South Dakota.

Aquifer: Rutland (RUT)

Hydrogeologic Characteristics

The Rutland aquifer is composed of the saturated and permeable portions of a sand and gravel outwash body deposited during the Quaternary Period which lies between approximately 1,400 and 1,690 feet above NGVD29 and underlies 240 square miles of eastern Brookings County [1]. The aquifer is generally under confined conditions and is 15 feet thick on average.

The applicant submitted a well completion report for one test well completed on August 4, 2021 in the E ½ SW ¼ Section 32 T110N-R48W. The driller reported encountering top soil from ground surface to 2 feet below grade, yellow clay from 2 to 4 feet, mixed gravel from 4 to 16 feet, yellow clay from 16 to 18 feet, blue clay from 18 to 108 feet, and indicated “gray fine-med” from 108 to 122 feet. The driller clarified later that the last interval was sand and gravel mixed [2]. The driller placed 10 feet of screen from 112 to 122 feet below grade and used 3-inch casing or screen for the entire length. The static water level at the time the well was completed was 14 feet below grade. Static water level in a well is a measurement of the hydraulic head in an aquifer. Thus, at the time the well was completed, there were 94 feet of hydraulic head rising above the top of the aquifer.

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 allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. The applicant is not a water distribution system as defined in SDCL 46-1-6(17) and the Rutland aquifer is younger and

stratigraphically higher than the Greenhorn Formation. Therefore, it necessary to find that recharge exceeds withdrawals to approve this application.

Availability of Water

Hydrologic Budget

Recharge

Recharge to the Rutland aquifer is mainly by groundwater inflow from aquifers and glacial till in contact with the Rutland aquifer [1]. Hamilton [1] states that “additional studies would be necessary to delineate areas and quantities of recharge.” However, he estimates the amount of subsurface outflow through the Rutland aquifer into Moody County is approximately 6,000 ac-ft/yr [1]. Recharge to the aquifer must be equal to or more than outflow, so 6,000 ac-ft/yr is the minimum amount of recharge to the aquifer.

Discharge

Discharge from the Rutland aquifer occurs by subsurface outflow to the Big Sioux aquifer and by domestic and appropriative well withdrawals [1]. Due to the prevalence of stratigraphically higher aquifers and water distribution systems, domestic well withdrawals are estimated to be negligible for this hydrologic budget. There are currently 20 water rights/permits authorized to appropriate water from the Rutland aquifer, including 15 for irrigation, 3 for domestic use, and 2 for commercial use [3]. The non-irrigation water rights/permits are assumed to withdraw at their maximum permitted or licensed diversion rate 60% of the time, for a total estimated withdrawal of 717 ac-ft/yr [3]. This is likely to be an overestimate, based on Water Rights Staff experience.

Irrigation reported in the Rutland aquifer is shown in Figure 1 [4]. Prior to 1989, there were no irrigation water rights/permits authorized to withdraw from the Rutland aquifer [4]. The average irrigation reported over the period of record from 1989 through 2020 is 436 ac-ft/yr [4].

Irrigation practices are likely to have changed over the period of record. The average irrigation reported over the last 10 years of record (2011 through 2020) was 593 ac-ft/yr [4], which is the value that will be used for the hydrologic budget.

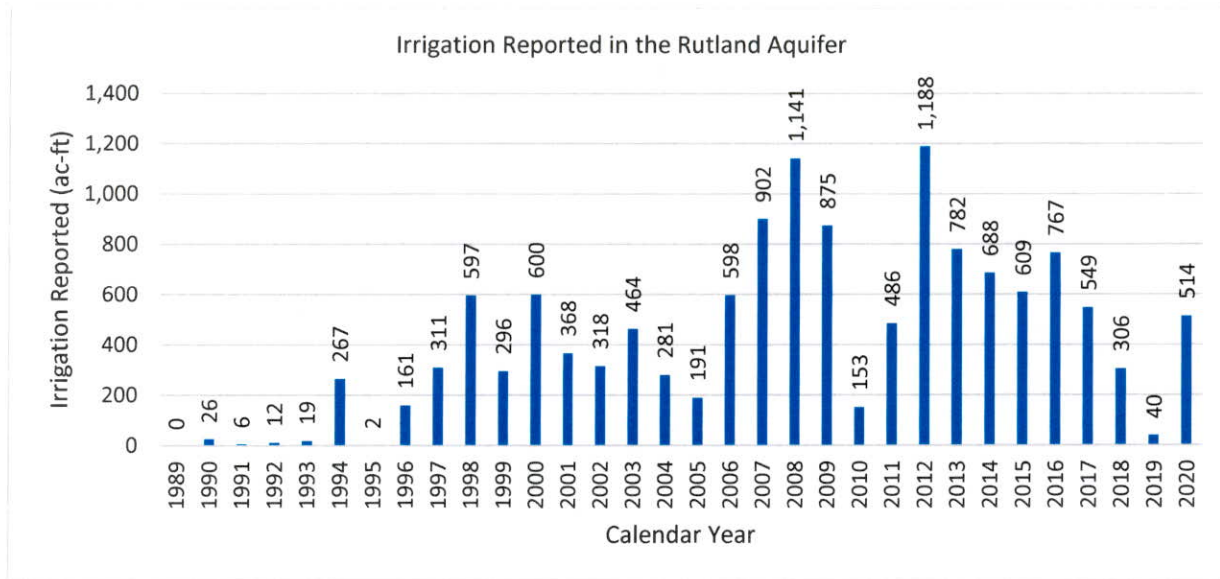


Figure 1: Irrigation reported in the Rutland aquifer [4]

Summary of Hydrologic Budget

Recharge to the Rutland aquifer is likely to exceed 6,000 ac-ft/yr [1]. The estimated withdrawal from non-irrigation water rights/permits is 717 ac-ft/yr [3] and the estimated withdrawal for irrigation water rights/permits is 593 ac-ft/yr [4], for a total annual withdrawal of approximately 1,310 ac-ft/yr. This application could withdraw up to 160 ac-ft/yr, if it is approved, although irrigation permits do not tend to withdraw their full appropriation, on average. Therefore, based on the hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Observation Wells

Administrative Rule of South Dakota 74:02:05:07 requires that the Water Management Board rely upon the record of observation well data in addition to other information to determine that recharge to the aquifer exceeds withdrawals. The Water Rights Program maintains four wells completed into the Rutland aquifer [5]. The nearest observation well completed into the Rutland aquifer is BG-2005A, located 3.5 miles west of this application [5]. The next-nearest observation well is BG-78F, located 3.6 miles east of this application [5]. Figure 2 shows the water level elevations for all four observation wells [5]. In general, water levels rise during periods of higher-than-average precipitation and decline during periods of lower-than-average precipitation. There are also seasonal declines due to withdrawals during the summer, but water levels in the aquifer return to normal after the spring recharge period [6]. Observation Well BG-78E indicates a slightly decreasing slope following new development in the aquifer in the late 1990s [3], but springtime water levels continue to fluctuate proportionally with annual precipitation [5] [6]. The fact that water level fluctuations are dominated by the effects of annual precipitation and other climate factors indicates that water is naturally discharging from the aquifer. Therefore, based on the record of observation well analysis, there is reasonable probability unappropriated water is available for this application.

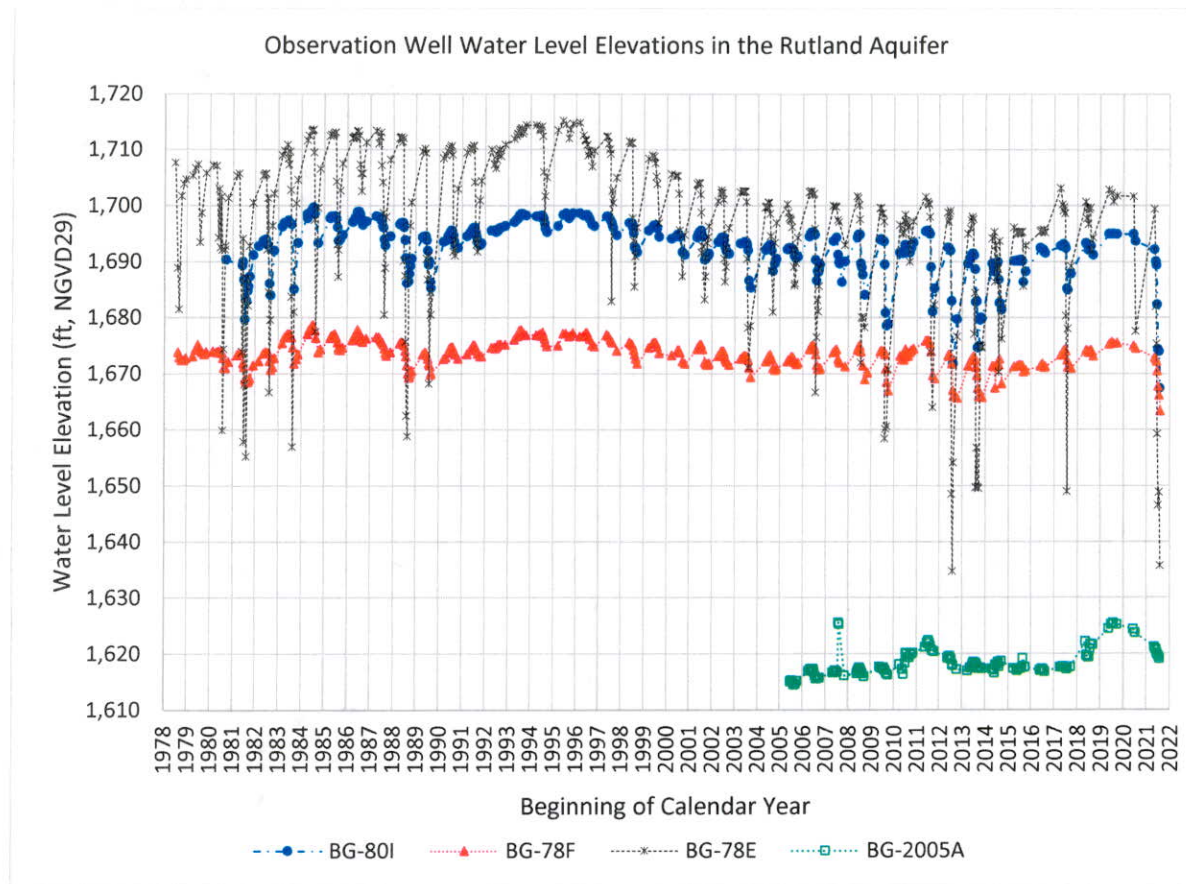


Figure 2: Observation well water elevations for Water Rights Observation Wells completed into the Rutland aquifer

Potential for Unlawful Impairment of Existing Water Rights

The nearest water right/permit completed into the Rutland aquifer to this application is Water Right No. 2676-3, located approximately 3 miles northwest of the proposed well for this application [3]. The nearest domestic well on file with the Water Rights Program that is likely to be completed into the Rutland aquifer is located in the quarter section to the east of the proposed well for this application [7]. That domestic well completion report was completed on November 17, 2003 in the SE $\frac{1}{4}$ Section 32 T110N-R48W [7]. The location of the neighboring well within that quarter section is not available to the Water Rights Program, but based on the location of the applicant's proposed well, it could be as near as 700 feet from this application. The driller reported the producing formation to be "grey medium sand" followed by an illegible word from 115 to 125 feet below grade. The static water level at the time of completion was 21 feet below grade. The Water Rights Program has historically interpreted an unlawful impairment of existing water rights to occur if a junior water right/permit causes a nearby adequate well with a senior water right/permit to become unable to withdraw at the rate it is entitled to or, if a domestic well is impacted, a water right/permit causes an adequate domestic well to be unable to withdraw at the rate needed to supply reasonable domestic use of water. Administrative Rule of South Dakota (ARSD) 74:02:04:20(6) defines an adequate well as:

...a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet

In order to place the waters of the state to maximum beneficial use, the Water Management Board concluded in their consideration of Water Permit Application No. 2313-2 for Coca-Cola Bottling Company that hydraulic head in the aquifer would not be protected as a means of water delivery [8]. Some drawdown in the aquifer is likely to occur, which may cause nearby wells to need to lower their pumps to access water in the aquifer. Lowering pumps is not considered an unlawful impairment of an adequate well. Precise drawdown behavior in an aquifer cannot be known without an aquifer performance test. In the case of the proposed well for this application, the aquifer is thicker where the applicant proposes to complete the well than it is at the domestic well in the quarter section east of this application. Table 1 shows estimated drawdown values from the applicant's proposed well using a numerical approximation of the Theis equation [9] [10] and a range of possible aquifer properties based on the formation described by the driller [11], assuming the neighboring domestic well is 700 feet away. If the formation is made of fine sand, then the applicant could cause enough drawdown to impair a nearby well after less than one day of pumping, although if the aquifer was drawn down that low in the pumping well, it would not physically be able to get that low in nearby wells (i.e. the applicant would impair his own well first). If the formation is made of fine gravel then the applicant would draw down the hydraulic head at the nearby well 17 feet after 14 days of pumping at the proposed maximum pump rate. Based on the thin nature of the aquifer and materials available, the applicant is likely to need multiple wells completed into the Rutland aquifer in order to achieve his requested pump rate. There is no record of well interference in adequate wells completed into the Rutland aquifer on file with the Water Rights Program [12]. Given the lack of record of well interference in the aquifer, the presence of 94 feet of hydraulic head above the aquifer in the applicant's test well, and the likelihood that the applicant would cause his own well to be dewatered before he could interfere with the neighboring well, there is reasonable probability this application can be developed without unlawful impairment of existing water rights. However, there should be a qualification on the applicant's permit that he must control his withdrawals so that nearby adequate domestic wells are able to get needed water.

Table 1: Estimated drawdown values at nearby well based on best- and worst-case aquifer properties plausible with provided formation descriptions [9] [10] [11]

Aquifer Material	Transmissivity (ft ² /day)	Hydraulic Conductivity (ft/day)	Aquifer Thickness (ft)	Storage Coeff.	Time (day)	Pump rate (cfs)	Pump rate (ft ³ /day)	Distance (ft)	Est. Drawdown (ft)
Fine sand	140	10	14	0.0001	0.74	1.14	98496	700	94
Fine gravel	2380	170	14	0.001	14	1.14	98496	700	17

Conclusions

1. Water Permit Application No. 8611-3 seeks to appropriate 1.14 cfs from one new well to be completed into the Rutland aquifer located in the E ½ SW ¼ Section 32 for irrigation of 80 acres located in the E ½ SW ¼ Section 32; all in T110N-R48W, 5th Principal Meridian.

Report on Water Permit App. No. 8611-3

2. Based on the hydrologic budget and record of observation wells, 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 or adequate domestic wells.
4. If this application is approved, a qualification requiring the applicant to control their water withdrawals, so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights, should be included.



Kimberly C. Drennon, E.I. – Natural Resources Engineer II
DANR Water Rights Program

References

- [1] L. J. Hamilton, "Water Resources of Brookings and Kingsbury Counties, South Dakota." United States Geological Survey, Huron, South Dakota, 1989. Water-Resources Investigations Report 88-4185.
- [2] J. Kaiser, Interviewee, *Well Driller*. [Interview]. 5 May 2022.
- [3] SD DANR Water Rights Program, "Water right permit file database," SD DANR Water Rights Program, Pierre, South Dakota, 2022.
- [4] SD DANR Water Rights Program, "Irrigation questionnaire summaries," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, SD, 2021.
- [5] SD DANR Water Rights Program, "Observation wells," Pierre, South Dakota, 2022.
- [6] NOAA, "Climate at a Glance - Divisional Time Series for South Dakota Region 7." NOAA, 1 May 2022. [Online]. Available: <https://www.ncdc.noaa.gov/cag/divisional/time-series>. [Accessed 16 May 2022].
- [7] SD DANR Water Rights Program, "Well completion reports," Pierre, South Dakota, 2022.
- [8] SD Water Management Board, "Findings of Facts, Conclusions of Law and Final Decision in the matter of Water Permit Application No. 2313-2," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 1994.
- [9] C. V. Theis, "The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground water storage," *Ground Water Notes No. 5*, pp. 1-9, August 1952.
- [10] Y. Gao, P. Hsieh and S. Alexander, "Using excel for aquifer test," [Online]. Available: https://d32ogoqmya1dw8.cloudfront.net/files/NAGTWorkshops/hydrogeo/activities/Excel__Aquifer_Test.pdf. [Accessed 3 August 2021].
- [11] G. M. Duffield, "Representative Values of Hydraulic Properties," 23 November 2019. [Online]. Available: http://www.aqtesolv.com/aquifer-tests/aquifer_properties.htm. [Accessed 12 May 2022].
- [12] SD DANR Water Rights Program, "County files," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2022.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, May 20, 2022 8:18 AM
To: jensenproduce@gmail.com
Subject: Water Permit Application No. 8611-3
Attachments: 3478.pdf

Mr. Jensen,

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>



RECEIVED

Affidavit of Publication JUN 06 2022

State of South Dakota

Exhibit "A"

ss

OFFICE OF
WATER

County of Brookings

Katherine Foiles of said county, first duly sworn, on oath, says: That she is the office clerk of THE BROOKINGS REGISTER, a daily newspaper, printed and published in the City of Brookings, in said County of Brookings, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies of each issue daily; that said newspaper has been published within the said County of Brookings and State of South Dakota, for more than one year prior to the first publication of Exhibit "A," hereto attached and herein mentioned, and was and is printed that the

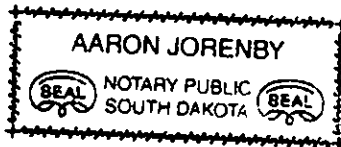
LEG#18060 Notice of Application to Appropriate Water

same was published, is hereto attached marked Exhibit said newspaper for _____ 1 times, to-wit:

May 27, 2022

said Exhibit "A" inures to the sole benefit for the publishers of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever, that the fees charged for the publication thereof are:

Forty-Six Dollars and Forty-Six Cents \$46.46



Katherine Foiles

1 day of

June

2022

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires February 22, 2026

Ag

Legal 18060 1X
5/27

**NOTICE OF
APPLICATION
NO. 8611-3 TO
APPROPRIATE WATER**

Notice is given that Chase L. Jensen, 21324 479th Ave, Aurora SD 57002 has filed an application for a water permit to appropriate 1.14 cubic feet of water per second from one well to be completed into the Rutland Aquifer (approximately 122 feet deep) located in the E 1/2 SW 1/4 Sec-

tion 32 for irrigation of 80 acres located in the E 1/2 SW 1/4 Section 32; all in T110N-R48W. This site is located approximately 3 miles east of Aurora SD. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8611-3 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 June 6, 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. 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 June 6, 2022. If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engi-

neer shall act on the application pursuant to the recommendation with the hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then the 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 1X at the total approximate cost of \$46.46.

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Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, May 20, 2022 8:15 AM
To: registerclassifieds@brookingsregister.com
Subject: 8611-3, Chase L Jensen
Attachments: 8611-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on May 27, 2022.

Chase L Jensen, 21324 479th Ave, Aurora SD 57002 (605 690-4970) 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.**

May 20, 2022

Chase L. Jensen
21324 479th Ave
Aurora SD 57002

Dear Mr. Jensen:

Water Permit Application No. 8611-3 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 Register printed at Brookings SD (Ph # 605 692-6271). 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
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. 8611-3 to Appropriate Water

Notice is given that Chase L. Jensen, 21324 479th Ave, Aurora SD 57002 has filed an application for a water permit to appropriate 1.14 cubic feet of water per second from one well to be completed into the Rutland Aquifer (approximately 122 feet deep) located in the E 1/2 SW 1/4 Section 32 for irrigation of 80 acres located in the E 1/2 SW 1/4 Section 32; all in T110N-R48W. This site is located approximately 3 miles east of Aurora SD.

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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 June 6, 2022.

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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 June 6, 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_



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 28 2022

Chase L Jensen
21324 479th Ave
Aurora SD 57002

Dear Mr. Jensen:

Enclosed is Water Permit No. 8611-3 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