

WATER PERMIT NO. 7913-3

Name of Applicant: Lance Mennenga

Address: 18804 463rd Ave, Castlewood SD 57223 Phone: 605 881-2304

Amount of Water Claimed: 1.33 cfs Total Acres: 119 acres

Source of Water Supply: groundwater (2 wells)

Water to be used for: irrigation County: Hamlin

Type of Waste Disposal System:

Location: 6 miles southeast of Castlewood

PRIORITY Date Received: 10-17-13 Application/License Fee: \$ 950

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

Remarks:

Diversion Point: S 1/2 SW 1/4 Sec 14-T114N-
R51W

Land to be Irrigated: SW 1/4 Sec 14-T114N-R51W

Depth of Well: 30 feet deep

Well Driller: Steffl Well Drilling

Remarks:

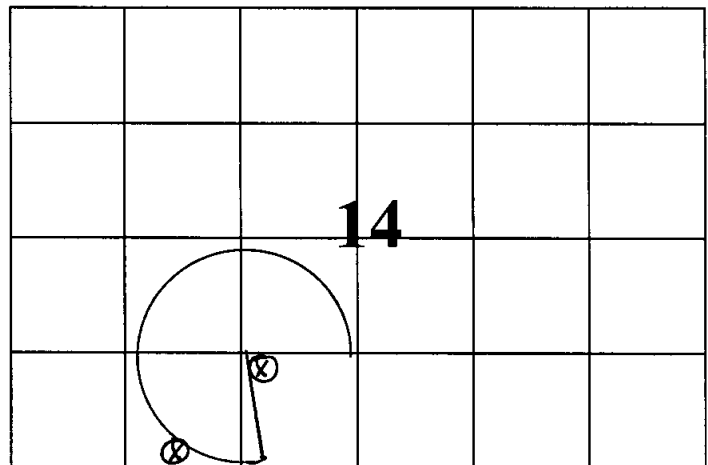
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 10-17-13

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

(office use only)
No. 7913-3 Hydrologic Unit 10170202
Basin Loup River 605-793-2293
Newspaper Hamlin Co. Republican Box SD Castlewood 57223
Public Opinion Box 10 Watertown 57201

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Application For Permit To Appropriate Water For Irrigation

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

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

1. Name to Appear on Irrigation Permit Lance Mennenga

(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 18804 463rd Ave Castlewood SD 57223
(Address) (City) (State) (Zip Code)

Home Phone _____ Cell 605 881-2304 Email _____

2. Amount of water claimed 1.34 *CFS or 600 **GPM ***AF Total Acreage 119A
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Wells

4. Location of point of diversion 2 wells #1 - SW 1/4 of the SW 1/4 Sec 14 114N 51W

(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

#2 - SE 1/4 of the SW 1/4 Sec 14 114N 51W County Hamlin

5. County or counties where water will be used Hamlin

6. Annual period during which water is to be used May - September 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
SW 1/4 of the SW 1/4 sec. 14 114N-51W	38		
NW 1/4 of the SW 1/4 sec. 14 114N-51W	38		
NE 1/4 of the SW 1/4 sec. 14 114N-51W	38		
SE 1/4 of the SW 1/4 sec. 14 114N-51W	5		

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

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

**SOUTH DAKOTA
WATER PERMIT NO. 7913-3**

Date of first receipt of application October 17, 2013.

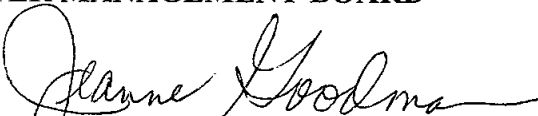
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7913-3 to Lance Mennenga, 18804 463rd Ave, Castlewood SD 57223 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7913-3 appropriates 1.34 cubic feet of water per second from two wells to be completed into the Big Sioux:Brookings Aquifer (30 feet deep) located in the S 1/2 SW 1/4 Section 14 for irrigation of 119 acres located in the SW 1/4 Section 14; all in T114N-R51W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is October 17, 2013.
4. The date of approval of Permit No. 7913-3 is December 16, 2013.
5. One-fifth of the construction is to be completed on or before June 16, 2016.
6. All construction is to be completed on or before December 16, 2018.
7. Water is to be put to beneficial use on or before December 16, 2022.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7913-3 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, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 15 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 2 Have test holes been drilled ☒ Yes ☐ No Drilled by Sto PFI 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 30 Depth to Top of Water Bearing Material 4 Depth to Water from Surface 4

d) Distance to nearest existing domestic well:

On applicant's property None On property owned by others None

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)

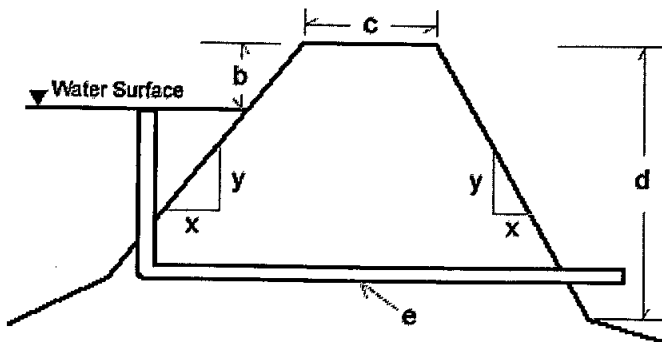
Upstream

Downstream

h) Surface Area of Impoundment

i) Storage Acre Feet

j) Drainage Area Above Dam Acres



LANCE MENNENGA

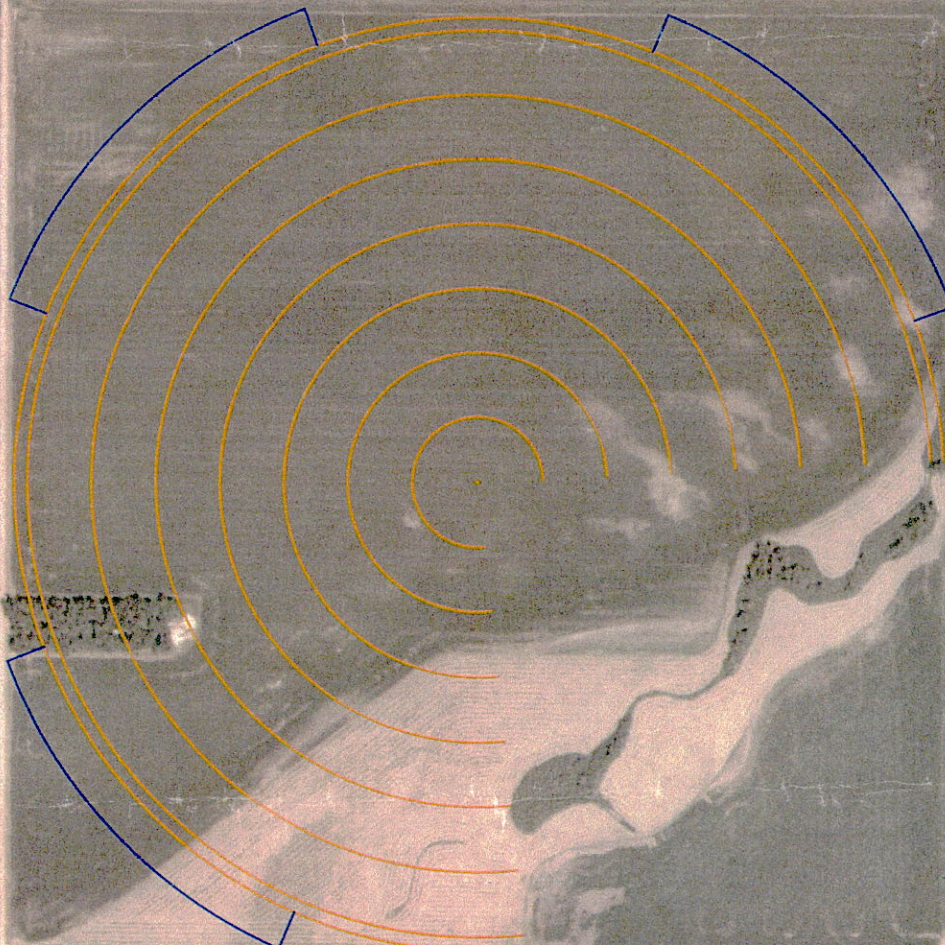


PPLS:14_114N_51W



LANCE MENNENGA

2 Pivot + Flex Point
180.0 | ALL Span
180.0 | ALL Span
180.0 | ALL Span
180.0 | ALL Span
180.0 | ALL Span
180.0 | ALL Span
180.0 | ALL Span
36.2 | 7K-8K Overhang
110 | SR100 EndGun
Total : 1298.2 ft
Total Irrigated Area : 103.5 ac



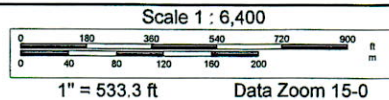
Farmers
Implement and Irrigation
Brookings, SD

VALLEY 

Data use subject to license.
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www.delorme.com



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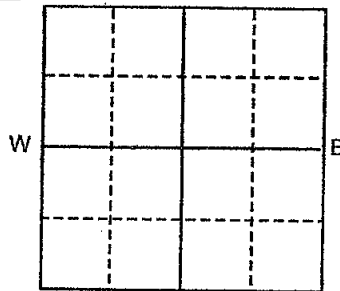


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 SW 1/4 Sec 14 Twp 114 Rg 51County Hamlin

Please mark well location with an "X"



Well Completion Date

November 8, 2012

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 _____

DEPTH	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
HS Bentonite	3	Lb/gal	0.0 Ft	55.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremmie

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ 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? _____

 L which water quantity sample sent for analysis

Well Owner: Lance & Linda MennengaBusiness Name: L & M IncAddress: 18804 463rd AveCity, State, Zip: Castlewood SD 57223

WELL LOG:

			DEPTH	
FORMATION			FROM	TO
Top Soil	Blk	M	0	1
Clay	Tan	M	1	4
Gravel	Wht/Tan	C	4	9
Clay	Tan	M	9	12
Gravel	Tan	C	12	30
Clay	Gry	M	30	55

STATIC WATER LEVEL

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
Test Hole #7

OCT 17 2013

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Doc

This 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: _____

Date: _____

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 10/17, 20 13

RECEIVED OF L & M Inc 18804 463rd Ave Castlewood SD 57223

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

Fee for Application for Permit No. <u>7913-3</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>7913-3</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	950 00

No. **06463**

By Jillanne Goodman
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7913-3, Lance Mennenga**

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. 7913-3, Lance Mennenga, 18804 463rd Avenue, Castlewood SD 57223.

The Chief Engineer is recommending APPROVAL of Application No. 7913-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7913-3 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
November 22, 2013

NOTE: The proposed well sites are located outside the current delineated boundary of the Big Sioux:Brookings Aquifer. Therefore the actual presence of this aquifer or ability to produce the requested amount of water is not known.

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7913-3

Lance Mennenga

November 6, 2013

Water Permit Application No. 7913-3 proposes to appropriate water at a maximum diversion rate of 1.34 cubic feet per second (cfs) from two wells to be completed into the Brookings management unit of the Big Sioux aquifer. The wells are to be approximately 30 feet deep, located in the S½ of the SW¼ of Section 14, T114N-R51W in Hamlin County. Water will be used to irrigate 119 acres located in the SW¼ of Section 14, T114N-R51W.

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

HYDROGEOLOGY:

The proposed well sites are located outside the current delineation of the Big Sioux: Brookings aquifer (Stonesifer, 2013). However, any aquifer materials found at the proposed depth at this location would be considered part of the Big Sioux aquifer. The actual presence of this aquifer or ability to divert water at the proposed rate at these well sites cannot be determined.

In total the Brookings management unit of the Big Sioux aquifer underlies approximately 323,000 acres of Brookings, Codington, Deuel, Hamlin, Kingsbury, and Moody Counties (Hamilton, 1989; Hansen, 1988; Hedges and others, 1982; Kume, 1985; Stonesifer, 2013). The Brookings management unit is hydraulically connected to the North management unit to the north, the Battle Creek aquifer to the west, the North Deer Creek, Unnamed Creek, Six Mile Creek, and Aurora management units to the east, and the Moody management unit to the south (Hedges and others, 1982). The aquifer is hydraulically connected to many surface waters, specifically the Big Sioux River. Water in the aquifer generally moves from north to south and locally towards the river (Hamilton, 1989).

The Big Sioux: Brookings aquifer is an alluvium mantled outwash consisting of well-sorted, permeable, medium to coarse sand and fine to medium gravel. Generally, the aquifer is underlain by till and, when buried, overlain by till. The aquifer is often under unconfined conditions near the Big Sioux River and can be confined elsewhere (Hamilton, 1989). From the average thickness of 30 feet and a commonly assumed storativity of 0.15, the Big Sioux: Brookings aquifer is estimated to contain 1,453,000 acre-feet (ac-ft) of recoverable water in storage (Hedges and others, 1982; Hamilton, 1989; Kume, 1985; Stonesifer, 2013). From a test hole in the area of proposed well sites, aquifer materials were encountered from four to 30 feet below ground surface.

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 issue must be considered.

HYDROLOGIC BUDGET:

Recharge:

Recharge to the Big Sioux: Brookings aquifer occurs through infiltration of precipitation in areas where the aquifer is at or near land surface, seepage through till, lake deposits, and underlying aquifers, and inflow from the Big Sioux River and its tributaries during times of relatively high surface water levels (Hamilton, 1989; Kume, 1985).

Hedges and others (1985) determined the average recharge rate to the entire Big Sioux aquifer system by base flow analysis to be 6.5 inches per year (in/yr). Koch (1980) estimated average recharge to the Big Sioux aquifer in Brookings, Deuel, and Hamlin Counties by modeling to be 6.57 in/yr to the unconfined portions. Kume (1985) estimated recharge to the Big Sioux aquifer in Hamlin and Deuel Counties to be 5.11 in/yr. Hansen (1988) estimated recharge to the Big Sioux aquifer in Moody County by modeling to be on average 4.85 in/yr. Hedges and others (1985) estimated recharge specifically of the Brookings management unit by observation well analysis to be 4.0 in/yr; this is considered the best data available due to its emphasis on the management unit. Applying the recharge rate of this management unit to the area, recharge to the Big Sioux: Brookings aquifer is estimated to be 107,000 acre-feet per year (ac-ft/yr).

Koch (1980) indicates that even more water could be pumped than the estimated average recharge based on the concepts of induced recharge from surface waters due to pumpage and capture of water to pumpage prior to evapotranspiration or natural outflow.

Discharge:

Discharge from the aquifer occurs through evapotranspiration in areas where the aquifer is at or near land surface, outflow to the Big Sioux River and its tributaries during times of relatively low surface water levels, and well withdrawals (Hamilton, 1989; Kume, 1985). There are a total of 246 water rights/permits appropriating water from the aquifer. Water rights/permits limited by annual volume currently appropriate 5,034 ac-ft/yr of water, and water rights/permits limited by diversion rate currently appropriate water at a total maximum diversion rate of 18.939 cfs. There are a total of nine future use permits reserving a total of 7,327 ac-ft/yr of water from the aquifer (Water Rights, 2013b).

Brookings-Deuel-Kingbrook and Sioux rural water systems and the municipalities of Lake Norden and Volga are required to report withdrawals from the Big Sioux: Brookings aquifer for some or all water rights/permits. Reported use of a public water supply system may not be an accurate reflection of expected use. Eventual full use of an appropriation for public water supply systems is often expected to account for future growth. Each of these entities have future use permits and subsequently any appropriation permitted but not put to beneficial use can be reverted back to the future use reservation (Water Rights, 2013b).

Several municipalities are connected to a rural water system that is either used as a primary or standby, “back-up,” source. The municipalities of Clear Lake, Hayti, and Bruce currently use a rural water system as a primary source and their water rights/permits are retained as a standby source for security, such as fire protection. These water rights are all limited by diversion rate, totaling 2.81 cfs (Water Rights, 2013b).

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits and future use permits at the current appropriation/reservation amount can be estimated by assuming:

- 1) reported use of municipalities and rural water systems still expecting future growth is not yet considered,
- 2) water rights/permits limited by an annual volume will pump the entire volume appropriated annually,
- 3) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time,
- 4) future use permits can be fully developed, and
- 5) water rights/permits authorized to municipalities using rural water systems as a primary source will not withdraw water.

Considering these water use expectations, non-irrigation water appropriations/reservations are expected to account for 19,368 ac-ft/yr to be withdrawn from the Big Sioux: Brookings aquifer (Water Rights, 2013b).

While there are numerous domestic wells on file, many are no longer used as primary sources since rural water systems have been introduced in the area. Considering this, and the relatively small withdrawal ability and authorization of a domestic well, the annual quantity of water withdrawn due to domestic wells is not significant to the hydrologic budget of the Big Sioux: Brookings aquifer (Water Rights, 2013c).

The average of the annual irrigation pumpage is currently 8,684 ac-ft/yr, but varies from a minimum of 1,043 ac-ft/yr to a maximum of 19,483 ac-ft/yr (Water Rights, 1980-2013). This data indicates a huge variability in the data set, which can be seen in Figure 1. The annual irrigation pumpage can be attributed to two major factors: climatic and economic conditions. For example, during the drought and high commodity prices of 2012, the irrigation pumpage was much greater than the average. While the relationship between these variables is obvious, these variables are difficult to predict.

The annual irrigation appropriation from this aquifer has remained fairly steady until just recently. Since the beginning of 2013, 20 water permits have been approved, authorizing

irrigation of 2,957.5 acres. Annual use of these permits has not yet been reported. There are also several pending applications for this aquifer. Water Permit Application Nos. 7889-3, 7896-3, 7902-3, and 7907-3 propose to appropriate water for irrigation to a total of 641 acres (Water Rights, 2013b). While the maximum allowable application rate is two feet per acre per year (ft/ac/yr), in most instances irrigators apply less than one ft/ac/yr. To be realistic yet conservative, assuming an application of one ft/ac/yr results in an expected use of these newly approved and pending permits, if approved, of 3,599 ac-ft/yr.

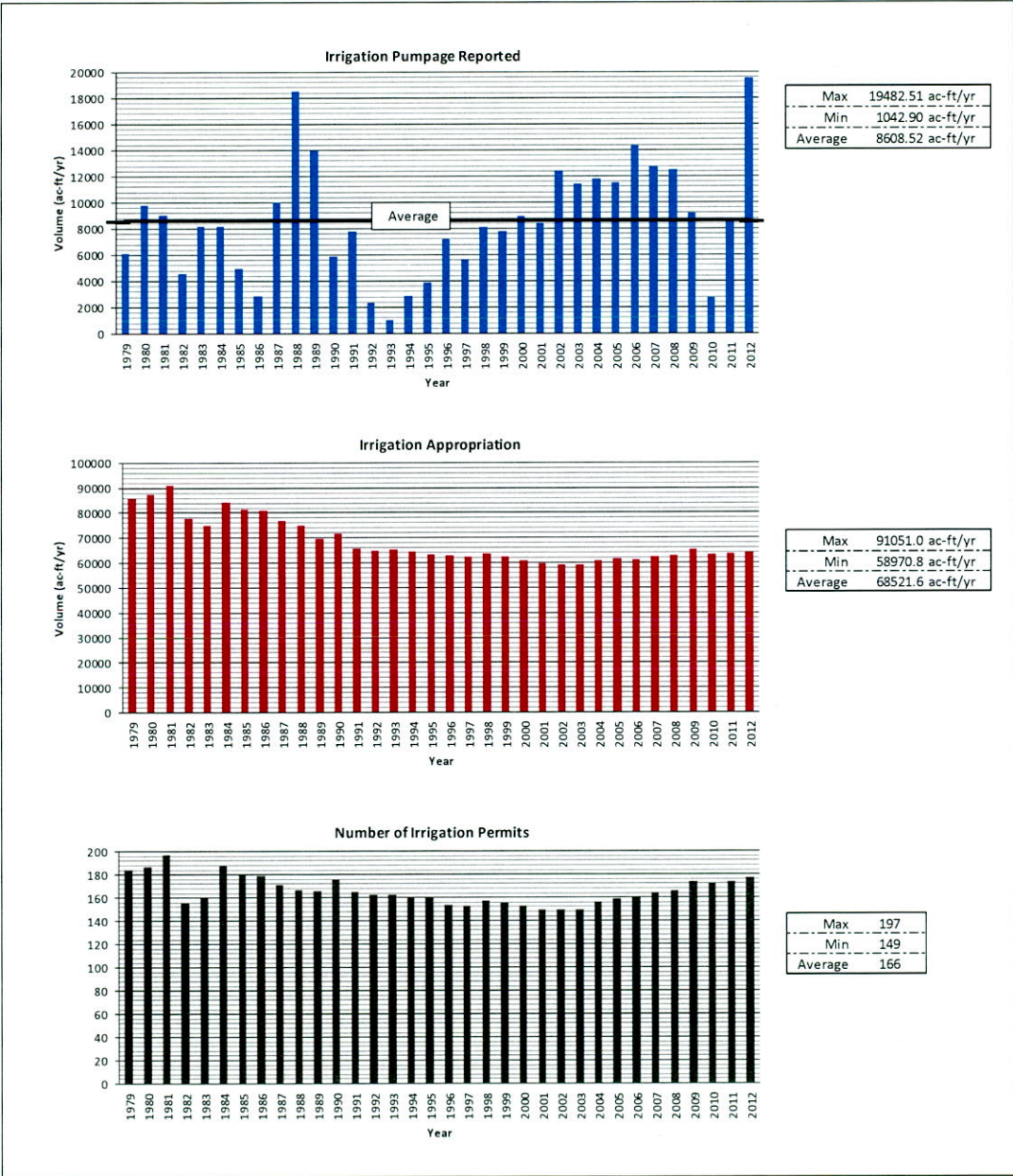


Figure 1: Historic irrigation water use from the Big Sioux: Brookings aquifer (Water Rights, 1980-2013)

Hydrologic Budget:

Recently, courts have ruled that if average annual recharge is used, average annual withdrawals should also be used to determine if unappropriated water is available and that data must be presented to show that it is probable that the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (Memorandum Decision, April 29, 2005; Memorandum Decision, April 11, 2012).

The average annual recharge to the Big Sioux: Brookings aquifer is estimated to be 107,000 ac-ft/yr. The average annual withdrawal is expected to be at most 31,651 ac-ft/yr. Therefore, unappropriated water is available from the Big Sioux: Brookings aquifer to support the proposed appropriation.

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 DENR-Water Rights Program currently monitors 54 observation wells completed into the Big Sioux: Brookings aquifer that produce representative data of the aquifer. Most of these wells record steady or increasing water levels in the aquifer over the period of record (Water Rights, 2013a). While a few observation wells appear to record a decreasing water level trend, further analysis reveals that these decreases are a record of the drawdown due to pumpage of new wells in the area and do not reflect an overall decrease in water availability in the aquifer. Considering this, there are no observation wells in the Big Sioux: Brookings aquifer that indicate that withdrawals have exceeded recharge.

The nearest observation well, HN-77E, is located approximately two miles southwest of the proposed well sites. The hydrograph of this observation well is shown in Figure 2 (Water Rights, 2013a). These hydrographs are typical of many observation wells recording water levels in the Big Sioux: Brookings aquifer.

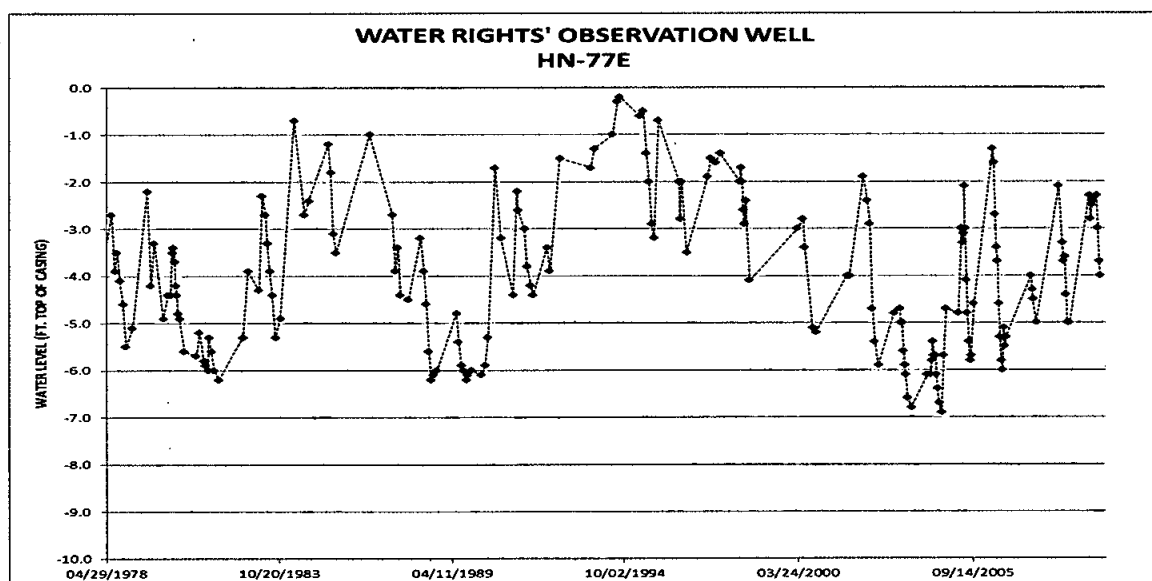


Figure 2: Hydrograph for observation well HN-77E (Water Rights, 2013a)

Water levels in these observation wells often display cyclic conditions, recharging during wet years and declining during dry years. Pumpage is generally masked by climatic conditions. The lowering of the water table shown in some wells is attributed to area pumping and drawdown effects. The water table has since remained at a similar stage since the development, indicating that at the current level of development recharge to and natural discharge from the aquifer exceeds well withdrawal. Therefore, unappropriated water is available from the Big Sioux: Brookings aquifer to support the proposed appropriation.

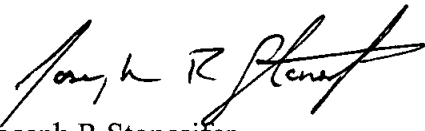
EXISTING WATER RIGHTS:

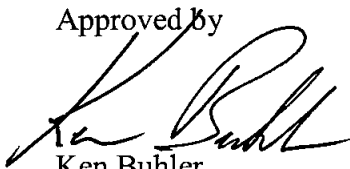
There are several wells completed into the Big Sioux aquifer in the area of the proposed well sites. There are two water rights/permits appropriating water and no domestic wells of file completed into the Big Sioux: Brookings aquifer within one mile of the proposed well sites. Between one and two miles, there are nine water rights/permits appropriating water and two domestic wells on file completed into the aquifer. The nearest well is located approximately two thirds of a mile from the proposed well sites (Water Rights, 2013b; Water Rights, 2013c).

The water table conditions of the aquifer in this area dictate that water level drawdown due to pumping would probably not extend far from the well. 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.

CONCLUSIONS:

1. The water permit application proposes to withdraw groundwater at a maximum diversion rate of 1.34 cfs from two wells to be completed into the Brookings management unit of the Big Sioux aquifer in Hamlin County for the irrigation of 119 acres.
2. There is a reasonable probability that unappropriated water is available from the Parker Centerville aquifer to supply the proposed appropriation.
3. The proposed wells are not expected to adversely impact nearby adequate wells.


Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by

Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hamilton, L.J. 1989. Water Resources of Brookings and Kingsbury Counties, South Dakota. Water-Resources Investigations Report 88-4185, 82 p. USGS, Huron, South Dakota.
- Hansen, H.S. 1988. Appraisal of the Water Resources of the Big Sioux Aquifer, Moody County, South Dakota. Water-Resources Investigations Report 87-4057. 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.
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RECEIVED

DEC 11 2013

Form 8

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Hamlin) SS

I, LeeAnne Dufek

certify that the attached printed Notice was
taken

from the Hamlin County
Republican

printed and published in Castlewood

County of Hamlin and

state of South Dakota. The notice was
published

in the newspaper on the following date:

Dec. 4, 2013

Cost of Printing \$ 22.11

LeeAnne Dufek
(Signature)

Publisher
(Title)

12-10-13
(Date Signed)

NOTICE OF
APPLICATION NO. 7913-3
TO APPROPRIATE WATER

Notice is given that Lance Men-
nenga, 18804 463rd Ave, Castlewood
SD 57223 has filed an application
for a water permit to appropriate
1.34 cubic feet of water per second
from two wells to be completed into
the Big Sioux-Brookings Aquifer (30
feet deep) located in the S 1/2 SW
1/4 Section 14 for irrigation of 119
acres located in the SW 1/4 Section
14; all in T114N-R51W.

Pursuant to SDCL 46-2A-2, the
Chief Engineer recommends AP-
PROVAL of Application No. 7913-3
because 1) unappropriated water is
available, 2) existing rights will not
be unlawfully impaired, 3) it is a ben-
eficial use of water, and 4) it is in the
public interest. In accordance with
SDCL 46-2A-23, the Chief Engineer
will act on this application, as rec-
ommended, unless a petition is filed
opposing the application or the ap-
plicant 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 sched-
uled 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 oppos-
ing 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 Build-
ing, 523 E Capitol, Pierre SD 57501
(605 773-3352)" and the applicant's
mailing address is given above. A
petition filed by either an interested
person or the applicant must be filed
by December 16, 2013.

The petition may be informal, but
must include a statement describ-
ing the petitioner's interest in the
application, the petitioner's reasons
for opposing or supporting the appli-
cation, and the signature and mail-
ing 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 ap-
plication. Steven M. Pirner, Secre-
tary, Department of Environment and
Natural Resources.

Published Dec. 4, 2013, at total
cost of \$22.11.

RECEIVED

DEC 10 2013

WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
County of Codington)

I, Monica K. Saathoff

certify that the attached printed Notice was
taken

from the Watertown Public Opinion

printed and published in Watertown

County of Codington and

state of South Dakota. The notice was
published

in the newspaper on the following date:

December 4th, 2013

Cost of Printing \$57.29

Monica K. Saathoff
(Signature)

Bookkeeper

(Title)

December 4th, 2013

(Date Signed)

DEPARTMENT OF ENVIRON- MENT AND NATURAL RESOURCES

NOTICE OF APPLICATION NO. 7913-3 to Appropriate Water

Notice is given that Lance Mennenga, 18804 463rd Ave, Castlewood SD 57223, has filed an application for a water permit to appropriate 1.34 cubic feet of water per second from two wells to be completed into the Big Sioux-Brookings Aquifer (30 feet deep) located in the S 1/2 SW 1/4 Section 14 for irrigation of 119 acres located in the SW 1/4 Section 14; all in T114N-R51W.

Pursuant to SDCL 46-2A-2,

the Chief Engineer recommends APPROVAL of Application No. 7913-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in

opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 16, 2013.

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 peti-

tioner'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 approximate cost of \$52.25. (December 4, 2013)

All legal notices in the Public Opinion and other South Dakota newspapers can be found at
www.sdpublicnotices.com

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Coteau Shopper,
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(50,000 person readership),
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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

November 22, 2013

Hamlin County Republican
PO Box 50
Castlewood SD 57223

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7913-3 to Appropriate Water. Please publish the notice once on December 4, 2013. 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 Lance Mennenga, 18804 463rd Ave, Castlewood SD 57223 (Ph # 605-881-2304).

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

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

November 22, 2013

Public Opinion
PO Box 10
Watertown SD 57201

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7913-3 to Appropriate Water. Please publish the notice once on December 4, 2013. 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 Lance Mennenga, 18804 463rd Ave, Castlewood SD 57223 (Ph # 605-881-2304).

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

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

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

November 22, 2013

Lance Mennenga
18804 463rd Ave
Castlewood SD 57223

Dear Mr. Mennenga:

Water Permit Application No. 7913-3 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 Hamlin County Republican printed at Castlewood SD (Ph # 605-793-2293) and the Public Opinion printed at Watertown SD (Ph # 605-886-6901). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352
enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish the Notice on December 4, 2013. 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. 7913-3 to Appropriate Water

Notice is given that Lance Mennenga, 18804 463rd Ave, Castlewood SD 57223 has filed an application for a water permit to appropriate 1.34 cubic feet of water per second from two wells to be completed into the Big Sioux:Brookings Aquifer (30 feet deep) located in the S 1/2 SW 1/4 Section 14 for irrigation of 119 acres located in the SW 1/4 Section 14; all in T114N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7913-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 16, 2013.

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

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



JAN 15 2014

Lance Mennenga
18804 463rd Ave
Castlewood SD 57223

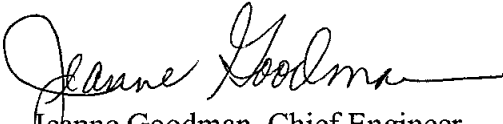
Dear Mr. Mennenga:

Enclosed is Water Permit No. 7913-3 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

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 7913-3**

I have this day, November 21, 2024, I talked to Lance Mennenga 18804 463rd Ave, Castlewood, SD 57223 on the phone (605/881-2304) regarding the status of Permit No. 7913-3, bearing the priority of October 17, 2013 authorizing the diversion of 1.34 cu. ft. per second of the waters of Big Sioux:Brookings Aquifer for irrigation purposes, in Hamlin County.

Mr. Mennenga indicated that he could not find sufficient water (75 gpm) for irrigation purposes on his property and plans to use the well for domestic purposes in the future.



Darrell DeBoer
Water Rights Inspector
DENR, Water Rights Program

Date report completed: November 21, 2024



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

February 27, 2025

7913-3

Lance Mennenga
18804 463rd Ave
Castlewood SD 57223

Dear Mr. Mennenga:

I'm writing you today in reference to Water Permit No. 7913-3. This permit authorized the diversion of 1.34 cfs (600 gpm) from 2 wells completed into the Big Sioux: Brookings Aquifer, for the irrigation of 119 acres located within the SW ¼ Section 14-T114N-R51W, with construction to be completed by December 16, 2018.

On November 21, 2024, Water Rights Program staff engineer Darrell DeBoer, conducted an on-site inspection for the purpose of licensing the irrigation system. At the time of inspection, it was noted that you were unable to locate sufficient water to develop irrigation; however, a well was completed that you wished to maintain for domestic purposes.

Due to the system not being constructed by the deadline outlined in the permit, the Water Rights Program will be pursuing cancellation of Permit No. 7913-3, due to non-construction.

For your information, the only type of water use which does not require a water right permit is domestic use. However, even domestic use of water requires a permit if your water use exceeds either 25,920 gallons per day or a peak pump rate of 25 gallons per minute. Examples of domestic water uses could be drinking, washing, household use, irrigation of a noncommercial garden, trees, or lawns not exceeding one acre in size, or stock watering. For a complete listing of what are domestic water uses please refer to SDCL 46-1-6.

Please contact the Water Rights Program so discuss cancellation of Permit No. 7913-3.

Sincerely,

Amanda Dewell
Permitting Administrator
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

NOTE: 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.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

May 23, 2025

No. 7913-3

Lance Mennenga
18804 463rd Ave
Castlewood, SD 57223

Dear. Mr. Mennenga:

I'm writing to you today in reference to Water Permit No. 7913-3. This permit authorized the diversion of 1.34 cfs (600 gpm) from 2 wells completed into the Big Sioux: Brookings Aquifer, for the irrigation of 119 acres located within the SW ¼ Section 14, T114N, R51W, with construction to be completed by December 16, 2018.

On February 27, 2025, Water Rights Program permitting administrator Amanda Dewell, sent you a letter informing you that the Water Rights Program will be pursuing cancellation of Permit No. 7913-3, due to non-construction. I have enclosed a copy of this letter.

We have not received correspondence from you in regard to the cancellation. Please contact the Water Rights Program to discuss cancellation of Water Permit No. 7913-3.

Sincerely,

Miranda Smith
Water Rights Program
605 773-3352
Miranda.Smith@state.sd.us

Note: 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.

enclosure