

WATER PERMIT NO. 7956-3

Name of Applicant: Terry Gasper

Address: 46419 244th St, Colton SD 57018 Phone: 605 446-3342

Amount of Water Claimed: 1.43 cfs Total Acres: 110

Source of Water Supply: groundwater (one existing well)

Water to be used for: irrigation County: Lake

Type of Waste Disposal System:

Location: approximately 12 miles southeast of Madison

PRIORITY Date Received: 1-23-14

Application/License Fee: \$950

Corrected Application Received: 2-3-14

Period of Annual Use: April 1- September 30

Remarks:

Diversion Point: NW 1/4 NW 1/4 Sec 22-T105N-
R51W

Land to be Irrigated: NW 1/4, W 1/2 NE 1/4
Section 22-T105N-R51W

Depth of Well: 43 feet deep

Well Driller:

Remarks:

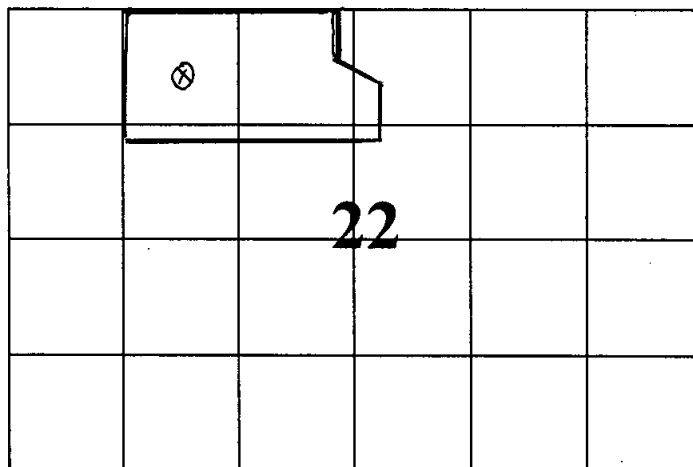
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 2-4-14

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7956-3</u> (office use only)	Hydrologic Unit <u>10170203</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Daily Leader Box 348</u>	
	<u>Madison 57042 - 605-256-4556</u>	

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JAN 23 2014

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☐ Amendment/Correction to Permit No. 3641-3
(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Terry Gaspar
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 46619 244th ST Colton SD 57018
(Address) (City) (State) (Zip Code)

Home Phone 605-446-3342 Cell 605-254-6240 Email _____

2. Amount of water claimed 1.43 *CFS or 644 **GPM ***AF Total Acreage 110
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion Well in NW 1/4 Sec 22 T105N R 54W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
(NW 1/4 NW 1/4) County Lake

5. County or counties where water will be used Lake

6. Annual period during which water is to be used April - 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 NW 1/4 of Sec 22 T105N R51W	40		
NE 1/4 of NW 1/4 of Sec 22 T105N R51W	40		
SW 1/4 of NW 1/4 of Sec 22 T105N R51W	10		
SE 1/4 of NW 1/4 of Sec 22 T105N R51W	10		

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

Center Pivot Irrigation Supplied By Well

I, Terry Gaspar, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
TEMPORARY USE WATER PERMIT NO. 7956-3

Date of first receipt of application January 23, 2014.

Date of return to applicant for corrections, amendments or changes January 23, 2014.

Date of receipt of corrected application February 3, 2014.

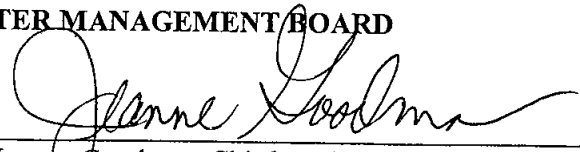
The Chief Engineer, on behalf of the Water Management Board, issues Temporary Use Water Permit No. 7956-3 to Terry Gaspar, 46419 244th St, Colton SD 57018 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Temporary Use Water Permit No. 7956-3 appropriates 1.43 cubic feet of water per second from one existing well completed into the Big Sioux:North Skunk Creek Aquifer (43 feet deep) located in the NW 1/4 NW 1/4 Section 22 for irrigation of 110 acres located in the NW 1/4, W 1/2 NE 1/4 Section 22; all in T105N-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: April 1 – September 30.
3. The date from which applicant may claim right is January 23, 2014.
4. The date of approval of Permit No. 7956-3 is April 14, 2014.
5. One-fifth of the construction is to be completed on or before October 14, 2016.
6. All construction is to be completed on or before April 14, 2019.
7. Water is to be put to beneficial use on or before April 14, 2023.
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 city of Madison, Kingbrook Rural Water System and Big Sioux Community Water have priority right to this water under future use withdrawal permits. This permit is issued as a temporary use permit pursuant to SDCL 46-5-39 and is subject to these prior rights if or when the future use permit holders fully develop their reserve water supply. The permit may be subject to cancellation when the water reserved under these future use permits is put to beneficial use. The Chief Engineer must provide the permit holder six months' notice prior to cancellation of this temporary use permit.
2. The well 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.
3. The well authorized by Permit No. 7956-3 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.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

MAY 02 2014

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable)



Drilling new well(s)

☐ Using existing well(s)

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

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

c) Well Depth 46 Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____

d) Distance to nearest existing domestic well:

On applicant's property _____ 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 (e.g. 3 to 1 is a typical slope)

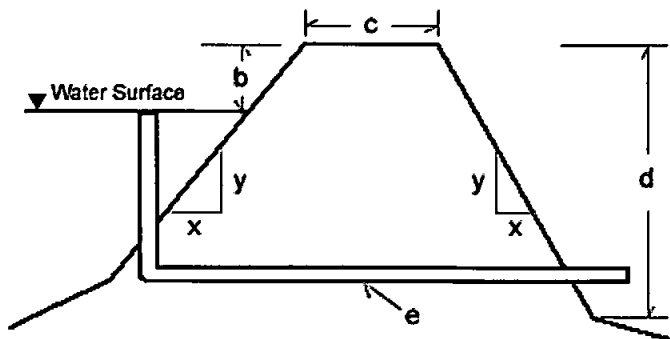
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Bryce
K. Man
New

x well

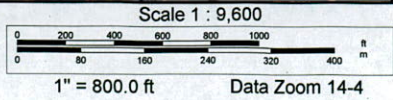
NE 22-105-51
Stoner

PPLS:22_105N_51W

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RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/3, 20 14

RECEIVED OF Terrance Gaspar 46419 244th St Colton SD 58018

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	100	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. <u>7-956-3</u>		
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	100 00

No. **06725**

By 
Chief Engineer

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/23, 20 14

RECEIVED OF Terence J Gaspar 46419 244th St Colton SD 57018

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

Fee for Application for Permit No. <u>7956-3</u> to Appropriate Water, to construct and to put water to beneficial use	750	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. <u>7956-3</u>	100	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	850	00

No. **06673**

By Jeanne Goodman
Chief Engineer



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



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WATER RIGHTS
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January 23, 2014

Terry Gaspar
46419 244th St
Colton SD 57018

Dear Mr. Gaspar:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation in Lake County. In order to complete the application, the following is required.

- Enclosed is the aerial photo map submitted with the application. Please mark the well location with an "X". marked
- Also, is the area to be irrigated what is outlined in orange. Yes If so, it appears that some of the acres to be irrigated will be located in the W 1/2 NE 1/4 Section 22. Is this correct? If so, how many acres? 10
- Regarding item No. 2, Amount of water claimed, the application states 800 gpm. State Statutes limit diversions to 1 cubic foot of water per second (cfs) for each 70 acres irrigated. This would mean that you are allowed approximately 1.43 cfs or 644 gpm to irrigate 100 acres. Please clarify the amount of water you are claiming. We understand that in order to accommodate certain irrigation methods, a greater diversion rate is required. Please justify in writing your request for a diversion rate greater than the statutory limit (please explain diversion rate requirement for the project).
- Enclosed is a copy of the well log found in cancelled Water Right No. 3641-3. Do you agree this 46 foot deep well is the well you are proposing to use? Yes
- We received your check for \$850.00. The application/license fee for irrigation of 100 acres is \$950.00. Please submit an additional \$100.00.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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

enclosures

15⁺ 60-500
25⁺ 60-250
Inspection 200



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7956-3, Terry Gaspar**

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. 7956-3, Terry Gaspar, 46419 244th Street, Colton SD 57018.

The Chief Engineer is recommending APPROVAL of Application No. 7956-3 as a TEMPORARY USE PERMIT pursuant to SDCL 46-5-39 because 1) water is available to be appropriated as a temporary use permit until holders of future use permits fully develop water reserved from their future use permit, 2) the proposed diversion can be developed as a temporary use permit 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 city of Madison, Kingbrook Rural Water System and Big Sioux Community Water have priority right to this water under future use withdrawal permits. This permit is issued as a temporary use permit pursuant to SDCL 46-5-39 and is subject to these prior rights if or when the future use permit holders fully develop their reserve water supply. The permit may be subject to cancellation when the water reserved under these future use permits is put to beneficial use. The Chief Engineer must provide the permit holder six months' notice prior to cancellation of this temporary use permit.
2. The well 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.
3. The well authorized by Permit No. 7956-3 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.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.


Jeanne Goodman, Chief Engineer
March 26, 2014

**REPORT TO THE CHIEF ENGINEER
WATER PERMIT APPLICATION NO. 7956-3
TERRY GASPER
MARCH 12, 2014**

Water Permit Application No. 7956-3 proposes to appropriate water at a maximum diversion rate of 1.43 cubic feet of water per second (cfs) from a single existing well completed into the Northern Skunk Creek Management Unit of the Big Sioux aquifer at approximately 46 feet deep. The well is located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 22, T105N-R51W and will be used to irrigate 110 acres in the NW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$ of the same section in Lake County

AQUIFER: Northern Skunk Creek Management Unit of the Big Sioux aquifer (BS: NSC)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Northern Skunk Creek management unit of the Big Sioux aquifer is a surficial aquifer composed of unconsolidated sand and gravel (Hansen, 1986). The aquifer lies mostly within Lake County but also extends to the east into Moody County. The aquifer delineation by Hansen (1986) and management unit boundaries determined by Hedges and others (1982) show that the Big Sioux: Northern Skunk Creek aquifer underlies approximately 30,000 acres. Assuming an average thickness of 39 feet and applying a specific yield coefficient of 0.2, the Big Sioux: Northern Skunk Creek aquifer contains an estimated 234,000 acre feet (ac-ft) of water in storage. Hansen (1986) showed in his delineation of the aquifer that 27,250 acres of the total aerial extent are unconfined. The Big Sioux: Northern Skunk aquifer is hydraulically connected to local surface waters, specifically Lakes Madison, Herman, and Brant, and Skunk Creek. The Northern Skunk Creek management unit is hydraulically connected to the Middle Skunk Creek management unit to the south (Hedges and others, 1985). Water in the aquifer generally moves to the southeast at an average gradient of approximately five feet per mile. The hydraulic gradient decreases where the aquifer widens near the grouping of area lakes and increases where the aquifer narrows or thins (Hansen, 1986; Water Rights, 2014a).

The lithological log submitted with the application documented aquifer materials at a depth of 16 to 48 feet below ground surface, with a static water level of 15.5 feet below ground surface. In the area of the proposed well site, the Big Sioux: Northern Skunk Creek aquifer occurs from just below ground surface to a depth of approximately 50 feet (SD Geological Survey, 2014; Water Rights, 2014c).

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the 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 aquifer that are pertinent to this application.

WATER AVAILABILITY:

The probability of unappropriated water available from an 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 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.” If the source of the water is older or lower than the Greenhorn Formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved. Therefore, withdrawal/recharge must be considered.

In July of 2009, Buhler (2009) found that withdrawals plus expected future use development exceeds estimated recharge from the Big Sioux: Northern Skunk Creek aquifer, indicating that unappropriated water was not available for a future use permit application submitted by Big Sioux Community Water. This was primarily based on a hydrologic budget considering expected average annual withdrawal versus estimated annual recharge. Since then, four water permit applications have been filed proposing to appropriate water from this aquifer. In each case, the appropriations were made as temporary use water permits pursuant to SDCL 46-5-39. Recharge and discharge estimates are described in greater detail in the section below.

Hydrologic Budget:*Recharge:*

Recharge to the Big Sioux: Northern Skunk Creek aquifer occurs primarily through infiltration of precipitation, and inflow from area lakes and streams during periods of high flow and stage (Hansen, 1986). Hedges and others (1985) estimated recharge to the aquifer using an observation well analysis to be 3.1 inches per year (in/yr). Buhler (2009) refined an estimate for recharge to approach 3.82 in/yr by using the observation well method as described by Hedges and others (1982). Using both values for recharge and area of the aquifer, recharge to the Big Sioux: Northern Skunk Creek aquifer is estimated to range from 6,562 to 9,779 ac-ft/yr.

Discharge:

Discharge from the Big Sioux: Northern Skunk Creek aquifer is by well withdrawals, evapotranspiration, and outflow to area lakes and streams during periods of low flow and stage (Hansen, 1986). Currently, there are 35 water rights/permits appropriating water, four temporary use permits and four future use permits reserving water from the aquifer (Water Rights, 2014b). The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming water rights/permits limited by an annual volume will pump the entire volume appropriated, water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time, and future use permits will be fully developed (Water Rights, 2014b).

The appropriation by all non-irrigation appropriations and the reported pumpage by the Chester Sanitary District, Big Sioux Community Water, Kingbrook Rural Water System and the City of Madison from the Big Sioux: Northern Skunk Creek aquifer are shown in Tables 1 and 2, respectively.

Permit No.	Name	Status	Use	Annual Appropriation
4943-3 5689-3 6152-3 6834-3 7117-3**	Big Sioux Community Water David & Chrysella Daniel	LC FU PE FU PE	RWS RWS RWS RWS RWS	0.44cfs (4943-3) 100% developed= 318.5 ac-ft/yr, plus 360 ac-ft/yr (6152-3), plus 600 ac-ft/yr (7117-3), plus 960 ac-ft/yr (total future use) APPROXIMATELY 2,238.5 ac-ft/yr
6046-3	Chester Sanitary District	LC	MUN	0.786cfs (341.4 ac-ft/yr estimated)
5168-3*	Hilde Pipe & Gravel	LC	IND/DOM	480 ac-ft/yr*
4311A-3 4367-3 5643-3 5646-3 6531-3 6730-3	Kingbrook RWS Inc	LC LC FU LC LC LC	RWS RWS RWS RWS RWS RWS	3.0cfs (4367-3) (1303 ac-ft/yr estimated), plus 1,041 ac-ft/yr (5429-3, 5646-3, 4311A-3, 6531-3, 6730-3 combined), plus 425 ac-ft/yr (total future use) APPROXIMATELY 2,766 ac-ft/yr
371-3 372-3 747-3 1079-3 1453-3 6040-3 6510-3	City of Madison	LC LC FU LC LC LC PE	MUN MUN MUN MUN MUN MUN MUN	2.7cfs (1079-3)+ 0.78cfs (1453-3)+ 0.31cfs (371-3)+ 0.26cfs (372-3)= 4.05 cfs (1,759 ac-ft/yr), plus 600 ac-ft/yr (6040-3), plus 339 ac-ft/yr (6510-3), plus 1,033 ac-ft/yr (total future use) APPROXIMATELY 3,731 ac-ft/yr
5688-3	Shipwreck Inn	LC	COM	0.022 cfs (9.5 ac-ft/yr estimated)
* May be subject to cancellation due to abandonment, ** Rural water system use by Big Sioux Community Water System				

Table 1- Non-irrigation appropriations from the Big Sioux: Northern Skunk Creek aquifer (Mathiowetz, 2013).

	Chester Sanitary District ^{1,2}	Big Sioux Comm. Water ^{2,3}	Kingbrook RWS ^{2,3}	City of Madison ^{2,3}	Total
	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft
2013	35.74	903	620	491.5	2014.5
2012	36.55	752	677	630	2095.5
2011	29.69	694	662	684	2069.7
2010	30.76	728	621	766	2145.8
2009	30.6	699	606	601	1936.6
2008	41.71	690	647.1	614.03	1992.8
2007	49.15	741	695.95	622.92	2109
2006	51.18	777	663.7	713.59	2205.5
2005	66.1	748	653.58	595.96	2063.6
2004	56.47	711	640.08	672.88	2080.4
2003	62.52	746.9	648.45	624.87	2082.7
2002	60.83	597.58	609.78	744.5	2012.7
2001	64.8	117.01	601.49	885.82	1669.1
2000	52.01	0	654.83	848.96	1555.8
1999	n/a	0	591.4	845.35	1436.8
1998	n/a	0	592.39	882.47	1474.9
Min	29.7	0	591.4	596	1436.8
Max	66.1	777	696	885.8	2205.5
Avg	48.6	666.8	637.7	715.5	1928.7
¹ Carruthers, 2014; ² Buhler, 2009; ³ Water Rights, 2003-2013					

Table 2- Water distribution system use from the BS: NSC aquifer (modified from Mathiowetz, 2013).

Note that Big Sioux Community Water System did not withdraw any water from the Northern Skunk Creek management unit in 1998, 1999, or 2000 due to nitrate issues (Buhler, 2009).

Table 3 shows the historic irrigation water use from the aquifer. In addition to appropriative rights there are a number of domestic wells on file with the SD DENR- Water Rights Program. However, the domestic use is not a significant contribution to the hydrologic budget.

Year	No. of Permits	Appropriations (ac-ft/yr)	Reported Pumping (ac-ft/yr)
2012	20	5645	1755
2011	19	5525	541.04
2010	19	5525	237.5
2009	17	5209	700.1
2008	16	5119	1361.49
2007	16	5119	1337.56
2006	15	5043	1037.47
2005	18	6184.4	825.56
2004	18	6132.4	284.4
2003	19	6364.4	1116.52
2002	19	6364.4	1461.85
2001	19	6364.4	1475.57
2000	19	6364.4	1007.05
1999	19	6364.4	964.04
1998	19	6364.4	429.46
1997	18	6184.4	574
1996	18	6260.4	1060.48
1995	18	7260.8	347.34
1994	18	7260.8	906.22
1993	18	7970.8	86
1992	17	8243	12
1991	18	8873	1198.7
1990	15	8897	565
1989	15	8133	1129
1988	15	8133	1908
1987	14	7912	870
1986	15	8345	723
1985	14	7945	941
1984	15	8185	912
1983	14	7913	763.59
1982	13	7513	432.18
1981	15	8041	941
1980	15	5818	233
1979	14	7753	393
Min	13	5043	12
Max	19	8897	1908
Avg	16.70	6929.83	811.37
1992 through 2008 appropriations adjusted (by -80 ac-ft/yr) to correct for clerical error involving Water Right No. 4133A-3 (it was issued for 2 ac-ft/acre but the irrigation questionnaire incorrectly reflected a 3 ac-ft/yr appropriation)			

Table 3- Historic irrigation water use from the BS: NSC aquifer (modified from Mathiowetz, 2013)

Development Possible Under Current Permits:

The “probable maximum” amount of water that can be withdrawn at the current level of appropriation from the Northern Skunk Creek management unit can be estimated using appropriation and future use reservation values for Shipwreck Inn, Big Sioux Community Water, Chester Sanitary District, City of Madison, and Kingbrook RWS from Table 1 (9,086.4 ac-ft/yr in total), plus the estimated average annual irrigation usage (811.37 ac-ft/yr). Water Right No. 5168-3, Hilde Pipe & Gravel, has not been included in this calculation since it may be subject to cancellation.

A simple hydrologic budget shows that the probable maximum development of the current appropriation (9,900.8 ac-ft/yr) exceeds the maximum estimated annual recharge to the Big Sioux: Northern Skunk Creek aquifer (9,779 ac-ft/yr) by 121.8 ac-ft/yr.

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 of the aquifer.”

The SD DENR-Water Rights Program monitors seven observation wells completed into the Northern Skunk Creek management unit of the Big Sioux aquifer (Water Rights, 2013a). The hydrographs for the observation wells are shown in Figures 1 through 7 below.

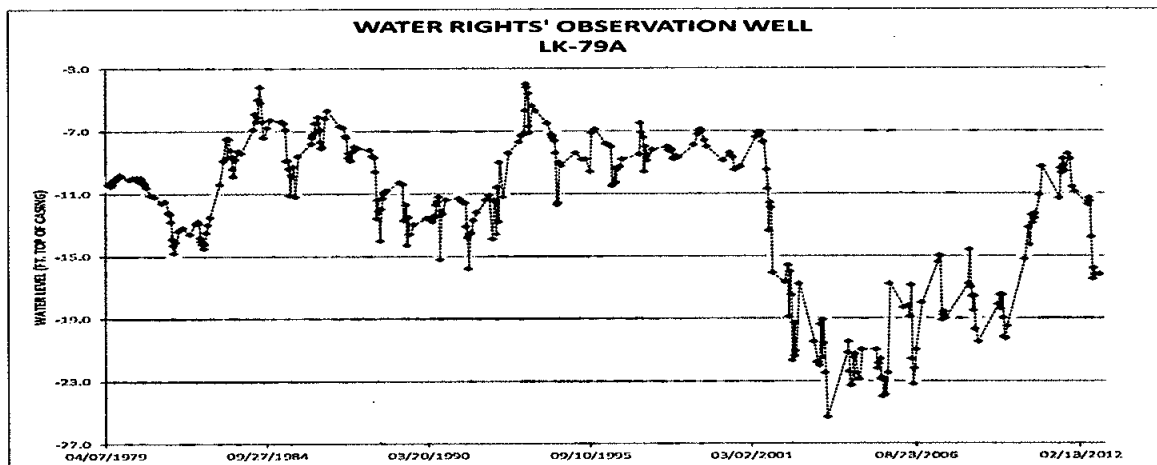


Figure 1- Hydrograph for observation well LK-79A, located in Sec. 9, T105N-R51W (Water Rights, 2014a)

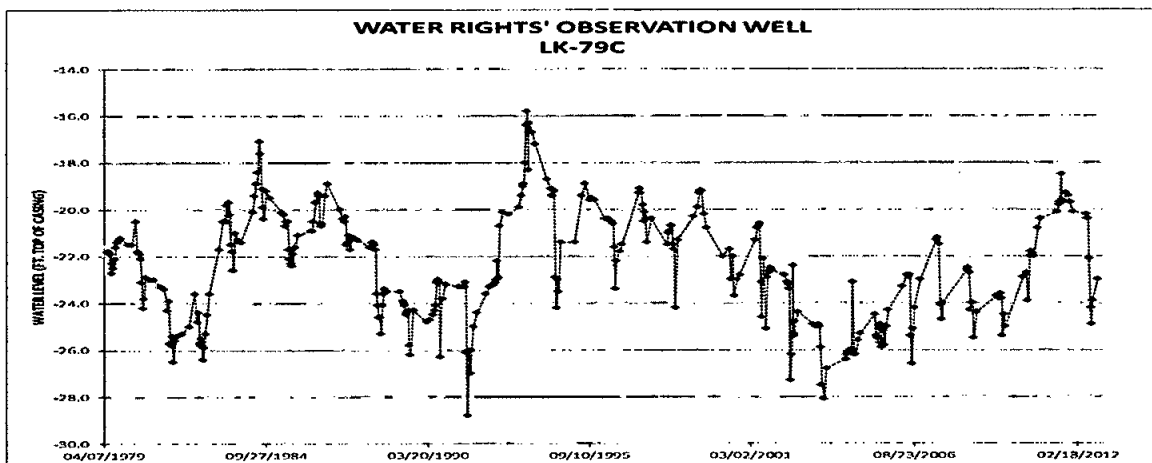


Figure 2- Hydrograph for observation well LK-79C, located in Sec. 16, T105N-R51W (Water Rights, 2014a)

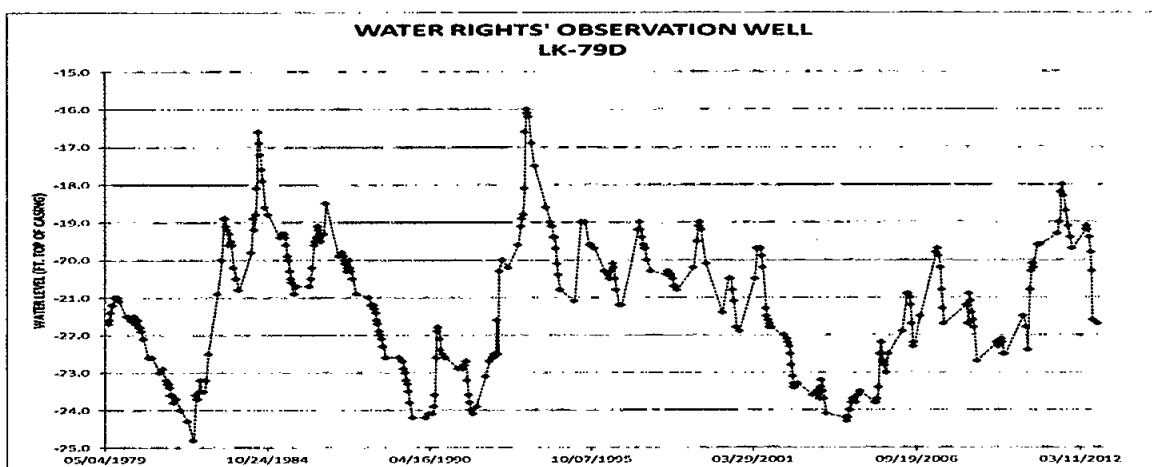


Figure 3- Hydrograph for observation well LK-79D, located in Sec. 16, T105N-R51W (Water Rights, 2014a)

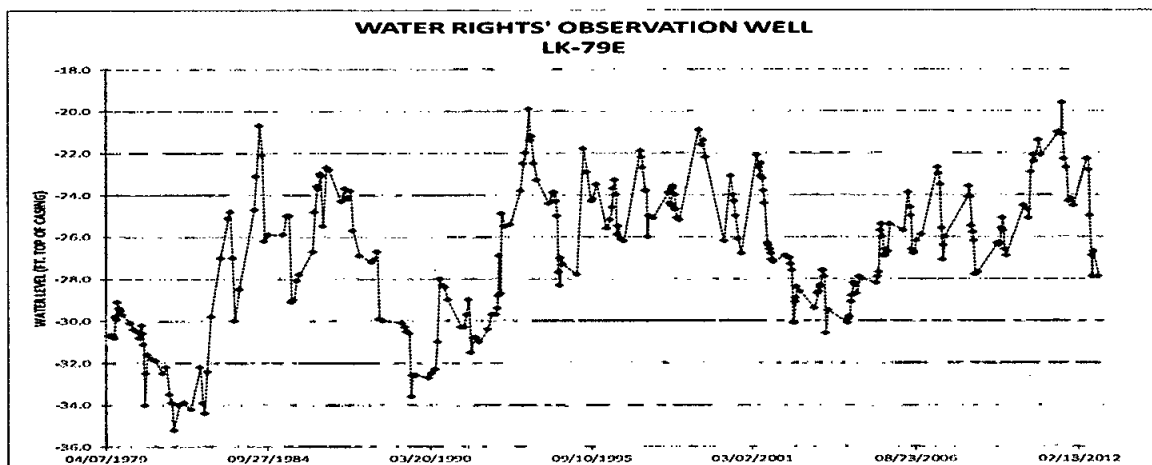


Figure 4- Hydrograph for observation well LK-79E, located in Sec. 19, T105N-R51W (Water Rights, 2014a)

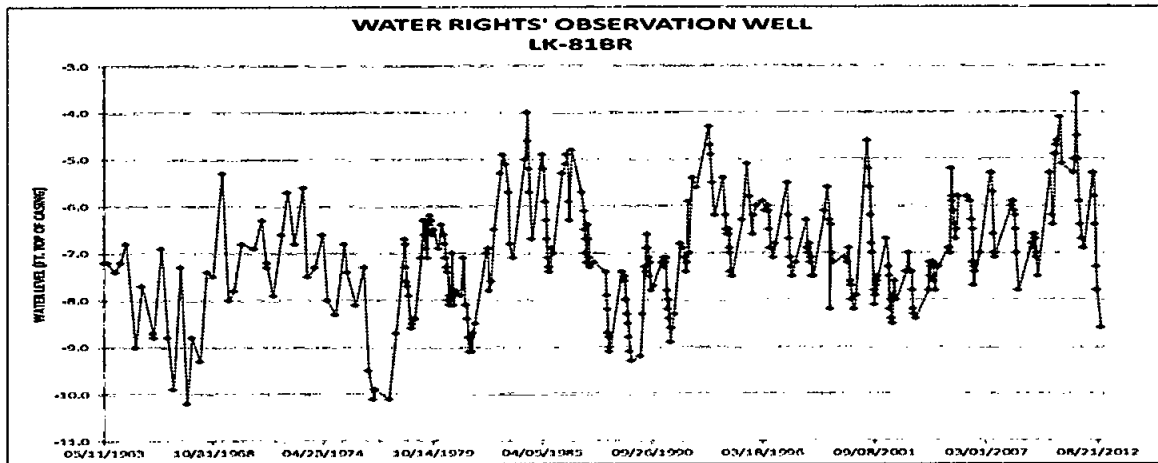


Figure 5- Hydrograph for observation well LK-81BR, located in Sec. 23, T105N-R51W (Water Rights, 2014a)

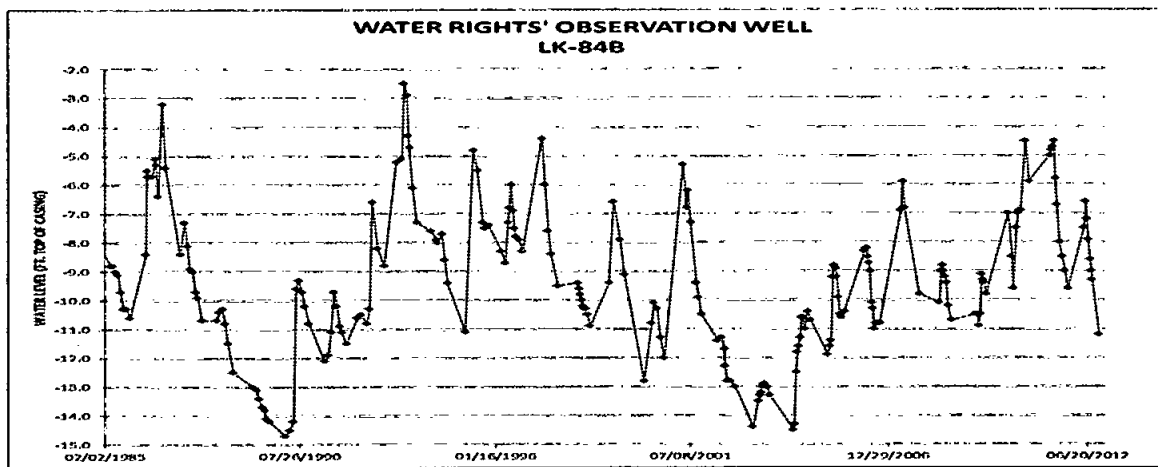


Figure 6- Hydrograph for observation well LK-84B, located in Sec. 8, T106N-R52W (Water Rights, 2014a)

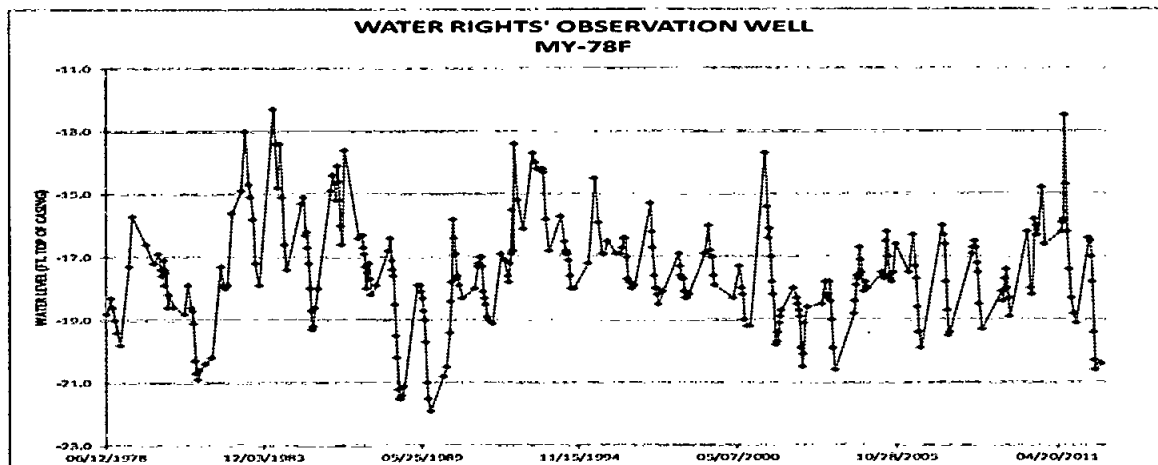


Figure 7- Hydrograph for observation well MY-78F, located in Sec. 29, T105N-R50W (Water Rights, 2014a)

The downward trending water levels shown in some of the hydrographs can be attributed to the observation wells' proximity to high capacity wells. In general, the water levels in the observation wells have held fairly stable over the period of record. The observation well data

documents cyclic conditions of water levels, recharging during wet years and declining during dry years. Therefore at the current level of development, temporal well withdrawal is masked by climatic conditions, indicating that recharge to and natural discharge from the aquifer exceeds pumping. Recognizing that natural discharge can be captured for pumping, these hydrographs indicate that withdrawals from the aquifer do not exceed recharge to the aquifer.

EXISTING WATER RIGHTS:

There are several wells completed into the Big Sioux: Northern Skunk Creek aquifer in the area of the existing well site. The nearest wells on file are authorized under Water Right No. 5422-3, located approximately 3,100 feet to the northwest of the existing well site. The next nearest well on file is authorized under Water Right No. 1328-3, located approximately 3,600 feet to the northeast. The nearest domestic well on file is located approximately 1,300 feet to the northwest. The water table conditions of the aquifer in this area dictate that water level drawdown due to pumping would not extend far from the wells. The close proximity of the wells to Skunk Creek indicates that drawdown due to pumping would be reduced due to the induced recharge from the creek. However, precise drawdown cannot be quantified without aquifer testing. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. Therefore, nearby adequate wells are not expected to be adversely impacted by the proposed diversion.

SDCL 46-5-39 & SDCL 46-5-40:

SDCL 46-5-39 allows the Water Management Board to authorize a temporary appropriation of water reserved under a future use permit. However, SDCL 46-5-40 states that the temporary use permit would be effective only until such time as the future use holder wants to develop the water covered by the temporary permit. The temporary permit holder is to be given six months' notice after which time the temporary permit is subject to cancellation.

Temporary use permits are intended to place water that is reserved by future use permits to beneficial use until the future use permit is developed. There are four temporary use permits (shown in Table 4) that have been approved from the Northern Skunk Creek management unit of the Big Sioux aquifer pursuant to SDCL 46-5-39. Applying 60% of continuous pumping at the maximum diversion rate for East River Electric Power Coop, Inc., results in an expected use of 58 ac-ft/yr. Irrigators withdrawing from this aquifer apply water at an average rate of 7.89 inches per acre (Buhler, 2009). Applying this rate to the acres permitted by the three temporary use irrigation permits, estimated use is 137 ac-ft/yr. Temporary Use Permit No. 7275-3 authorizes additional acres to be irrigated but does not authorize an increase in flow rate from the 3.85 cfs already licensed under Water Right No. 3072-3. In total, temporary use permits are expected to withdraw approximately 195 ac-ft/yr.

There are four future use permits reserving water from the Northern Skunk Creek management unit, shown in Table 5. As shown, there is significantly more water reserved in future use than what is currently appropriated by temporary use permits. Therefore, until the future use permits are fully developed, water is available for this proposed appropriation as a temporary use permit.

Number	Name	Status	Use	Maximum Diversion Rate (cfs)	Area Irrigated
7131-3	Charles Alverson	PE	Irrigation	1	68
7275-3	Trevor Anderson	PE	Irrigation	0	60
7829-3	East River Electric Power Co-op Inc.	PE	Geothermal Heat	0.133	0
7915-3	Tom Park	PE	Irrigation	1.33	80

Table 4: Temporary use water permits from the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2014b).

Future Use Permit No.	Name	Reservation (ac-ft)	Next Review
747-3	City of Madison	1,033	09/30/2020
5643-3	Kingbrook RWS Inc.	425	07/07/2020
5689-3	Big Sioux Community Water	360	07/01/2014
6834-3	Big Sioux Community Water	600	06/11/2014
Total		2,418	

Table 5: Future use reservations from the Big Sioux: Northern Skunk Creek aquifer (Water Rights, 2014b).

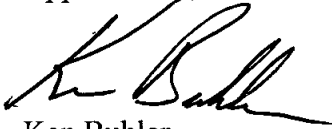
CONCLUSIONS:

1. Water Permit Application No. 7956-3 proposes to irrigate 110 acres from one well, 46 feet deep, completed into the Big Sioux: Northern Skunk Creek aquifer.
2. The water availability analysis concluded the Big Sioux: Northern Skunk Creek aquifer is fully appropriated. Therefore, there is not a reasonable probability that unappropriated water is available to supply the proposed appropriation.
3. Pursuant to SDCL 46-5-39 and SDCL 46-5-40, a temporary use water permit allows water reserved by future use water permits to be put to beneficial use until the future use permit holder uses the water reserved under the permit.
4. Four temporary use water permits have since been approved since the aquifer was deemed fully appropriated. Given the amount of water reserved in the future use permits, there is a reasonable probability that reserved water is temporarily available from future use permits in the Big Sioux: Northern Skunk Creek aquifer to supply the proposed appropriation.
5. This proposed diversion will not adversely or unlawfully impair existing nearby wells.
6. The proposed diversion point is an existing well. No new diversion points will be constructed if application is approved.



Bracken Capen
SD DENR – Water Rights Program

Approved by:



Ken Buhler
SD DENR – Water Rights Program

REFERENCES:

- Buhler, K. 2009. Report to the Chief Engineer, Water Permit Application No. 7136-3, Big Sioux Community Water. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- Buhler, K. 2011. Report to the Chief Engineer, Water Permit Application No. 7275-3, Trevor Anderson. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- Carruthers, J. 2014. Personal Communication. Chester Sanitary District Contact Person. March 12, 2014.
- Goodman, J.A. 2009. Report on Water Permit Application No. 7131-3 Charles Alverson. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- Hansen, D.S. 1986. Water Resources of Lake and Moody Counties, South Dakota. Water-Resources Investigations Report 84-4209. USGS, Huron, South Dakota.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., Allen, J., and 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.
- In the Matter of Water Permit Application No. 7239-3, by Hanson County Dairy v. Robert Bender and Stace Nelson, South Dakota First Judicial Court Civ. No. 11-54 (Memorandum Decision, April 11, 2012)
- In the Matter of Water Permit Application No. 6431-3, by Phillip W. Hines v. SD Department of Environment and Natural Resources, South Dakota Sixth Judicial Court Civ. No. HU04-37 (Memorandum Decision, April 11, 2012)
- Mathiowetz, A.M. 2013. Report to the Chief Engineer, Water Permit Application No. 7829-3, East River Electric Coop Inc. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- SD Geological Survey. 2014. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.
- Water Rights. 2003-2013. "Non-Irrigation Yearly Reports": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 1980-2013. "Annual Irrigation Summary by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

AFFIDAVIT OF PUBLICATION

RECEIVED

APR - 7 2014

WATER RIGHTS PROGRAM

STATE OF SOUTH DAKOTA }
County of Lake } ss.

Sue Anne Artko

of the City of Madison, County of Lake, State of South Dakota, being first duly sworn on oath, deposes and says:

The Madison Daily Leader is a daily legal newspaper of general circulation, printed and published in the City of Madison, in said County of Lake, by Hunter Publishing, Inc., Jon M. Hunter, publisher, and has been such legal newspaper during the times hereinafter mentioned; that the said Madison Daily Leader has been in existence as such legal newspaper for more than one year prior to the publication of the notice hereunto attached, and has during all of said time had, and how has, more than 200 bona fide subscribers; that the undersigned, the affiant, is the Secretary of the said newspaper, in charge of the advertising department thereof and has personal knowledge of all the facts stated in this affidavit and the advertisement headed

Terry Gaspar

DENR/Application #7956-3 to Appropriate Water

printed copy of which hereunto attached, was printed and published in the said newspaper for One successive weeks, once each week and on the same day of the week, on the following dates, to-wit:

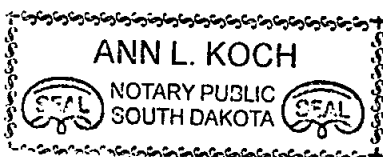
On Wednesday, the 2nd day of April, 2014;
On , the day of , 20;
On , the day of , 20;
On , the day of , 20;
On , the day of , 20;
On , the day of , 20;
On , the day of , 20;
On , the day of , 20;

That \$ 27.61 being the full amount of the fees for publication of the attached notice inures solely for the benefit of the publisher of the said newspaper; that no arrangement or understanding for a division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Sue Anne Artko

Subscribed and sworn to before me this 3rd day of April, 2014

Ann L Koch
Notary Public, Lake County, South Dakota



Wednesday, April 2

NOTICE OF APPLICATION
NO. 7956-3 TO
APPROPRIATE WATER

Notice is given that Terry Gaspar, 46419 244th St, Colton SD 57018 has filed an application for a water permit to appropriate 1.43 cubic feet of water per second from one existing well completed into the Big Sioux: North Skunk Creek Aquifer (43 feet deep) located in the NW 1/4 NW 1/4 Section 22 for irrigation of 110 acres located in the NW 1/4, W 1/2 NE 1/4 Section 22; all in T105N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7956-3 as a TEMPORARY USE PERMIT pursuant to SDCL 46-5-39 because 1) water is available to be appropriated as a temporary use permit until holders of future use permits fully develop water reserved from their future use permit, 2) the proposed diversion can be developed as a temporary use permit without unlawful impairment of existing rights, 3) the proposed use is a beneficial use 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 April 14,

Publicat

Notary Fees \$

Total \$

Received Payment,

In Court
County of

County of _____

AFFIDAVIT OF PUBLICATION

Filed in the office of .

on the

day of .

20

Attorneys for

2014.

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 \$27.61



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



March 27, 2014

Daily Leader
PO Box 348
Madison SD 57042

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7956-3 to Appropriate Water. Please publish the notice once on April 2, 2014. 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 Terry Gaspar, 46419 244th St, Colton SD 57018 (Ph # 605-446-3342).

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

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



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

March 27, 2014

Terry Gaspar
46419 244th St
Colton SD 57018

Dear Mr. Gaspar:

Water Permit Application No. 7956-3 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 Daily Leader printed at Madison SD (Ph # 605-256-4555). 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 April 2, 2014. 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. 7956-3 to Appropriate Water

Notice is given that Terry Gaspar, 46419 244th St, Colton SD 57018 has filed an application for a water permit to appropriate 1.43 cubic feet of water per second from one existing well completed into the Big Sioux:North Skunk Creek Aquifer (43 feet deep) located in the NW 1/4 NW 1/4 Section 22 for irrigation of 110 acres located in the NW 1/4, W 1/2 NE 1/4 Section 22; all in T105N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7956-3 as a TEMPORARY USE PERMIT pursuant to SDCL 46-5-39 because 1) water is available to be appropriated as a temporary use permit until holders of future use permits fully develop water reserved from their future use permit, 2) the proposed diversion can be developed as a temporary use permit without unlawful impairment of existing rights, 3) the proposed use is a beneficial use 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 April 14, 2014.

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

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PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



MAY 02 2014

Terry Gaspar
46419 244th St
Colton SD 57018

Dear Mr. Gaspar:

Enclosed is temporary use Water Permit No. 7956-3 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,

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

enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

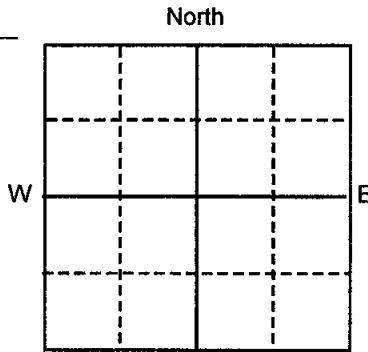
SD EForm - 1621LD V1

11-02

Location SW 1/4 NW 1/4 Sec 22 Twp 104 Rg 51

County Minnehaha

Please mark well location with an "X"



Well Completion Date

May 29, 2014

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:

mud rotary

CASING DATA:

If other describe ☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>12.00</u> IN	<u>1.5</u> FT	<u>49.0</u> FT	<u>17.00</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Quick Grout</u>	<u>6</u>	Lb/gal	<u>0.0</u> Ft	<u>39.0</u> Ft
<u>Red Flint</u>	<u>60</u>	Lb/gal	<u>39.0</u> Ft	<u>69.0</u> Ft

Describe grouting procedure

Tremmy

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12.00 Inches Length 20.0 Feet

Material stainless steel

Slot Size 80 Set From 49.0 Feet to 69.0 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?

Lab to which water quality sample sent for analysis

Well Owner: Terry Gaspar

Business Name:

Address: 46419 244th St

City, State, Zip: Colton SD 57018

WELL LOG:

		DEPTH	
FORMATION		FROM	TO
Top Soil	Blk	0	1
Clay	Tan	1	11
Sand/Gravel	Red/Brn	11	50
Sand/Gravel	Blu	50	69

STATIC WATER LEVEL 8.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

43 49 37.84N, 96 55 38.06W 600 - 700 GPM

RECEIVED

DEC 22 2014

WATER RIGHTS PROGRAM

This well was drilled under license # 463 and this report is true and accurate.

Drilling firm: Steffl Drilling & Pump Inc, Kris VanHeuveln

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 6-7-14

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7956-3

I have this day, October 29, 2021, made a thorough examination of the water use system constructed by Terry Gasper, 46419 244th St, Colton, SD 57018 of Permit No. 7956-3, bearing the priority of January 23, 2014 authorizing the diversion of 1.43 cu. ft. per second of the waters of the Big Sioux: North Skunk Creek Aquifer for irrigation purposes, in Lake County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Steffl Drilling & Pump
- 2) No. of Wells 1
- 3) Depth(s) 69 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 12 inches
- 2) Length 49 feet
- 3) Type Plastic

Screen:

- 1) Type Stainless steel
- 2) Length 20 feet
- 3) Static water level 8 feet

Pump:

- 1) Make NA
- 2) Model Submersible
- 3) Size NA
- 4) Capacity 500 GPM

Motor: (unknown)

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

- 1) Type Buried PVC
- 2) Size 8 inches
- 3) Length feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1540 feet
- 3) Number of towers 7 plus corner leg
- 4) End gun Y
- 5) Capacity 500 GPM

Chemigation Equipment:

- 1) Does chemigate N

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in poor, good, etc condition with the point(s) of diversion located as follows: From the NW corner of Section 22 T105N R51W, 1015 ft S & 1020 ft E, Lat 43.88896 Long -96.94493 (NW 1/4 NW 1/4 Sec 22)
2. The works are capable of diverting and conveying to the place of use 1.11 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:

All land in Section 22 T105N R51W

NW 1/4 NW 1/4 – 36 acres

NE 1/4 NW 1/4– 33 acres

SE 1/4 NW 1/4 – 6 acres

SW 1/4 NW 1/4 – 6 acres

NW 1/4 NE 1/4 – 2 acres

SW 1/4 NE 1/4 – 1 acre

comprising a total of 84 acres of land and the license should be issued for 1.11 cfs

3. All structures, wells and lands on map Y

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

The irrigated acreage was determined with the aid of FSA imagery and ArcMAP software.

The telephone number for the Permit should be changed to 905/254-4403 while the mailing address is current.

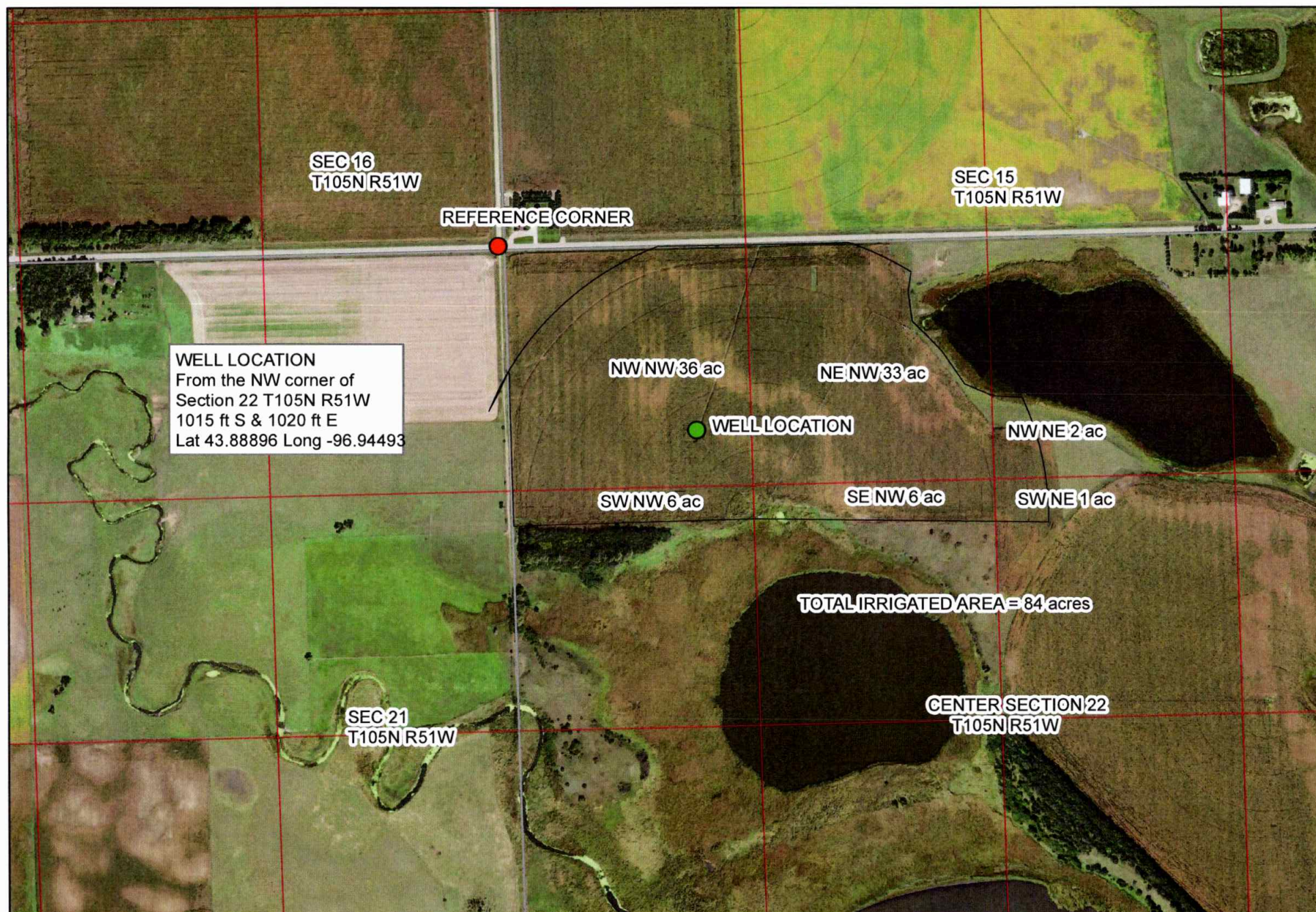


Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: **November 1, 2021**

Note: No. 7956-3 is a Temporary Use Permit and can not be licensed. The permit will be reissued to reflect the system as developed.

Genny McMath



0 0.1 0.2 0.4 0.6 0.8 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

January 18 2022

7956-3

Terry Gasper
46419 244th St
Colton SD 57018

Dear Mr. Gasper:

Enclosed is Reissued Temporary Use Water Permit No. 7956-3. The temporary use water permit was reissued to reflect the system as developed. The reissued permit is based on a field investigation done by a staff engineer with our program. A copy of his map is included showing the location of the diversion point and acres developed for irrigation.

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

The Reissued Temporary Use Water Permit is subject to the qualifications listed in the permit. If you have any questions, please contact our office.

Sincerely,

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

enclosures

**REISSUED SOUTH DAKOTA
TEMPORARY USE WATER PERMIT NO. 7956-3
AS DEVELOPED**

On April 14, 2014, on behalf of the Water Management Board, Temporary Use Water Permit No. 7956-3 was approved and issued to Terry Gasper, 46419 244th St., Colton SD 57018 authorizing construction of the water use system and placement of water to beneficial use.

1. On October 29, 2021, an investigation was conducted of the water use system described in Temporary Use Water Permit No 7956-3. The investigation found the system was developed as follows: One well, 69 feet deep into the Big Sioux: Northern Skunk Creek Aquifer located approximately 1,015'S and 1,020'E of the NW corner of Section 22, T105N, R51W (NW ¼ NW ¼ Sec 22) Latitude 43.88896, Longitude -96.94493.

The temporary use permit holder is authorized to divert the developed diversion rate of 1.11 cubic feet of water per second (500 gpm) from the well described above to irrigate the following acreage:

T105N, R51W Section 22	NW ¼ NW ¼	36 acres	NW ¼ NE ¼	2 acres
	NE ¼ NW ¼	33 acres	SW ¼ NE ¼	1 acre
	SE ¼ NW ¼	6 acres		
	SW ¼ NW ¼	6 acres		
			Total of 84 acres	

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: April 1 - September 30.
3. The date from which applicant may claim right is January 23, 2014.
4. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

- The city of Madison, Kingbrook Rural Water System and Big Sioux Community Water have priority right to this water under future use withdrawal permits. This permit is issued as a temporary use permit pursuant to SDCL 46-5-39 and is subject to these prior rights if or when the future use permit holders fully develop the reserve water supply. The temporary use permit may be subject to cancellation when the water reserved under these future use permits is put to beneficial use. The Chief Engineer must provide the permit holder a six month notice prior to cancellation of this temporary use permit.
- The well approved under this temporary use 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.

Reissued Temporary Use Water Permit No. 7956-3
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- The well authorized by Temporary Use Permit No. 7956-3 shall be constructed by a licensed well driller and construction 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. *The well was drilled in May 2014 by Steffl Drilling & Pump, Inc. A copy of the well completion report is on file with the Water Rights Program.*
- This temporary use permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

1/18/2022
date

