

WATER PERMIT NO. 8247-3

Name of Applicant: **Paul Moriarty Trust**

Address: **603 Main Ave, Brookings SD 57006** Phone: **605 695-6333**

Amount of Water Claimed: **1.78 cfs** Total Acres: **144 acres**

Source of Water Supply: **groundwater (one well)**

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

Type of Waste Disposal System:

Location: **5 miles north of Brookings**

PRIORITY Date Received: **11-28-16** Application/License Fee: **\$1050**

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

Remarks:

Diversion Point: **NW 1/4 NW 1/4 Sec 19-T111N-
R49W**

Land to be Irrigated: **NW 1/4 Sec 19-T111N-
R49W**

Depth of Well: **53 feet deep**

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

Remarks:

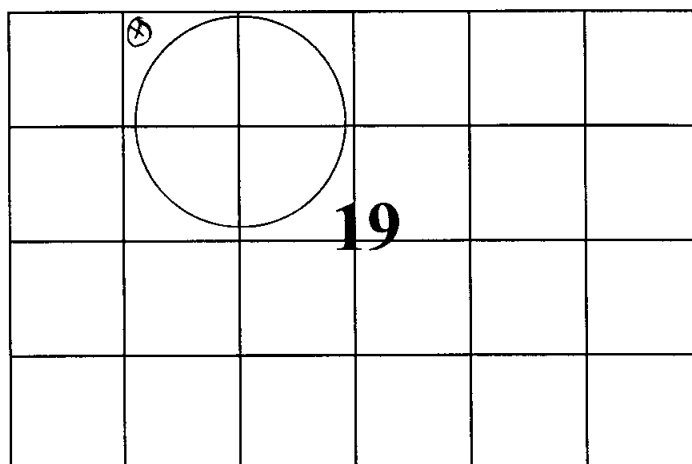
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **11-29-16**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



Mail to:	(office use only)	
DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8247-3</u>	Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Brookings Register</u>	
	<u>605-692-6271</u>	

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

SOUTH DAKOTA
WATER PERMIT NO. 8247-3

Date of first receipt of application November 28, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8247-3 to Paul Moriarty Trust, 603 Main Ave, Brookings SD 57006 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. 8247-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Big Sioux:Unnamed Creek Aquifer (53 feet deep) located in the NW 1/4 NW 1/4 Section 19 for irrigation of 144 acres located in the NW 1/4 Section 19; all in T111N-R49W.
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 November 28, 2016.
4. The date of approval of Permit No. 8247-3 is February 13, 2017.
5. One-fifth of the construction is to be completed on or before August 13, 2019.
6. All construction is to be completed on or before February 13, 2022.
7. Water is to be put to beneficial use on or before February 13, 2026.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under 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 well authorized by Permit No. 8247-3 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.

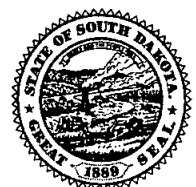
WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

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

MAR 06 2017

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 Steff Well Drilling
(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 53 Depth to Top of Water Bearing Material 2 ft Depth to Water from Surface 10 ft
- d) Distance to nearest existing domestic well:

On applicant's property none

On property owned by others 1600 ft

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

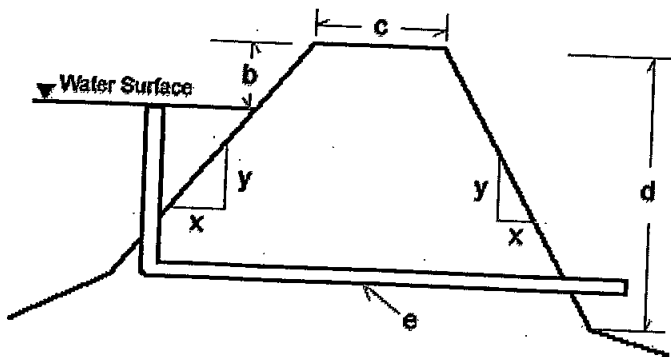
3. Dugout Information

- 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

Paul Moriarty

PPLS:19J11N_49W

Legend

-  Moraity Section Outline
-  Mororiaty 1/4 outline
-  Paul Moriarty test well fall 2016

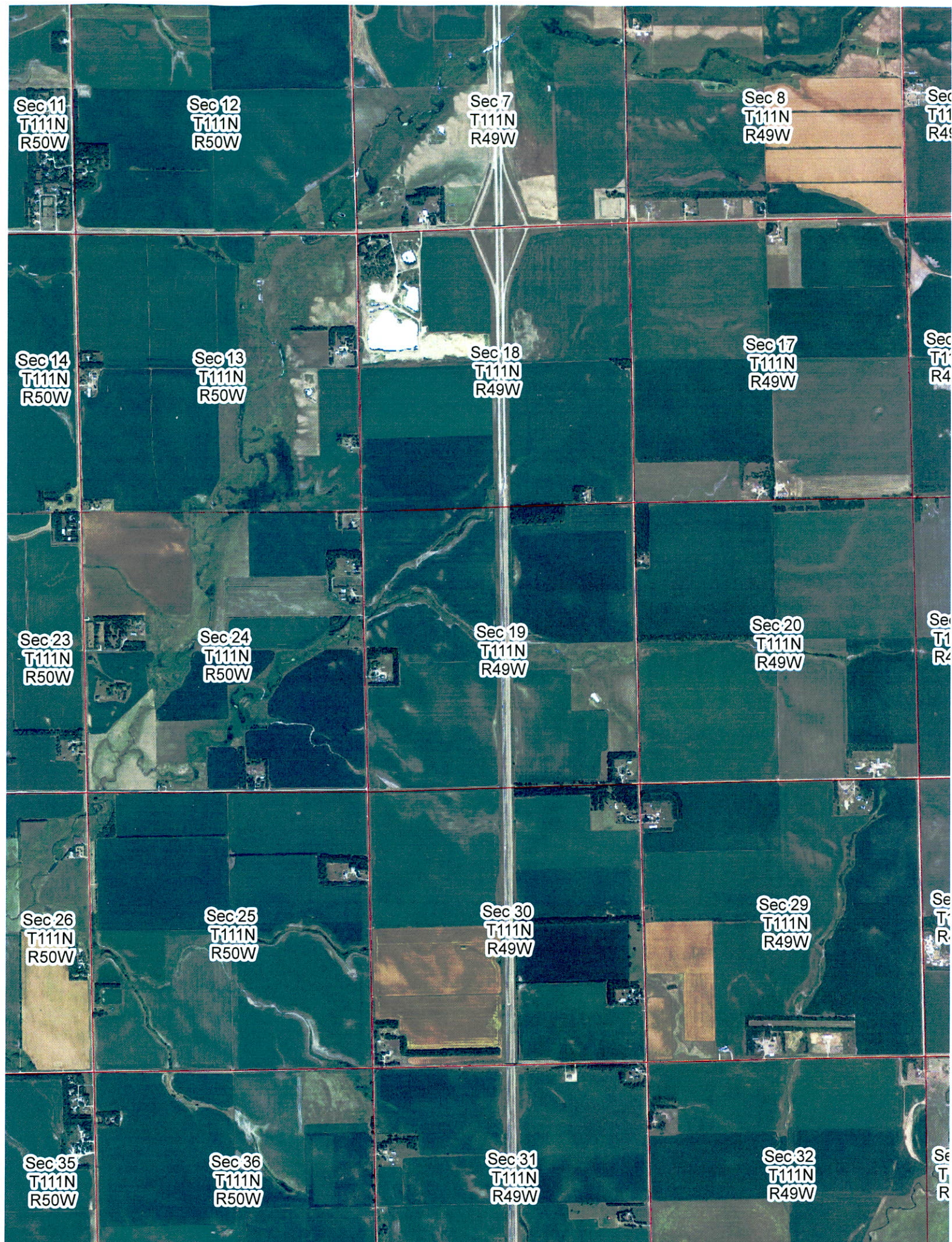
 Paul Moriarty test well fall 2016

Google Earth

206th St

3000 ft





Date:

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date ± 11/28, 20 186

RECEIVED OF Moriarity Rental PO Box 705 Brookings SD 57706

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

Fee for Application for Permit No. <u>8247-3</u> 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. <u>8247-3</u>	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. **07900**

By *James Goodman*
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

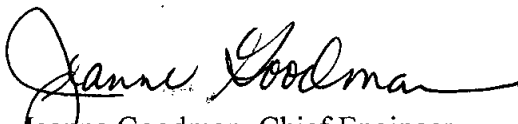
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8247-3, Paul Moriarty Trust**

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. 8247-3, Paul Moriarty Trust, c/o Paul Moriarty, 603 Main Avenue, Brookings SD 57006.

The Chief Engineer is recommending APPROVAL of Application No. 8247-3 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 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.
2. The well authorized by Permit No. 8247-3 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.


Jeanne Goodman, Chief Engineer
January 26, 2017

Report to the Chief Engineer

Water Permit No. 8247-3

Paul Moriarty Trust

January 3, 2017

Water Permit Application No. 8247-3 proposes to appropriate water from the Unnamed Creek management unit of the Big Sioux aquifer at a maximum diversion rate of 1.78 cubic feet per second (cfs). The water is to be used for the proposed irrigation of 144 acres located in the NW $\frac{1}{4}$ Section 19 T111N-49W in Brookings County. The application proposes to divert water from one proposed well approximately 53 feet deep located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 19 T111N-49W in Brookings County.

Aquifer: Unnamed Creek management unit of the Big Sioux aquifer (BS: UC)

Aquifer Characteristics and Hydrogeology

The Big Sioux aquifer is a shallow, glacial aquifer that underlays the Big Sioux River Valley and many of its tributaries (Koch, 1980). It is made up of very permeable, well-sorted glacial outwash sand (mostly medium to very coarse) and gravel (mostly very fine to medium) that overlies a relatively impermeable glacial till (Hamilton, 1989 and Koch, 1980). Near the Big Sioux River and major tributaries, the aquifer is under unconfined conditions; elsewhere it can underlie glacial till and be under confined conditions (Hamilton, 1989).

Based on the geographic location and testhole information, this application proposes to appropriate water from the Unnamed Creek management unit of the Big Sioux aquifer. The management unit is located in the north central part of Brookings County and underlies portions of the drainage area of an unnamed tributary to the Big Sioux River (Hedges et al., 1982). Groundwater in the management unit moves southwest toward the Big Sioux River (Hamilton, 1989). Thickness of the aquifer ranges from less than 10 feet to in excess of 50 feet in some locations (Mathiowetz, 2013).

The area of the Big Sioux: Unnamed Creek aquifer (as mapped by Hedges et al. (1982)) is approximated at 5,800 acres. Hedges et al. (1982) estimated that the aquifer contained 13,050 acre-feet of recoverable water. Hedges et al. (1982) also makes note of several areas in Brookings County where additional groundwater could potentially be located that were not included in the report's estimated aquifer areas due to data limitations. One of these areas is located adjacent to the area mapped by Hedges et al. (1982) as the Big Sioux: Unnamed Creek. Hamilton (1989) and additional drilling confirms the presence of groundwater resources in that area (Water Rights, 2017c). As additional development has occurred in this area, additional water rights/permits have been considered to be appropriating water from the Big Sioux: Unnamed Creek aquifer based on extending the management unit of Hedges et al. (1982) to the upgradient areas. Using the water right/permits that have been considered to be completed into the Big Sioux: Unnamed Creek aquifer as references the extent of this extended area that can be

attributed to the Big Sioux: Unnamed Creek aquifer is at least 4,800 acres. This area is shown in Figure 1.

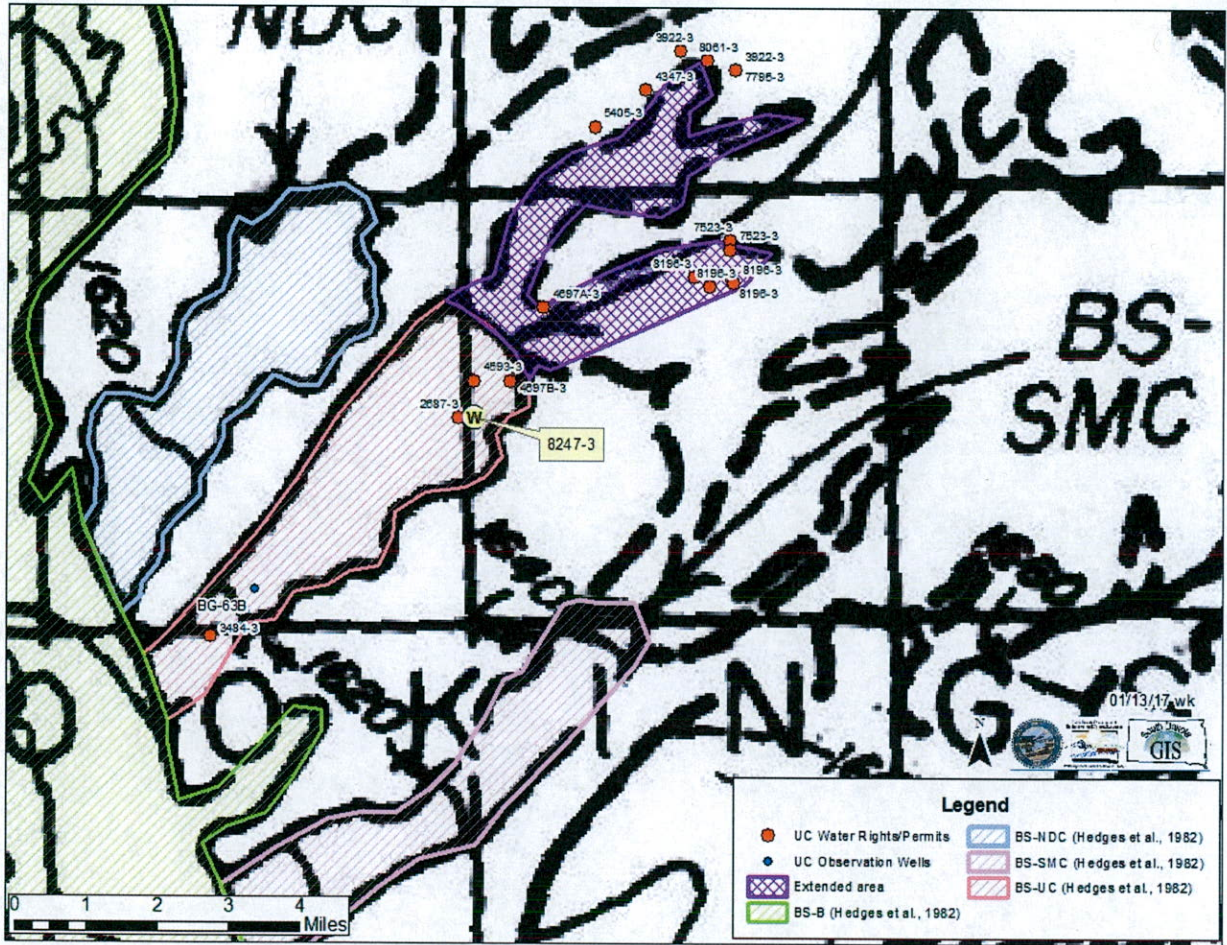


Figure 1: Map of the Big Sioux: Unnamed Creek aquifer (BS:UC) also indicated are the Big Sioux (BS) management unit of Brookings (B), Six Mile Creek (SMC), and North Deer Creek (NDC) (modified from Hedges et. al, 1982; Water Rights, 2017a; Water Rights, 2017b)

Table 1: Summary of Water Rights/Permits Shown in Figure 1 (Water Rights, 2017b)

Permit No.	Name	Type	Status	Rate (cfs)	Acres
2687-3	Rodney/Loretta Foster	IRR	LC	1.88	264
3484-3	Charlotte Nichols	IRR	LC	1.49	104
3922-3	Richard J. Dougherty	IRR	LC	2.56	220
4347-3	Raymond Rennick	IRR	LC	1.11	77.5
4593-3	Marcia Eberle	IRR	LC	1.33	130
4697A-3	Western Trust Company	IRR	LC	1.71	120
4697B-3	Workman Brothers	IRR	LC	1.56	125
5405-3	Larry D. Holler	IRR	LC	1.67	117
7523-3	Ben Culver	IRR	LC	1	152
7795-3	Richard J. Dougherty	IRR	PE	0	110
8061-3	Dougherty Family Associates	IRR	PE	0.34	60
8196-3	Red Willow Httm Brth	IRR	PE	3.56	275

IRR = irrigation, LC = water right, PE = water permit

The management unit is under unconfined conditions in the vicinity of the proposed well location for this application (SDGS, 2017 and Water Rights, 2017c). The testhole report indicates aquifer materials from 2 to 53 feet below grade with a static water level of 10 feet below grade (11/16/2016). This indicates a saturated thickness of 43 feet at the proposed well site.

South Dakota Codified Law (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

Water Permit Application No. 8247-3 proposes to appropriate water from the Unnamed Creek management unit of the Big Sioux aquifer for the purpose of irrigation. 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 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." If the source of the water is older or lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a water distribution system is not involved and the Unnamed Creek management unit of the Big Sioux aquifer is not older or lower than the Greenhorn Formation, therefore the withdrawal/recharge issue must be considered.

Hydraulic Budget

Recharge

Recharge to the aquifer occurs primarily during the spring from infiltration of snowmelt and precipitation (Hamilton, 1989). In Hedges, et al. (1985) recharge rates for the management units of the Big Sioux aquifer were estimated to range from 2.7 to 6.9 inches per year based on observation well analysis, base flow recession analysis, and computer model analysis. Hedges, et al. (1985) further addresses the Unnamed Creek management unit by estimating its recharge range as being toward the high end of 2 to 5.6 inches per year based on observation well analysis performed on data from unconfined aquifers in Eastern South Dakota. Koch (1980) estimated recharge rates to the Big Sioux aquifer in Brookings, Deuel, and Hamlin counties at 6.57 inches per year in the water table portion of the aquifer and 3.29 inches per year in the confined portion of the aquifer via modeling. In considering these ranges, the range for the management units of the Big Sioux aquifer by Hedges, et al. (1985) is likely more reflective of the geohydrologic conditions present in the Big Sioux: Unnamed Creek aquifer. Therefore, the recharge rate of 2.7 to 6.9 inches per year will be used in the examination of the hydraulic budget for Unnamed Creek management unit. Utilizing the estimated area of 5,800 acres by Hedges, et al. (1982) for the Unnamed Creek management unit the average yearly recharge is estimated to be between 1,305 acre-feet per year and 3,335 acre-feet per year. The inclusion of the extend area for this aquifer results in an area of at least 10,600 acres with a recharge range of 2,385 to 6,095 acre-feet per year.

Withdrawals

Withdrawals from the aquifer include evapotranspiration, seepage to surface water, pumping, and groundwater outflow to the Brookings management unit of the Big Sioux aquifer (Hamilton, 1989 and Hedges et al., 1982). Withdrawals from domestic wells are not considered a significant portion of the hydraulic budget for the Big Sioux: Unnamed Creek aquifer due to their relatively low diversion rates and the development of rural water in the area. There are currently 12 water rights/permits appropriating water from the Big Sioux: Unnamed Creek aquifer all of which are for irrigation use.

The Water Rights Program collects and maintains irrigation data from across the state. Yearly appropriations and reported irrigation pumpage for water rights/permits in the Big Sioux: Unnamed Creek aquifer for 1979 to 2015 are shown in Figure 2. Average reported pumpage over the period of record is 333 acre-feet per year, with the maximum reported pumpage occurring in 1988 at 831 acre-feet and minimum reported pumpage occurring in 1980 at zero acre-feet. Between 1990 and 2012 total irrigation appropriation in the aquifer was relatively steady; average reported irrigation for this time period was 350 acre-feet per year. An examination of the water rights in this aquifer for this time period indicate that this usage is from the same eight water rights and can be considered reflective of the average annual withdrawals of those water rights. In recent years four new permits have been issued for the aquifer. These permits authorize the irrigation of a total of 597 acres. Aquifers in the eastern portion of the state, for which the

application rate per irrigated acre has been quantified, have yielded application rates of less than ten inches per acre. This rate can be utilized to estimate withdrawals for the newer permits/rights in the aquifer. Applying this rate to the 597 acres authorized by the newer water permits/rights in the aquifer results in an estimated average annual withdrawal of less than 500 acre-feet per year. Combining this with the average reported pumpage of the eight older water rights, results in an estimated average annual appropriative withdrawal from the management unit of 850 acre-feet per year.

The estimated recharge range for this aquifer and the noted extended area ranges from 2,385 to 6,095 acre-feet per year. The total estimated average annual withdrawal from the aquifer by the 12 water rights/permit in the aquifer is less than 850 acre-feet per year. Therefore, there is a reasonable probability that average annual recharge exceeds average annual withdrawals in the aquifer.

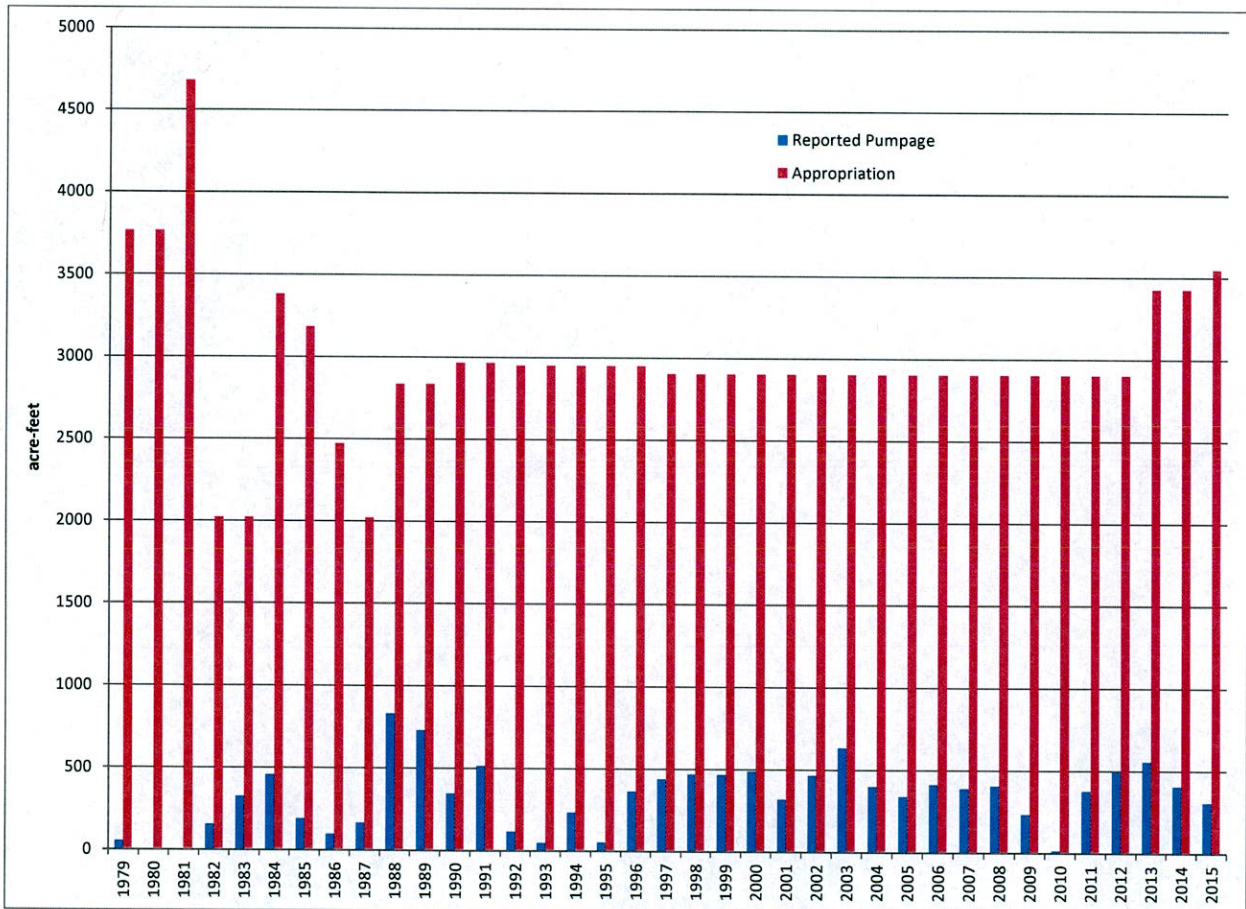


Figure 2: Yearly irrigation appropriations and reported irrigation pumpage over the period of record for the Big Sioux: Unnamed Creek aquifer (Water Rights, 1980-2016)

Observation Wells

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on the record of observation well measurements, in addition to other data, to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated annual recharge.

The Water Rights Program currently monitors one observation well in the Unnamed Creek management unit of the Big Sioux aquifer. This is observation well BG-63B which is located approximately 3.9 miles to the southwest of the proposed well location for this application shown in Figure 1. The hydrograph for this well is shown in Figure 3.

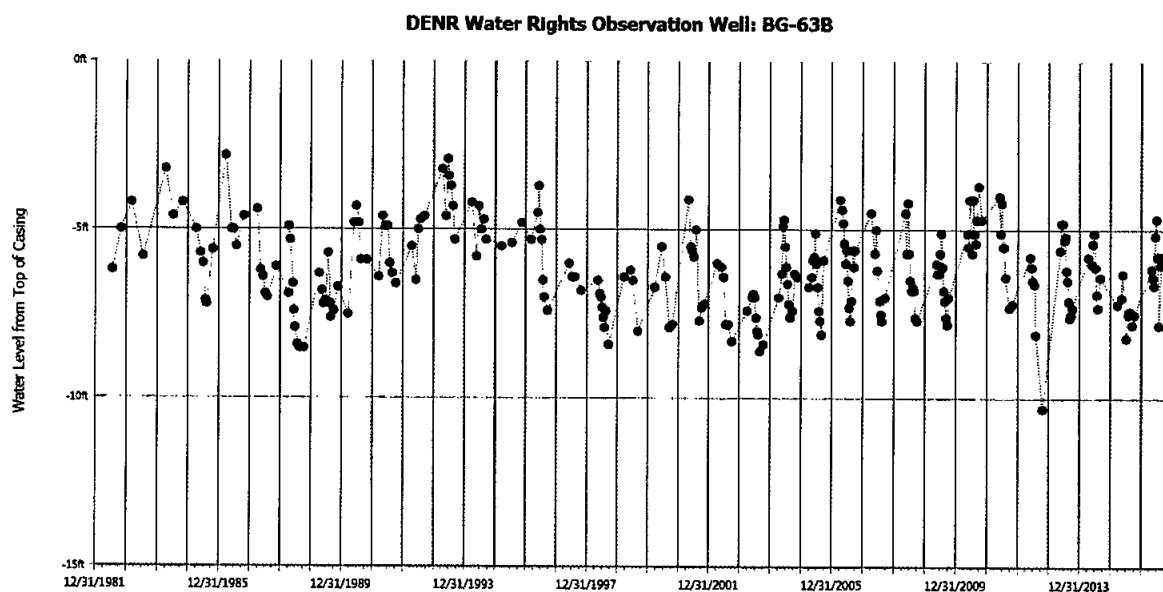


Figure 3: Hydrograph of Observation Well BG-63B (Water Rights, 2017a)

The hydrograph for observation well BG-63B shows a good response to climatic conditions; water levels increase during wet periods and slowly decrease during dry periods. The observation well hydrograph shows little to no effects of pumping. This indicates that natural conditions dominate within the aquifer. A review of hydrographs for observation wells within ten miles of observation well BG-63B monitoring nearby Big Sioux aquifer management units (North Deer Creek, Six Mile Creek, and Brookings) generally show similar features to the hydrograph for BG-63B, for example the multi-year dip in water levels starting in 1996, water level dips in 2012, and water level highs in 1993 and 2010 (Water Rights, 2017a). Therefore, there is a reasonable probability that unappropriated water is available for capture.

Existing Rights

The approximate location of area water rights/permit appropriating water from the Big Sioux: Unnamed Creek are shown in Figure 4, and a summary of these water rights/permits can be found in Table 1. The nearest diversion point to the proposed well location for this application is for Water Right No. 2687-3 located approximately 0.17 miles to the southwest. There is one

domestic well completion report on file with the Water Rights Program within one mile of the proposed well location for this application.

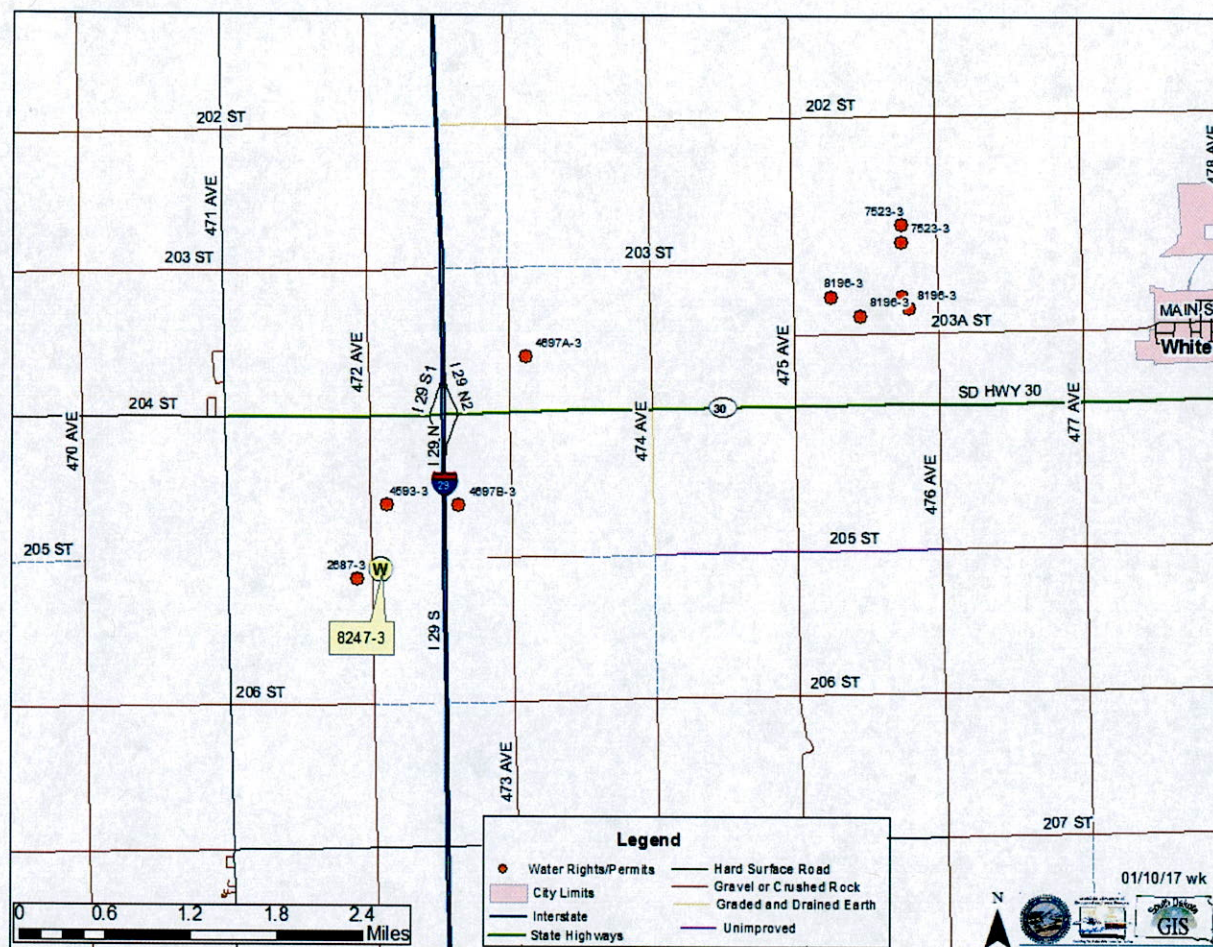


Figure 4: Area water rights/permits currently authorized to appropriate water from the Big Sioux: Unnamed Creek aquifer (Water Rights, 2017b)

In the past, the Water Management Board has recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur. Since the aquifer is under unconfined conditions, drawdown due to pumping would not be expected to be significant far from the well site. Additionally, Hamilton (1989) notes that, “Effects of withdrawals from wells that tap the Big Sioux aquifer generally are small because of extensive recharge and unconfined conditions. Drawdown of water levels is temporary and a few feet at most at distances of about a mile from large-capacity wells.” Utilizing specific capacity calculated from available test pumping data, when available, from well completion reports on file with the Water Rights Program for wells completed in the Big Sioux: Unnamed Creek aquifer average transmissivity from specific capacity can be estimated at 6,500 ft²/d (Water Rights, 2017c and Duffield, G.). The exact amount of drawdown as a result of the diversion requested by this application cannot be quantified without aquifer testing. However, the Theis equation can be used to estimate theoretical drawdown from a pumping well in a confined aquifer. Utilizing a transmissivity of

6,500 ft²/d, a storativity of 0.2 (Hamilton, 1989), and a time of 82 days the calculated drawdown estimate at a distance of 0.17 miles is 3.9 feet (Utah, 2010). The time of 82 days would allow for the application of two feet of water per acre (the statutory limit) at a continuous pumping rate of 1.78 cfs. In examining the application rates per permitted acre of developed water rights/permits in the aquifer utilizing center pivot systems an average rate of 3.8 inches per permitted acre per year results with yearly averages ranging from 0 to 8.9 inches per permitted acre per year. Considering these application rates for center pivot systems in the aquifer, the presented drawdown scenario would be considered a worst case scenario. Additionally, since the proposed well site for this application is under unconfined conditions the amount and distance that drawdown extends from a pumping well would theoretically be expected to be less than that of a confined aquifer. The testhole information for this application indicated 43 feet of saturated thickness in the area of the proposed wellsite for this application. Therefore, nearby adequate wells are not expected to be adversely impacted by this application, if approved.

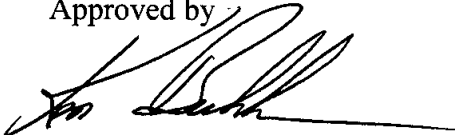
The Big Sioux: Unnamed Creek aquifer is a relatively thin aquifer with a limited amount of water in storage. While the average annual withdrawal would not exceed average annual recharge to the aquifer, conditions may occur when the withdrawal exceeds recharge. When this occurs, water will be removed from storage, consequently reducing the saturated thickness of the aquifer. If the saturated thickness is reduced to the extent that the water rights/permits can no longer pump at their developed or “historically established” rates, this may be considered an adverse impact.

Conclusions

1. Water Permit Application No. 8247-3 proposes to appropriate water from the Unnamed Creek management unit of the Big Sioux aquifer at a maximum diversion rate of 1.78 cfs from one proposed well approximately 53 feet deep located in the NW ¼ NW ¼ Section 19 for the proposed irrigation of 144 acres located in the NW ¼ Section 19; all in T111N-49W.
2. There is a reasonable probability that there is unappropriated water available to meet the request of this application.
3. There is a reasonable probability that this water permit application will not adversely impact nearby adequate wells.


 Whitney Kilts
 SDDENR-Water Rights Program

Approved by


 Ken Buhler
 SDDENR-Water Rights Program

References

- Duffield, G. Transmissivity from Specific Capacity. Accessed Jan. 19, 2017.
<http://aqtesolv.com/forum/transcap.asp>.
- Hamilton, L. 1989. Water Resources of Brookings and Kingsbury Counties, South Dakota. USGS, Huron, SD.
- 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 3: Ground-Water Storage. 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.
- Koch, N. C. 1980. Appraisal of the Water Resources of the Big Sioux Aquifer, Brookings, Deuel and Hamlin Counties, South Dakota. USGS, Huron, SD.
- Mathiowetz, A. 2013. Water Permit No. 7795-3. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- SD Geological Survey. 2017. Lithological Logs Database, SD DENR-Geological Survey Program, Vermillion, SD.
- Utah Division of Water Rights. 2010. Theis Equation Calculation for Aquifer Testing and Well Drawdown. Accessed Jan. 19, 2017.
http://waterrights.utah.gov/wellinfo/theis/theis_input.asp

Water Rights. 1980-2016. "1979-2015 Irrigation Summaries by Aquifer": SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.

Water Rights. 2017a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.

Water Rights. 2017b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2017c. Well Completion Reports. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

RECEIVED

Affidavit of Publication

FEB 16 2017

WATER RIGHTS
PROGRAM

Exhibit "A"

State of South Dakota

ss

County of Brookings

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

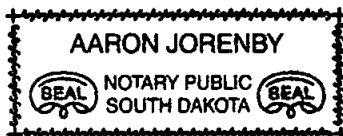
Leg#921 Notice of Application NO. 8247-3 to Appropriate Water

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

February 2, 2017

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-Five Dollars and Sixteen Cents \$25.16



[Handwritten Signature]

3 day of

February

2017

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires February 22, 2020.

Legal 921, 1x, 2/2
NOTICE OF APPLICATION NO. 8247-3 to
Appropriate Water
Notice is given that Paul Moriarty Trust, c/o Paul Moriarty, 603 Main Ave, Brookings SD 57006 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Big Sioux:Unnamed Creek Aquifer (53 feet deep) located in the NW 1/4 NW 1/4 Section 19 for irrigation of 144 acres located in the NW 1/4 Section 19; all in T111N-R49W. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends

APPROVAL of Application No. 8247-3 with qualifications 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. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below. 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 February 13, 2017. 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. If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition. Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of \$25.16.

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, January 26, 2017 1:06 PM
To: registerclassifieds (registerclassifieds@brookingsregister.com)
Subject: 8247-3, Paul Moriarty Trust
Attachments: 8247-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on February 2, 2017.

Paul Moriarty Trust, c/o Paul Moriarty, 603 Main Ave, Brookings SD 57006 (605 692-6333 or c 605 695-6333) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP.

Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



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.**

January 26, 2017

Paul Moriarty Trust
Paul Moriarty
603 Main Ave
Brookings SD 57006

Dear Mr. Moriarity:

Water Permit Application No. 8247-3 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.

NOTICE OF APPLICATION NO. 8247-3 to Appropriate Water

Notice is given that Paul Moriarty Trust, c/o Paul Moriarty, 603 Main Ave, Brookings SD 57006 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Big Sioux:Unnamed Creek Aquifer (53 feet deep) located in the NW 1/4 NW 1/4 Section 19 for irrigation of 144 acres located in the NW 1/4 Section 19; all in T111N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8247-3 with qualifications 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. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

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 February 13, 2017.

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.

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

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

MAR 06 2017

Paul Moriarty Trust
603 Main Ave
Brookings SD 57006

Dear Mr. Moriarty:

Enclosed is Water Permit No. 8247-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,


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

enclosures



8247-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 26, 2018

NOTICE

TO: PAUL MORIARTY TRUST, PAUL MORIARTY, 603 MAIN AVE, BROOKINGS, SD 57006
FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2017 Irrigation Questionnaire(s)

Our records indicate your 2017 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 8247-3. The request for the Questionnaire was dated October 20, 2017. The Water Management Board has directed that owners of water permits who have not submitted the 2017 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) 8247-3 qualification:

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

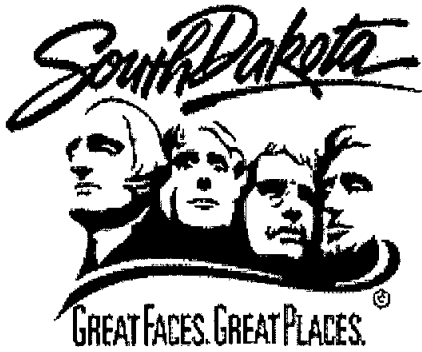
The hearing will be held at **Wednesday, March 7, 2018 at 10:00 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant 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) 8247-3 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 7, 2018** 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: <http://denr.sd.gov/iq.aspx>

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 ENVIRONMENT
and NATURAL RESOURCES**

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

February 1, 2018

8247-3

Paul Moriarty
Paul Moriarty Trust
PO Box 705
Brookings SD 57006 0705

Dear Sir:

I am writing to acknowledge receipt of your 2017 irrigation questionnaire.

You may disregard the January 26, 2018, "Notice" concerning reporting requirements for Water Permit No. 8247-3. 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,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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



8247-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 25, 2019

NOTICE

TO: PAUL MORIARTY TRUST, PAUL MORIARTY, PO BOX 705, BROOKINGS, SD 57006
0705

FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2018 Irrigation Questionnaire(s)

Our records indicate your 2018 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 8247-3. The request for the Questionnaire was dated October 30, 2018. The Water Management Board has directed that owners of water permits who have not submitted the 2018 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) 8247-3 qualification:

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

The hearing will be held at **Wednesday, March 6, 2019 at 10:30 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) 8247-3 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 6, 2019** 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: <http://denr.sd.gov/iq.aspx>

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 ENVIRONMENT
and NATURAL RESOURCES

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

January 31, 2019

8247-3

Paul Moriarty
Paul Moriarty Trust
PO Box 705
Brookings SD 57006

Dear Sir:

I am writing to acknowledge receipt of your 2018 irrigation questionnaire.

You may disregard the January 25, 2019, "Notice" concerning reporting requirements for Water 8247-3. 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,

A handwritten signature in cursive script that reads "Genny McMath".

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

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8247-3

I have this day, April 14, 2023, made a thorough examination of the water use system constructed by Paul Moriarty Trust, 603 Main Ave, Brookings, SD 57006 of Permit No. 8247-3, bearing the priority of November 28, 2016 authorizing the diversion of 1.78 cu. ft. per second of the waters of the Big Sioux-Unnamed Creek Aquifer for irrigation purposes, in Brookings County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Steffl Well Drilling
- 2) No. of Wells: 1
- 3) Depth(s): 53 feet
- 4) Well log is available Y

Casing:

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

Screen:

- 1) Type: manufactured
- 2) Length: 15 feet
- 3) Static water level: 12 feet

Pump:

- 1) Make Submersible
- 2) Model & size: Unknown
- 3) Capacity 700 GPM

Motor:

- 1) Make, model & horsepower rating: Unknown

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

- 1) Type PVC
- 2) Size 8 inches
- 3) Length 1720 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1225 feet
- 3) Number of towers: 6
- 4) End gun Y
- 5) Capacity 700 GPM

Chemigation Equipment: none

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 good condition with the point(s) of diversion located as follows: WELL LOCATION
From the NW corner Sec 19 T111N R49W, 50 ft S & 50 ft E, Lat 44.4125833 Long -96.76702778
(NW ¼ NW ¼).
2. The works are capable of diverting and conveying to the place of use 1.56 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 Sec 19 T111N R49W
NW ¼ NW ¼ 32.2 acres
NE ¼ NW ¼ 33.0 acres
SE ¼ NW ¼ 31.8 acres
SW ¼ NW ¼ 30.1 acres
comprising a total of 127.1 acres of land and the license should be issued for 1.56 cfs
3. All structures, wells and lands on map Y

F. Comments associated with the project:

- The irrigated acreage was determined with the aid of FSA imagery and ArcMAP software.
- The pump rate reported in a recent Irrigation Questionnaire was used to establish the system flow capacity.
- The mailing address and the telephone number in the permit materials are current.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: April 15, 2023



0 0.05 0.1 0.2 0.3 0.4 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program

8247-3

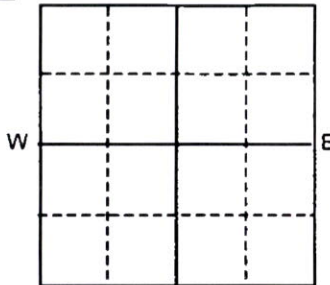
SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 SE 1/4 Sec 19 Twp 111 Rg 49County Brookings

North

Please mark well
location with an "X"

Well Completion Date

April 26, 2017

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:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	12.00 IN	0.0 FT	38.0 FT	17.50 IN
LB/FT	12.00 IN	53.0 FT	63.0 FT	17.50 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Quick Grout	6	Lb/gal	0.0 Ft	28.0 Ft
Red Flint	35	Lb/gal	28.0 Ft	63.0 Ft

Describe grouting procedure
Tremmy

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 12.00 Inches Length 15.0 FeetMaterial stainless steelSlot Size Set From 38.0 Feet to 53.0 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: Paul Moriarty

Business Name:

Address: 603 Main AVECity, State, Zip: Brookings SD 57006

WELL LOG:

DEPTH

FORMATION			FROM	TO
top soil	black	M	0	2
gravel	tan		2	53
clay	lt gray	M	53	63

STATIC WATER LEVEL 12.0 FEETIf flowing: closed in pressure PSIGPM flow through Inch pipeControlled by ☐ Valve ☐ Reducers ☐ Other Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: submersible
☐ Bailed

☐ Other

Pumping Level Below Land Surface

23.1 Ft. After 6.0 Hrs. pumped 600.0 GPM Ft. After Hrs. pumped GPMIf pump installed, pump rate: GPM

REMARKS

44-24-55.3N96-46-1.3W

Kris VanHeuveln

Big Sioux: Unnamed Creek m 2016This well was drilled under license # 463 and this report is true and accurate.Drilling firm: Steffl Drilling & Pump Inc

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

JAN 02 2018

Date: May 25, 2017WATER RIGHTS
PROGRAM



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

APR 19 2023

8247-3

Paul Moriarty Trust
PO Box 705
Brookings SD 57006-0705

Dear Sir:

Enclosed is Water License No. 8247-3. 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 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.

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

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 8247-3

(1) Paul Moriarty Trust, PO Box 705, Brookings SD 57006 made Application No. 8247-3, November 28, 2016, for a water permit to divert 1.78 cubic feet of water per second from ground water, one well (Big Sioux Unnamed Creek Aquifer), Brookings County, South Dakota for irrigation purposes. Permit No. 8247-3, with a priority date of November 28, 2016, was approved February 13, 2017, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before February 13, 2022, and for the application to beneficial use of water on or before February 13, 2026.

(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 1.56 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 50'S & 50'E of the NW corner of Section 19, T111N, R49W (NW ¼ NW ¼)
Latitude 44.4125833, Longitude -96.7670277

(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:

T111N, R49W Section 19	NW ¼ NW ¼	32.2 acres
	NE ¼ NW ¼	33.0 acres
	SE ¼ NW ¼	31.8 acres
	SW ¼ NW ¼	30.1 acres
Total		127.1 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Paul Moriarty Trust, PO Box 705, Brookings SD 57006 the holder and/or owner of Water Right No. 8247-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second from ground water, one well (Big Sioux Unnamed Creek Aquifer) with a priority date of November 28, 2016 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8247-3 and subject to the following qualifications:

- The well approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right 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 well authorized by Permit No. 8247-3 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. *The well was drilled in April 2017 by Steffl Drilling & Pump Inc. A copy of the well completion report is on file with the Water Rights Program.*

continued

- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

Eric Gronlund, Chief Engineer

Water Rights Program

Department of Agriculture and Natural Resources

APR 19 2023

date

