

WATER PERMIT NO. 7445-3

Name of Applicant: **Tracy Johnson**

Address: **19707 465th Ave, Bruce SD 57220** Phone: **605 873-2521**

Amount of Water Claimed: **1.78 cfs** Total Acres: **167 acres**

Source of Water Supply: **groundwater (two wells)**

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

Type of Waste Disposal System:

Location: **7 miles north of Bruce**

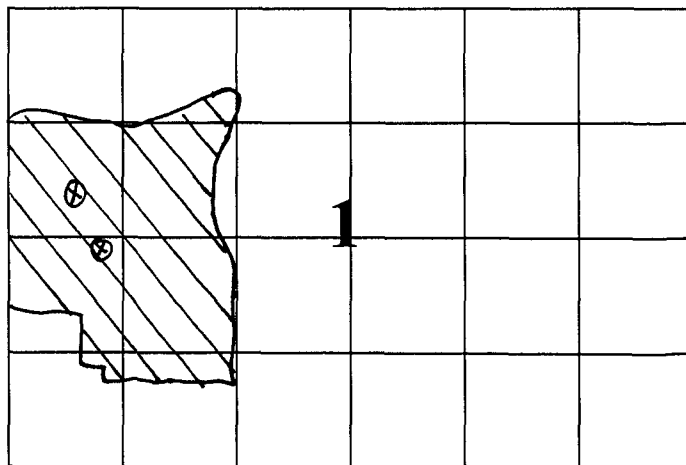
PRIORITY Date Received: **9-28-12** Application/License Fee: **\$ 1050**

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

Remarks:

Diversion Point: **SW 1/4 NW 1/4 and NW 1/4 SW 1/4 Sec 1-T112N-R51W**

Land to be Irrigated: **W 1/2 Sec 1- T112N-R51W**



Depth of Well: **27 and 37 feet deep**

Well Driller: **Steffl Drilling & Pump Inc**

Remarks:

Type of Map: **aerial**

Prepared by: **Jeremy Todoroff, Brookings Co FSA**

Reviewed and the Number Assigned on: **10-1-12**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)
	No. <u>7445-3</u> Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>
	Newspaper <u>Brookings Register P.O. Box 177</u> <u>57006 605-692-6271</u>

RECEIVED
SEP 28 2012

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. 2152-3

(Use predates Mar 2, 1955)

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

old permit for
N well
Cancelled

1. Name of Applicant Tracy Johnson Phone 605 873-2521
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 19707 465th Ave. Bruce State SD 57220
(Street, RR, or Box and City) (Zip Code)

2. Amount of water claimed 1.78 CFS or 800 **GPM ***AF Total Acreage 167
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable

3. Source of water supply 2 well

4. Location of point of diversion (example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W) County Brookings

North well old permit 2152-3 (SW 1/4 NW 1/4)
South well 1250' east of the SW 1/4 12' south in the SW 1/4 (NW 1/4 SW 1/4)

5. County or counties where water will be used Brookings Sec 1-T112N-R51W

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

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

Land Description	Acres	Land Description	Acres
NW 1/4 of the NW 1/4 Sec 1 112N 51W	5	SW 1/4 of the SW 1/4 Sec 1 112N 51W	5
SW 1/4 of the NW 1/4 Sec 1 112N 51W	40	SE 1/4 of the SW 1/4 Sec 1 112N 51W	10
NE 1/4 of the NW 1/4 Sec 1 112N 51W	7	NE 1/4 of the SW 1/4 Sec 1 112N 51W	40
SE 1/4 of the NW 1/4 Sec 1 112N 51W	30	NW 1/4 of the SW 1/4 Sec 1 112N 51W	30

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

STATE OF SOUTH DAKOTA) SS
County of Brookings

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Tracy Johnson, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Tracy Johnson

Subscribed and sworn to before me this 25th day of September 20 12

My Commission Expires,
October 29, 2013

Janean Woodruff
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7445-3

Date of first receipt of application September 28, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7445-3 to Tracy Johnson, 19707 465th Ave, Bruce SD 57220 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. 7445-3 appropriates 1.78 cubic feet of water per second from two wells completed into the Big Sioux:Brookings Aquifer (27 and 37 feet deep) located in the SW 1/4 NW 1/4 and the NW 1/4 SW 1/4 Section 1 for irrigation of 167 acres located in the W 1/2 Section 1; all in T112N-R51W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is September 28, 2012.
4. The date of approval of Permit No. 7445-3 is December 17, 2012.
5. One-fifth of the construction is to be completed on or before June 17, 2015.
6. All construction is to be completed on or before December 17, 2017.
7. Water is to be put to beneficial use on or before December 17, 2021.
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 wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7445-3 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: Garland Erbele
Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 25 2013
date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 26 Depth 27 ft
- b) Casing Type pvc Diameter ~~20~~ 12" Thickness 3/8
- c) Screen Type 5 Screen Diameter 12" Thickness 1/8
- d) Gravel Pack pea Rock Length of Gravel Pack 8"
- e) Depth to Top of Water Bearing Material 5 ft
- f) Depth to Water (ground surface to water level) 7 ft
- g) Distance to nearest existing domestic well:
- On applicants property 1000 ft On 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

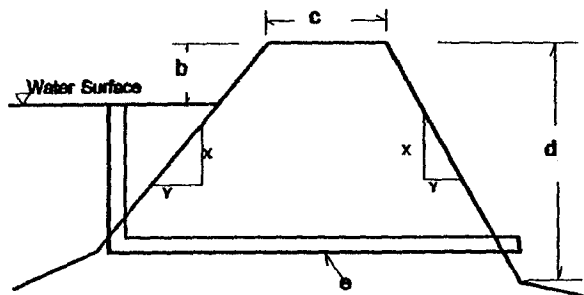
3. Dugout Information

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

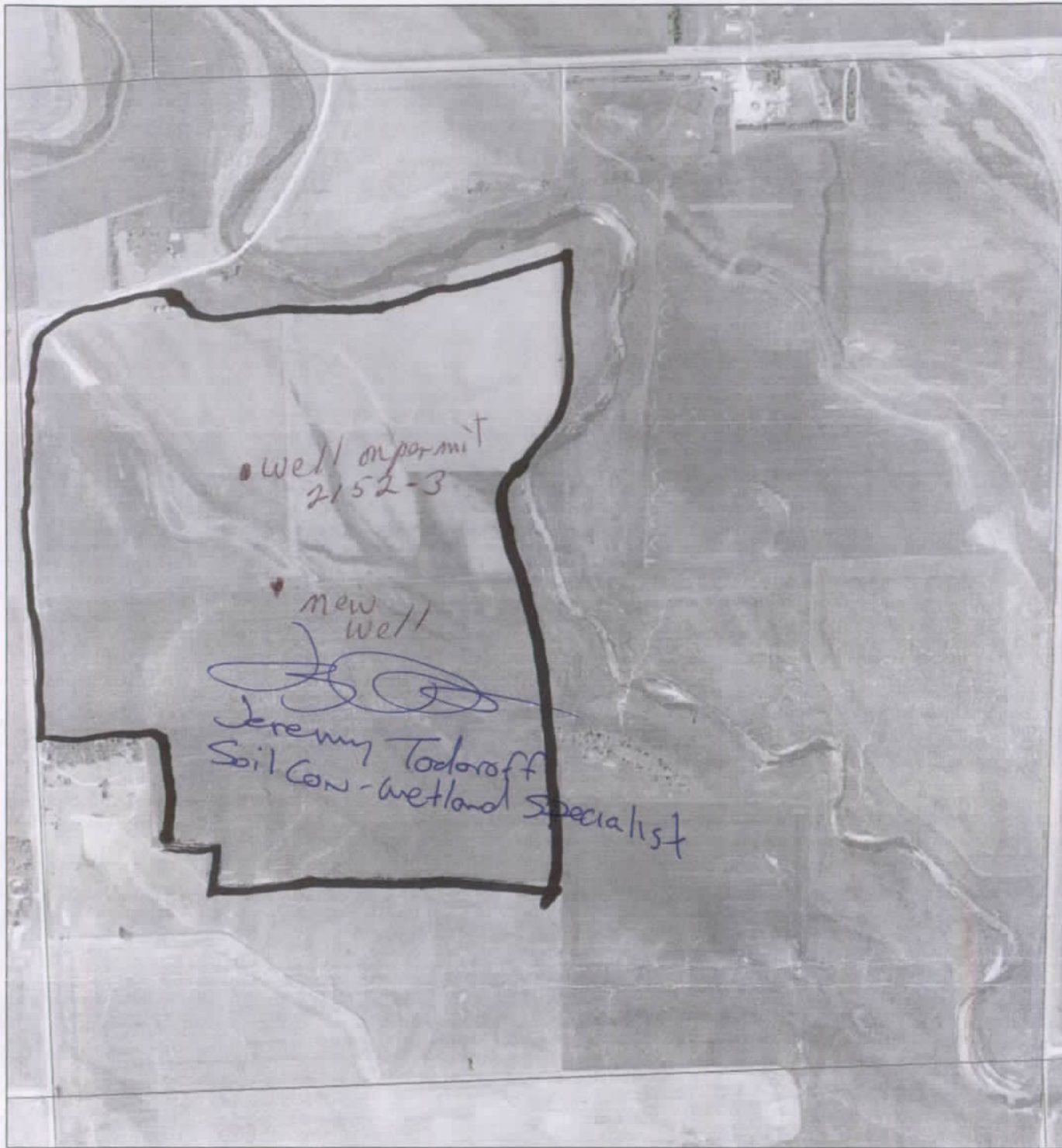
4. Water Storage Dams

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 _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



USDA - Farm Service Agency
Brookings County, SD

RECEIVED

SEP 28 2012

WATER RIGHTS
 PROGRAM

1-112N-51W

1:8,765

August 25, 2008

Tracy
 690-0840



USDA FSA maps are for FSA Program administration only. There is no guarantee or representation to the user as to the accuracy, currency, suitability or reliability. FSA MAPS DO NOT REPRESENT A LEGAL SURVEY. The user accepts the data 'as is' and assumes all risks associated with its use. Wetland points reflect records available with NRCS and may or may not constitute a full inventory of the property. The USDA Farm Service Agency assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data. Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

11-02

Date: 9-21-2012

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 10/11, 20 12

RECEIVED OF Tracy Johnson 19707 465th Ave Bruce SD 57220

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	850	00
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. _____	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1050 00

No. **05597**

By *Shirley Erdale*
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7445-3, Tracy Johnson**

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. 7445-3, Tracy Johnson, 19707 465th Avenue, Bruce SD 57220.

The Chief Engineer is recommending APPROVAL of Application No. 7445-3 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 rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7445-3 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.

Garland Erbele, Chief Engineer
November 27, 2012

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7445-3
TRACY JOHNSON
NOVEMBER 16, 2012

Water Permit Application No. 7445-3 proposes to appropriate up to 334 acre-feet annually (ac-ft/yr) at a maximum diversion rate of 1.78 cubic feet of water per second from two wells completed into the Brookings management unit of the Big Sioux aquifer. The wells are expected to be 27 and 37 feet deep and will be located in the SW¼ NW¼ of Section 1, T112N-R51W and in the NW¼ SW¼ of Section 1, T112N-R51W, respectively. The permit application proposes to irrigate 167 acres located in the W ½ section 1, T112N, R51W in Brookings County.

AQUIFER: Brookings management unit of the Big Sioux aquifer (BS:B)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Big Sioux aquifer is an alluvium mantled glacial outwash deposit that consists of “well-sorted, very permeable glacial outwash sand and gravel, mostly medium to very coarse sand and very fine to medium gravel” (Hamilton, 1989). The aquifer is located primarily in the flood plain of the Big Sioux River and its tributaries. The Brookings management unit of the Big Sioux aquifer extends from near the center of Hamlin County where it is differentiated from the North management unit, south to northern Moody County where the management unit is distinguished from the Moody management unit. The Brookings management unit underlies parts of Hamlin, Deuel, Brookings, Kingsbury and Moody Counties. The Big Sioux: Brookings underlies approximately 163,000 acres of Brookings and Hamlin Counties alone and contains an estimated 577,730 acre-feet of recoverable water in storage in the two counties (Hedges and others, 1982). The thickness of the aquifer averages 30 feet in Brookings County (Hamilton, 1989). The average hydraulic conductivity of the Big Sioux aquifer, based on four aquifer tests, ranges from 500-1,000 feet per day (ft/d) (Koch, 1980). The well completion report submitted with this application identifies sand from 5-27 feet below grade with a static water level of 8.5 feet below grade. The report also indicated the well produced 250 gallons per minute with 10.7 feet of drawdown. Based on the specific capacity for the well (i.e. 23.36 gallons per minute per foot of drawdown), the transmissivity of the aquifer at this well site is estimated to be 35,040 gallons per day per foot (gal/d/ft) (“Transmissivity from Specific Capacity”). Given a transmissivity of 35,040 gal/d/ft and a saturated thickness of 18.5 feet, the hydraulic conductivity of the aquifer in the immediate area of the well is estimated to be approximately 1,894 ft/d.

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only 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 rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the Big Sioux: Brookings aquifer.

WATER AVAILABILITY:

This application proposes to appropriate 334 acre-feet annually from the Big Sioux: Brookings aquifer. The actual water use if this application is approved will likely be less than the appropriation. The probability of unappropriated water 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."

Recharge versus Discharge:**Recharge:**

Recharge to the Big Sioux: Brookings occurs through infiltration and percolation of precipitation falling on the surface of the outwash. Since the aquifer is hydraulically connected to some area lakes and the Big Sioux River, recharge is also provided to the aquifer during times of high runoff when surface water levels are higher than groundwater levels. Recharge rates calculated for the various management units of the Big Sioux aquifer range from "2.7 to 6.9 in/yr if flow-net analysis is ignored" (Hedges and others, 1985). Given the area of management unit in Brookings and Hamlin Counties, average annual recharge to the aquifer in these two counties alone is estimated to be 36,675-93,725 acre-feet per year.

Discharge:

Discharge from the Big Sioux: Brookings aquifer is by evapotranspiration, discharge to streams and lakes, and withdrawal from wells. There are a number of completion reports on file with the DENR-Water Rights Program for domestic use wells completed into the Big Sioux: Brookings aquifer (Water Rights, 2012b) and there are currently 225 Water Rights/Permits appropriating water from the Big Sioux: Brookings aquifer. In addition, there are nine future use permits reserving water from the aquifer. Most of the appropriations from the Brookings management unit are from Brookings and Hamlin Counties with 207 Water Rights/Permits appropriating water from the counties (Water Rights, 2012c). Appropriations are for irrigation use (174 appropriations), municipal use (14 appropriations), commercial use (seven appropriations), industrial use (one appropriation), geothermal (one appropriation), suburban housing development use (two appropriations), and rural water system use (eight appropriations) (Water Rights, 2012c). Five of the future use permits reserving water from the aquifer are from the two counties.

The amount of water that can be expected to be withdrawn through non-irrigation appropriative uses from the Big Sioux: Brookings aquifer can be estimated by assuming: 1) water rights/permits limited by an annual volume will pump the entire volume appropriated, 2) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time, and 3) future use permits can be fully developed. Under current appropriations, given the assumptions listed above, the well withdrawals are estimated to be less than 17,500 ac-ft/yr. The reported water use from the Big Sioux: Brookings aquifer for irrigation is shown in Table 1.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
2011	174	63494.4	8527.61
2010	172	62966.4	2713.39
2009	174	65098.4	9172.9
2008	166	62761.8	12505.85
2007	164	62374.8	14730.13
2006	161	61075.8	14325.04
2005	159	61435.8	11513.48
2004	156	60695.8	11809.91
2003	149	58970.8	11380.47
2002	149	59186.8	12410.94
2001	149	59312.8	8384.81
2000	153	60799.8	8933.72
1999	155	62181.3	7841.04
1998	157	63306.2	8109.71
1997	153	62281.7	5650
1996	154	62575.2	7220.95
1995	161	62961.2	3862.25
1994	160	64395.2	2854.62
1993	162	64963.7	1042.9
1992	162	64603.7	2331.6
1991	165	65534.97	7771.74
1990	175	71616.95	5862.92
1989	166	69391.27	13930.7
1988	167	74615.27	18521.4
1987	171	76624.07	10015
1986	179	80788.57	2854.7
1985	181	81385.57	4951.4
1984	188	84188.07	8177.6
1983	161	74854.57	8227.46
1982	155	77754.57	4551.86
1981	198	91361	9040
1980	187	87093	9837
1979	184	85701	6144
MIN	149	58970.8	1042.9
MAX	198	91361	18521.4
AVE	166	68677.29	8339.61

Table 1. Irrigation from the Big Sioux: Brookings (Water Rights, 1980-2012)

Comparison of the estimated average annual withdrawal from the entire Big Sioux: Brookings aquifer with the estimated average annual recharge for the aquifer in Brookings and Hamlin Counties alone indicated that in general the average annual withdrawals to the aquifer do not exceed the average annual recharge to the aquifer and unappropriated water is available from the Big Sioux: Brookings aquifer. Specifically, unappropriated water is available for the 334 acre-foot appropriation proposed by this application.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity

of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge to the aquifer”.

The DENR-Water Rights Program monitors 80 observation wells completed into the Brookings management unit of the Big Sioux aquifer. Five of these observation wells are located within approximately two miles of the well sites proposed by this application. Hydrographs for these observation wells are shown in figures 1-5.

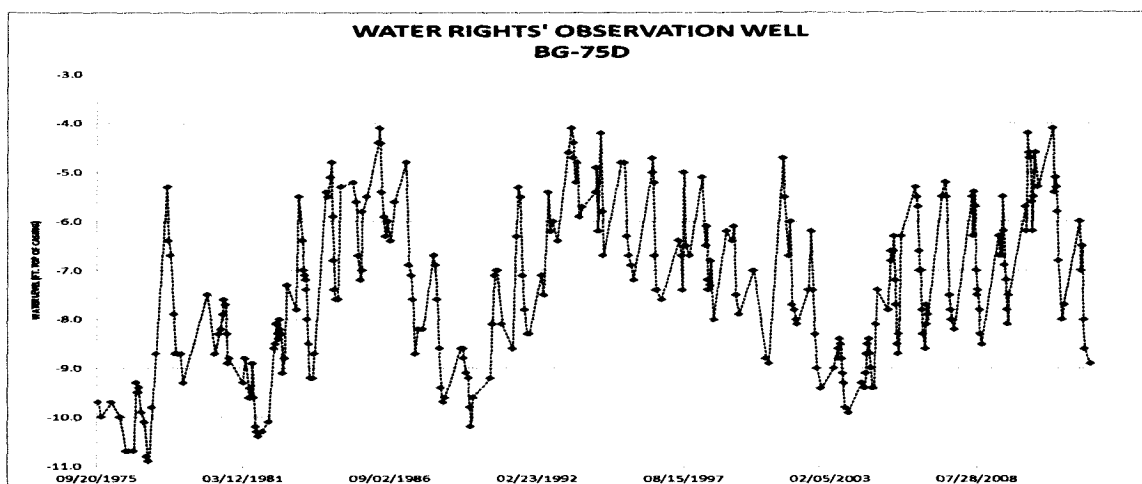


Figure 1. DENR-Water Rights' observation well completed into the Big Sioux: Brookings aquifer approximately one mile northeast of the well sites proposed by Application No. 7445-3

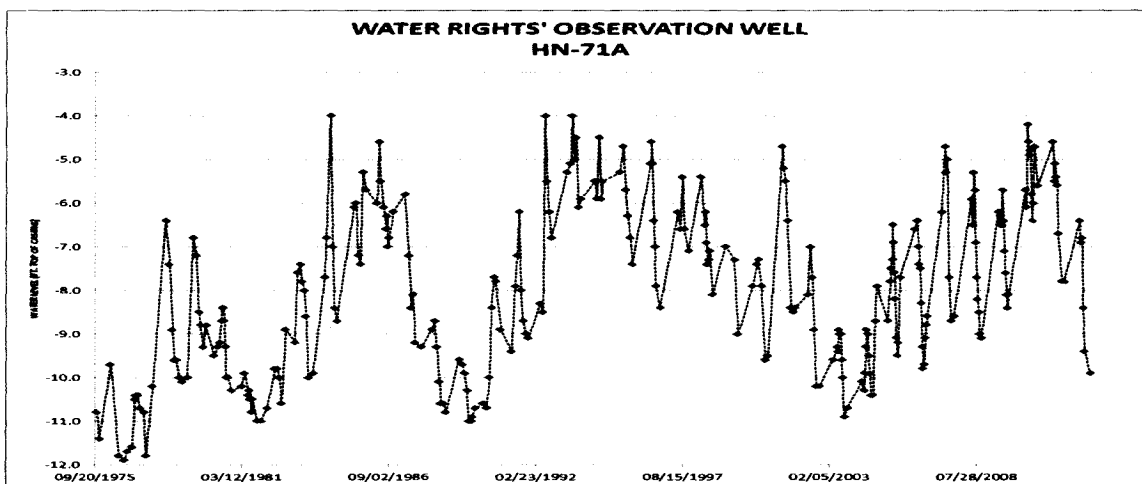


Figure 2. DENR-Water Rights' observation well completed into the Big Sioux: Brookings aquifer approximately one and one-half miles north of the well sites proposed by Application No. 7445-3

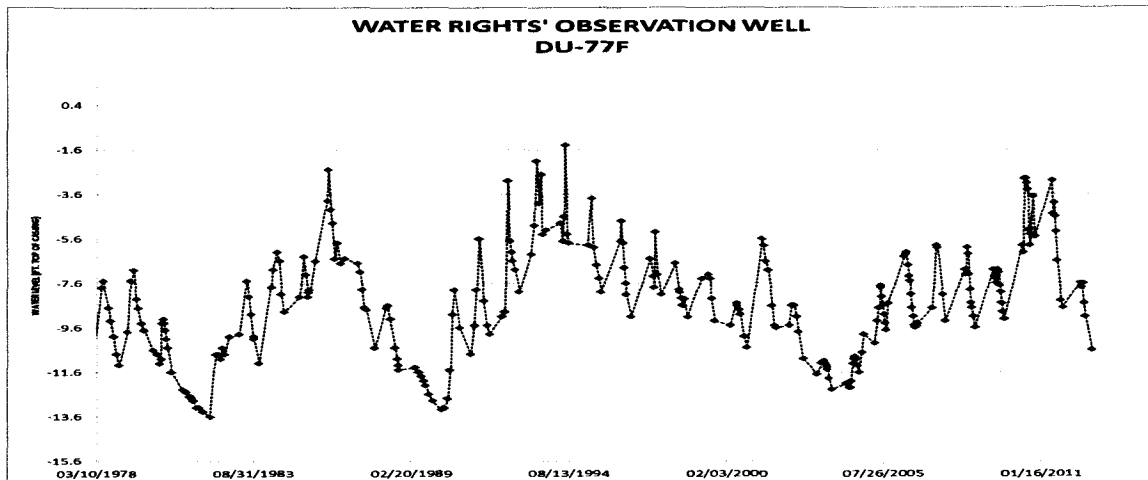


Figure 3. DENR-Water Rights' observation well completed into the Big Sioux: Brookings aquifer approximately two miles northeast of the well sites proposed by Application No. 7445-3

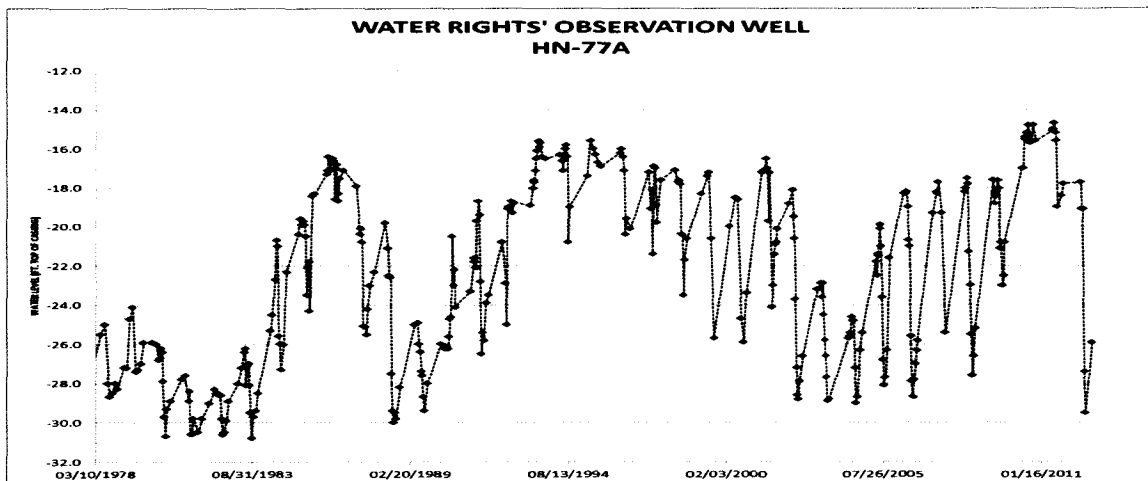


Figure 4. DENR-Water Rights' observation well completed into the Big Sioux: Brookings aquifer approximately two and one-quarter miles northwest of the well sites proposed by Application No. 7445-3

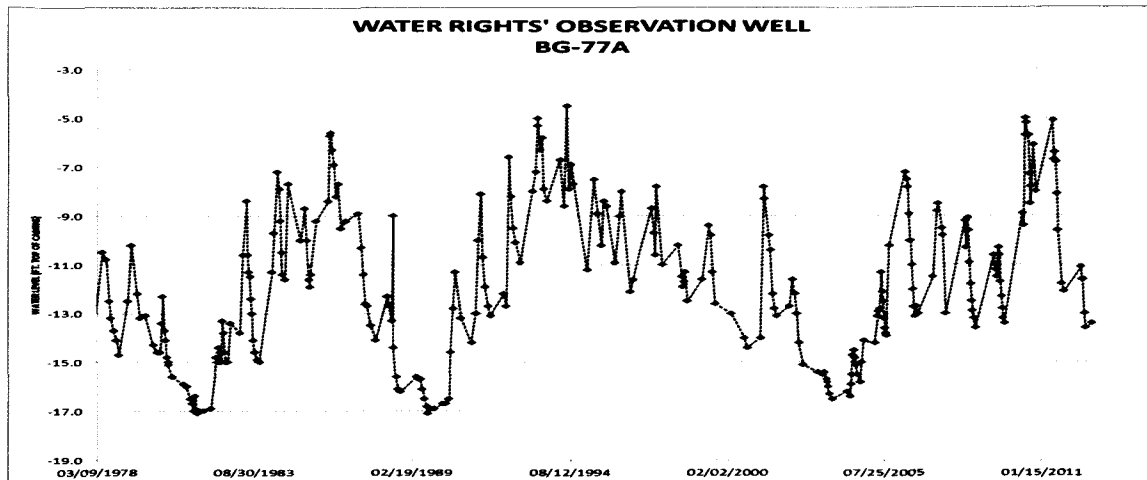


Figure 5. DENR-Water Rights' observation well completed into the Big Sioux: Brookings aquifer approximately two and one-quarter miles east-southeast of the well sites proposed by Application No. 7445-3

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. The water level data verifies that over the period of record, withdrawals have not exceeded recharge. Most importantly, the observation well data shows that at the current level of development, climatic conditions greatly mask the temporal effects of well withdrawals. Therefore, recharge to and natural discharge from the Big Sioux: Brookings aquifer significantly exceeds pumping. Recognizing that natural discharge from the aquifer can be captured for pumping. The hydrographs document that there is unappropriated water available from the aquifer to support this appropriation.

EXISTING WATER RIGHTS:

The well sites proposed by this application are located in a portion of the Big Sioux: Brookings aquifer that extends west of the Big Sioux River for approximately one-half mile to the edge of the aquifer. The river is a recharge boundary that would limit drawdown beyond it to the east. The nearest water rights/permits on the west side of the river have diversion points over one mile from the proposed well sites. At the distance between wells and the relatively high transmissivity expected, drawdown is not expected to be significant nor likely to cause adverse impacts to existing water rights.

CONCLUSIONS:

1. This application proposes to appropriate up to 334 acre-feet annually from the Big Sioux: Brookings aquifer.
2. There is a reasonable probability that unappropriated water is available from the Big Sioux: Brookings aquifer to satisfy this proposed appropriation.
3. The Big Sioux: Brookings aquifer is under unconfined (water table) conditions in this area and drawdown from pumping is not expected to be significant very far from a production well.
4. Withdrawals from the Big Sioux: Brookings wells proposed by this application will not adversely impair existing water rights.



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hamilton, L.J. 1989, Water Resources of Brookings and Kingsbury Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 88-4185, 82 p.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., 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
- Hedges, L.S., Allen, J., Holly D.E., 1985, 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 Contract DACW 45-80-C-0185
- Koch, N.C., 1980, Appraisal of the Water Resources of the Big Sioux aquifer, Brookings, Deuel, and Hamlin Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 80-100, 46 p.
- "Transmissivity from Specific Capacity." Aquifer Test Forum sponsored by HydroSOLVE, Inc. 15 Nov. 2012< <http://www.aqtesolv.com/forum/transcap.asp>
- Water Rights, 1980-2011, Irrigation Questioner Summaries 1980-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2008-2012, Non-irrigation Water User Reporting 1997-2012, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2012a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2012b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2012c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

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DEC 12 2012

Affidavit of Publication WATER RIGHTS
PROGRAM

10/

State of South Dakota

Exhibit "A"

ss

County of Brookings

Chaylee Duis 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

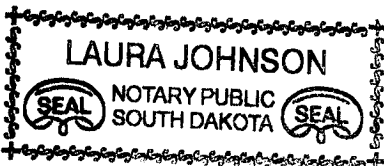
Leg#826 Notice of App No. 7445-3

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

December 5, 2012

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:

twenty-three dollars and sixteen cents \$23.16



Laura Johnson
6th day of

December

2012

Chaylee Duis

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires August 3, 2017.

Legal 826, 1x, 12/5
NOTICE OF APPLICATION NO. 7445-3 to
Appropriate Water
Notice is given that
Tracy Johnson, 19707
465th Ave, Bruce SD
57220 has filed an
application for a water
permit to appropriate
1.78 cubic feet of water
per second from two
wells completed into the
Big Sioux:Brookings
Aquifer (27 and 37 feet
deep) located in the SW
1/4 NW 1/4 and the NW
1/4 SW 1/4 Section 1 for
irrigation of 167 acres
located in the W 1/2
Section 1; all in T112N-
R51W.

Pursuant to SDCL
46-2A-2, the Chief
Engineer recommends
APPROVAL of
Application No. 7445-3
because 1) unappropri-
ated water is available.
2) existing rights will not
be unlawfully impaired,
3) it is a beneficial use
of water, and 4) it is in
the public interest. In
accordance with SDCL
46-2A-23, the Chief
Engineer will act on this
application, as recom-
mended, unless a peti-
tion is filed opposing the
application or the appli-
cant files a petition
contesting the Chief
Engineer's recommen-
dation. If a petition
opposing the applica-
tion 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.
Any person interested in
opposing or supporting
this application or rec-
ommendation must file
a written petition with
BOTH the applicant and
Chief Engineer. The
applicant must file a
petition if contesting the
Chief Engineer's recommen-
dation. The Chief
Engineer's address is
"Water Rights Program,
Foss Building, 523 E
Capitol, Pierre SD
57501" (605 773-
3352) and the appli-
cant's mailing address
is given above. A peti-
tion filed by either an
interested person or the
applicant must be filed
by December 17, 2012.
The petition may be
informal, but must
include a statement
describing the petiti-
on's interest in the appli-
cation, the petitioner's
reasons for opposing or
supporting the applica-
tion, and the signature
and mailing address of
the petitioner or the
petitioner's legal coun-
sel, if legal counsel is
obtained. Contact Eric
Gronlund at the above
Water Rights Program
address to request
copies of information
pertaining to this appli-
cation. Steven M.
Pirner, Secretary,
Department of
Environment and
Natural Resources.
Published once at the
total approximate cost
of \$23.16.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

November 28, 2012

Brookings Register
PO Box 177
Brookings SD 57006

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7445-3 to Appropriate Water. Please publish the notice once on December 5, 2012. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Tracy Johnson, 19707 465th Ave., Bruce SD 57220 (Ph # 605-873-2521).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

November 28, 2012

Tracy Johnson
19707 465th Ave
Bruce SD 57220

Dear Mr. Johnson:

Water Permit Application No. 7445-3 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 Brookings Register printed at Brookings SD (Ph # 605-692-6271). You will need to contact the newspaper(s) 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(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) 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,

Eric Gronlund
Natural Resources Engineer
(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.

Instruction to Newspaper - Publish the Notice on December 5, 2012. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7445-3 to Appropriate Water

Notice is given that Tracy Johnson, 19707 465th Ave, Bruce SD 57220 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from two wells completed into the Big Sioux:Brookings Aquifer (27 and 37 feet deep) located in the SW 1/4 NW 1/4 and the NW 1/4 SW 1/4 Section 1 for irrigation of 167 acres located in the W 1/2 Section 1; all in T112N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7445-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 17, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

JAN 25 2013

Tracy Johnson
19707 465th Ave
Bruce SD 57220

Dear Mr. Johnson:

Enclosed is Water Permit No. 7445-3 authorizing construction of your 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,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7445-3

I have this day, 28 October 2014, made a thorough examination of the water use system constructed by Tracy Johnson, 19707 465th Ave., Bruce, SD 57220 holder of Permit No. 7445-3, bearing the priority of 28 September 2012 authorizing the diversion of 1.78 cu. ft. per second of the waters of the Big Sioux: Brookings aquifer for irrigation purposes, in Brookings County.

Inspection contact & relationship to permit holder, if applicable: **Tracy Johnson, owner**

A. Works used to divert the water:

Well₁ (north well) Information:

- 1) Well Drilling Firm: Unknown
- 2) No. of Wells 1
- 3) Depth(s) 34 feet
- 4) Well log is available no

Casing:

- 1) Diameter 14 inches
- 2) Length ? feet
- 3) Type ?

Screen:

- 1) Type ?
- 2) Length ? feet
- 3) Static water level ? feet

Pump:

- 1) Make FPS (Franklin Electric)
- 2) Model FPS D25-2A
- 3) Size 25 HP
- 4) Capacity 350 GPM

Well Information:

- 1) Well Drilling Firm: Steffl Drlg & Pump Inc
- 2) No. of Wells 1
- 3) Depth(s) 27 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 12 inches
- 2) Length 19 feet
- 3) Type PVC

Screen:

- 1) Type Stainless Steel
- 2) Length 12 feet
- 3) Static water level 8.5 feet (4 April 2012)

Pump:

- 1) Make FPS (Franklin Electric)
- 2) Model FPS D15-2C
- 3) Size 15 HP
- 4) Capacity 275 GPM

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

- 1) Type PIP
- 2) Size 6 inches
- 3) Length 830 feet

- 1) Type Steel 2) Size 8 inches 3) Length 20 feet

Comments: **Buried PIP between wells, steel pipe above ground from south well to pivot**

C. Works used to apply water to beneficial use:

Center pivot located at (Lat/Lon: 44.53612/96.90369):

- 1) Make Valley Valley
- 2) Overall length 1538 with corner system feet
- 3) Number of towers 7 towers plus corner system
- 4) End gun Nelson 100
- 5) Capacity 600 GPM

Chemigation Equipment:

Does not chemigate

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period na
- 3) Exceptions to compliance are: na

E. Condition and Location:

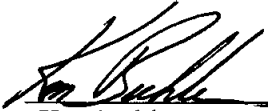
1. The system is in good condition with the point(s) of diversion located as follows:
Well₁: 3485 feet north and 1150 feet east of the SW corner of Sec. 1, T112N-R51W
(Lat/Lon: 44.53839/-96.90409, NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T112N-R51W)
Well₂: 2650 feet north and 1235 feet east of the SW corner of Sec. 1, T112N-R51W
(Lat/Lon: 44.53613/-96.90382, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T112N-R51W)
2. The works are capable of diverting and conveying to the place of use 1.34 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:
NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T112N-R51W: 2.5 acres
NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T112N-R51W: 3.0 acres
SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T112N-R51W: 40.7 acres
SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 1, T112N-R51W: 37.7 acres
NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 1, T112N-R51W: 37.3 acres
NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 1, T112N-R51W: 36.1 acres
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 1, T112N-R51W: 3.0 acres
SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 1, T112N-R51W: 3.3 acres
NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 1, T112N-R51W: 1.4 acres

comprising a total of 165 acres of land and the license should be issued for 1.34 cfs.

3. All structures, wells and lands on map yes

F. Comments or other permit(s) associated with the project:

Well₁ (north well) was associated with cancelled Water Right No. 2152-3. The water right was cancelled due to abandonment and/or forfeiture.



Ken Buhler
DENR, Water Rights Program

Date report completed: 6 December 2014



**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**

Date

1/5/15

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

FROM:

Tracy Johnson
(name)19707 465th Avenue
(address)Bruce, SD 57220
(city, state, zip)605-873-2521
(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. 7445-3 states that the water use system is to be constructed by

17 DEC 2017
(date)

, and water is to be put to beneficial use by

17 DEC 2021
(date)

The water use system was completed on 1 JULY 2013
(date)

Applying the water to beneficial use was completed on 15 JULY 2013
(date)

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

[Signature]
(signature)

4-2000



Licensing of Acreage Outside of Permitted Area

NAME: Tracy Johnson

ADDRESS: 19707 465th Ave., Bruce, SD 57220

DATE: February 5, 2015 **COUNTY:** Brookings **TELEPHONE:** 605.690.0840

AUTHORITY

Pursuant to SDCL 46-5-30.5, acreage developed for irrigation outside of the area described on the permit may be licensed provided the following conditions are met:

NO INCREASE IN PERMITTED ACREAGE OR WATER APPROPRIATED:

The acreage developed for irrigation is 165 acres as compared to 167 acres authorized by the permit. Licensing of the permit will result in a reduction in the amount of water appropriated.

UNPERMITTED ACREAGE:

- **Contiguous to Permitted Acreage**

The acreage authorized for irrigation by Permit No. 7445-3 is located in the NW¼ and the SW¼ of Sec. 1, T112N-R51W. The acreage irrigated that is not authorized by permit is contiguous, located in the NW¼SE¼ Sec. 1, T112N-R51W.

- **Owned by Same Property Owner**

yes

- **Developed Prior to Expiration of Construction Period**

yes

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the 1.4 acre area be included in the water license.

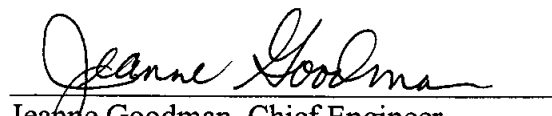


Ken Buhler

DENR-Water Rights Program

The Chief Engineer makes a finding pursuant to SDCL 46-5-30.5 that:

This acreage change does not impair existing water rights and the overall project, as developed, is consistent with the original application. Licensing of the unpermitted acreage may occur without application or publication pursuant to SDCL 46-2A-4.



Jeanne Goodman, Chief Engineer

Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

FEB 17 2015

7445-3

Tracy Johnson
19707 465th Ave
Bruce SD 57220

Dear Mr. Johnson:

Enclosed is Water License No. 7445-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 7445-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7445-3**

(1) Tracy Johnson, 19707 465th Ave., Bruce SD 57220 made Application No. 7445-3, September 28, 2012 for a water permit to divert 1.78 cubic feet of water per second from ground water – two wells (Big Sioux Brookings Aquifer), Brookings County, South Dakota for irrigation purposes. Permit No. 7445-3, with a priority date of September 28, 2012 was approved December 17, 2012 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before December 17, 2017 and for the application to beneficial use of said water on or before December 17, 2021.

The Permit holder completed a *"Notice of Completion of Works and Application of Water to Beneficial Use"* form on January 5, 2015. The *"Notice"* stated the water use system was completed on July 1, 2013 and the water placed to beneficial use on July 15, 2013.

The original permit authorized irrigation of land in the W ½ Section 1, T112N, R51W. The 1.4 acres developed in the NW ¼ SE ¼ Section 1 is outside of the permitted area. The Chief Engineer made a finding pursuant to SDCL 46-5-30.5 the acreage change does not impair existing water rights and the overall project as developed is consistent with the original application.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 1.34 cubic feet of water per second (600 gallons per minute) for beneficial use. The location of the diversion points are:

- **3,485 feet N and 1,150 feet E of the SW corner of Section 1, T112N, R51W (SW ¼ NW ¼);**
- **2,650 feet N and 1,235 feet E of the SW corner of Section 1, T112N, R51W (SW ¼ NW ¼).**

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

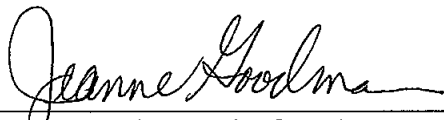
Section 1, T112N, R51W					
NE ¼ NW ¼	2.5 acres	NE ¼ SW ¼	37.3 acres	NW ¼ SE ¼	1.4 acres
NW ¼ NW ¼	3.0 acres	NW ¼ SW ¼	36.1 acres		
SW ¼ NW ¼	40.7 acres	SW ¼ SW ¼	3.0 acres		
SE ¼ NW ¼	37.7 acres	SE ¼ SW ¼	3.3 acres	Total acres	165.0 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Tracy Johnson, 19707 465th Ave., Bruce SD 57220 the holder and/or owner of Water Right No. 7445-3 is issued a license to appropriate water, the right to use 1.34 cubic feet of water per second from ground water – two wells (Big Sioux Brookings Aquifer) with a priority date of September 28, 2012 from the locations 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. 7445-3 and subject to the following qualifications:

- The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

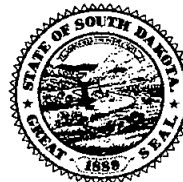
- The wells authorized by Permit No. 7445-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

FEB 17 2015

date





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

January 20, 2022

NOTICE

TO: TRACY JOHNSON, 19707 465TH AVE, BRUCE, SD 57220

FROM: Ron Duvall, Water Rights Permitting Administrator
for Eric Gronlund, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2021 Irrigation Questionnaire(s)

Our records indicate your 2021 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 7445-3. The request for the Questionnaire was dated October 22, 2021. The Water Management Board has directed that owners of water permits who have not submitted the 2021 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 7445-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **Wednesday, March 2, 2022 at 9:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 7445-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 2, 2022** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. **If you prefer, you can complete the questionnaire online at the following link: <https://danr.sd.gov/iq> using this password: TFKLYM**

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

February 1, 2022

7445-3

Tracy Johnson
19707 465th Ave
Bruce SD 57220

Dear Tracy:

I am writing to acknowledge receipt of your 2021 irrigation questionnaire.

You may disregard the January 20, 2022, "Notice" concerning reporting requirements for Water Right No. 7445-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us