

WATER PERMIT NO. 7676-3

Name of Applicant: Cloverleaf Farms

Address: PO Box 517, Elk Point SD 57025 Phone: 712-251-9581

Amount of Water Claimed: 2.0 cfs Total Acres: 157.1

Source of Water Supply: groundwater (one existing well)

Water to be used for: irrigation County: Union

Type of Waste Disposal System:

Location: 4 miles southeast of Elk Piont

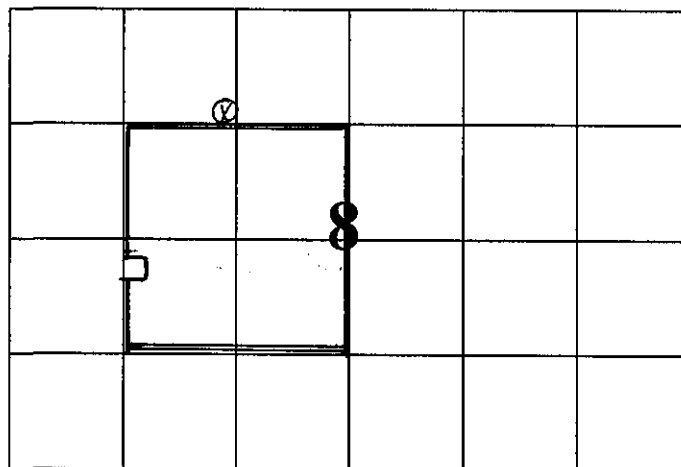
PRIORITY Date Received: 2-4-13 Application/License Fee: \$ 1050

Corrected Application Received: Period of Annual Use: June 1 – August 30

Remarks: Utilizing existing well authorized by Waer Permit No. 6247-3

Diversion Point: NW 1/4 NW 1/4 Sec 8-T90N-
R49W

Land to be Irrigated: S 1/2 NW 1/4, N 1/2 SW 1/4
Sec 8-T90N-R49W



Depth of Well: 134 feet deep

Well Driller: Dakota Drilling & Backhoe Inc.

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 2-4-13

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. 7676-3 Hydrologic Unit 10170101
Basin Missouri River 605-356-2632
Newspaper Leader-Courier Box 310 Elk Point 57025
Press & Dakotan 319 Walnut Yankton 57078 605-665-7811

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FEB - 4 2013

WATER RIGHTS
PROGRAM

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 of Applicant CLOVERLEAF FARMS - WILLIAM J CURRY Phone 712-251-9581
(check one) ☒ Owner ☐ Tenant/lessee

Mailing Address PO BOX 517 ELK POINT SD 57025
(Address) (City) (State) (Zip Code)

2. Amount of water claimed 2.0 *CFS or 900 **GPM ***AF Total Acreage 157.1
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply WELL

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County UNION

1 - EXISTING WELL IN NW1/4 NW1/4 SEC 08 - T090N - R49W PERMIT No. 6247-3

5. County or counties where water will be used UNION

6. Annual period during which water is to be used JUNE, JULY, AUGUST

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
SEC 08 - T090N - R49W SW1/4 NW1/4	40		
SEC 08 - T090N - R49W SE1/4 NW1/4	40		
SEC 08 - T090N - R49W NE1/4 SW1/4	40		
SEC 08 - T090N - R49W NW1/4 SW1/4	37.1		

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

PLACING A PIVOT IN THE MIDDLE OF THE 157.1 ACRE QUARTER LISTED.
GROUND WATER WILL BE PUMPED FROM EXISTING WELL FROM BOARDERING 80.
PERMIT No. 6247-3

STATE OF SOUTH DAKOTA)
County of UNION) SS

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)

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

Applicant's signature William J Curry

Subscribed and sworn to before me this 30 day of January 20 13



MY COMMISSION EXPIRES 5/2/2017

Mary Giffin
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7676-3

Date of first receipt of application February 4, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7676-3 to Cloverleaf Farms, c/o William J Curry, PO Box 517, Elk Point SD 57025 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. 7676-3 appropriates 2.0 cubic feet of water per second from one existing well completed into the Missouri:Elk Point Aquifer (134 feet deep) located in the NW 1/4 NW 1/4 Section 8 for irrigation of 157.1 acres located in the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 8; all in T90N-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: June 1 – August 31.
3. The date from which applicant may claim right is February 4, 2013.
4. The date of approval of Permit No. 7676-3 is April 1, 2013.
5. One-fifth of the construction is to be completed on or before October 1, 2015.
6. All construction is to be completed on or before April 1, 2018.
7. Water is to be put to beneficial use on or before April 1, 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 well approved under Water Right No. 6247-3 and 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

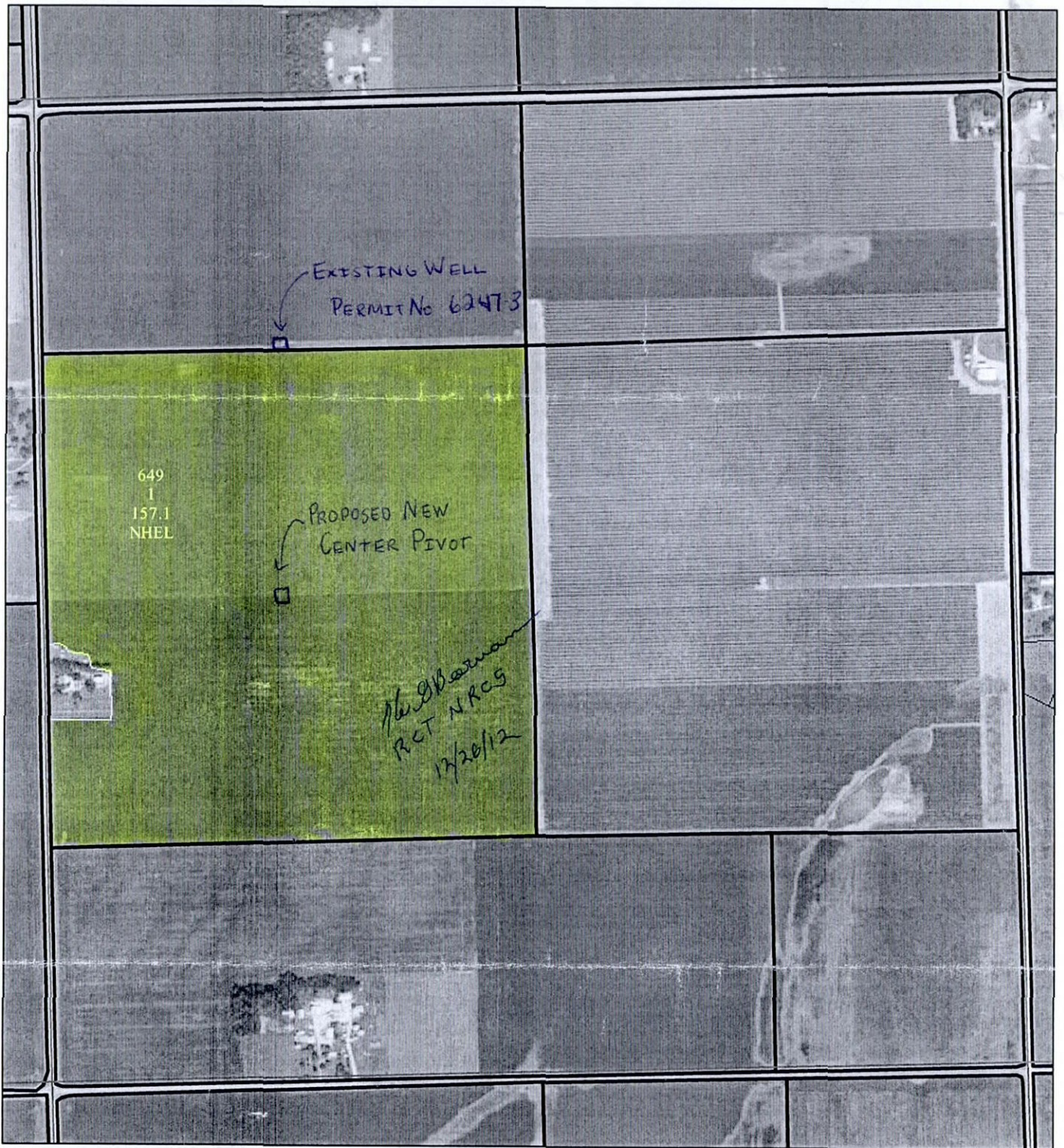
WATER MANAGEMENT BOARD

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

MAY 7 2013

date





United States Department of Agriculture
Farm Service Agency

PLSS: 8_90N_49W
Farm: 2859

Union County

1:8,775

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April 30, 2012

Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

Common Land Units

/// Non Cropland

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area.
Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

2010 Ortho-Photography - Not to Scale

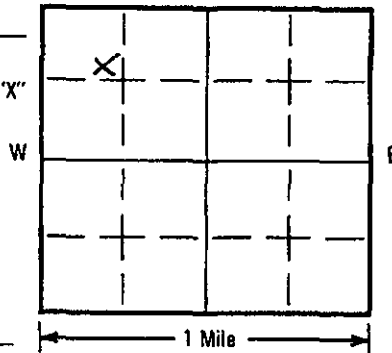
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location NW 1/4 NW 1/4 Sec 8 Twp 91N Rg 48W

County Union

Please mark well location with an "X"



Well Completion Date

6-8-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? >1000 ft. from Any (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
<u>5CH 44LB/FT</u>	<u>16</u> IN	<u>0</u> FT	<u>134</u> FT	<u>22</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	_____	_____ lb./gal	<u>30</u> ft.	<u>10</u> ft.
_____	_____	_____ lb./gal	_____ ft.	_____ ft.

Describe grouting procedure Pumped in

SCREEN: ☒ Perforated pipe ☐ Manufactured

Diameter 16 IN Length 40 FEET

Material PVC

Slot Size 80 Set From 94 Feet to 134 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:

Chlorine mixed with gravel pack

☐ NO, Why Not? _____

Laboratory sent to for water quality analysis

No

Well Owner: _____

Business Name: Curry Hybrid Seed Co.

Address: 701 N. Walnut
Elk Point, SD 57025

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Silty loam</u>	<u>0</u>	<u>8</u>
<u>Heavy clay</u>	<u>8</u>	<u>34</u>
<u>Sand</u>	<u>34</u>	<u>65</u>
<u>Clay</u>	<u>65</u>	<u>90</u>
<u>Med. gravel</u>	<u>90</u>	<u>137</u>

STATIC WATER LEVEL

23 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

- ☒ Pumped Describe: _____
☐ Bailed _____
☐ Other _____

Pumping Level Below Land Surface

54 ft. After 1 Hrs. pumped 1000 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 800 GPM

REMARKS

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JAN 23 2006

WATER RIGHTS PROGRAM

This well was drilled under license # 667

And this report is true and accurate.

Drilling firm Dakota Drilling & Backhoe, Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder:

William J. Curry

Date: _____

1-23-06

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/4, 20 13

RECEIVED OF Cloverleaf Farms Inc PO Box 517 Elk Point SD 57025

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

Fee for Application for Permit No. <u>7676-33</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>7676-33</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. 06085

By

[Signature]
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. 7676-3, Cloverleaf Farms**

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. 7676-3, Cloverleaf Farms, c/o William J Curry, PO Box 517, Elk Point SD 57025.

The Chief Engineer is recommending APPROVAL of Application No. 7676-3 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 Water Right No. 6247-3 and 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
March 13, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7676-3
CLOVERLEAF FARMS
February 26, 2013

Water Permit Application No. 7676-3 proposes to appropriate up to 314.2 acre-feet annually (ac-ft/yr) at a maximum diversion rate of 2.0 cubic feet of water per second (cfs) from one existing well completed into the Missouri: Elk Point aquifer authorized by Water Right No. 6247-3. The well is located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 8 and is approximately 134 feet deep. This application proposes to irrigate 157.1 acres located in the S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 8, in T90N-R49W in Union County.

AQUIFER: Elk Point management unit of the Missouri aquifer (M: EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Elk Point management unit of the Missouri aquifer is a surficial aquifer composed of unconsolidated glacial outwash material ranging from fine sand to coarse gravel (Niehus, 1994). The aquifer generally lies below the flood plains of the Missouri and Big Sioux Rivers in the southern part of Union County (Niehus, 1994). The existing well site is located in the southern part of Union County approximately one and three quarter miles east of the Missouri River and approximately seven and one half miles west of the Big Sioux River. The aquifer directly overlies and is hydraulically connected to the Dakota aquifer, and is hydraulically connected to the Big Sioux aquifer in the northeast and the Lower Vermillion-Missouri aquifer in the north (Niehus, 1994). The aquifer is primarily unconfined in Union County, but is confined in the area of this application. The Elk Point management unit of the Missouri aquifer encompasses regions of Clay, Union, and Yankton Counties. The Missouri: Elk Point aquifer underlies approximately 99,600 acres of Union County and contains an estimated 1,494,600 acre-feet of recoverable water in storage in the county (Hedges and others, 1982). Niehus estimated that the aquifer underlies approximately 115,200 acres of Union County and contains an estimated 1.5 million acre-feet of water in storage (1994). The maximum thickness of the Missouri aquifer is 146 feet with an average thickness of 84 feet (Niehus, 1994). The well completion report submitted for Water Right No. 6247-3 reports a saturated thickness at the existing well site of approximately 47 feet.

SDCL 46-2A-9

In accordance with SDCL 46-2A-9, a permit may be issued to appropriate water only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will review the availability of unappropriated water and existing rights within the Missouri: Elk Point aquifer.

WATER AVAILABILITY:

This application proposes to appropriate up to 314.2 ac-ft/yr from the Missouri: Elk Point aquifer. If this application is approved, it is likely that the actual water use will be less than the appropriated amount. The probability of unappropriated water available from the aquifer can be

evaluated using SDCL 46-6-3.1 which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.”

Recharge versus Discharge:

Recharge:

Recharge to the Missouri: Elk Point aquifer occurs through infiltration and percolation of precipitation falling in areas where the aquifer is near land surface (Niehus, 1994). Recharge is also provided to the aquifer from the Big Sioux, Lower Vermillion-Missouri, and Dakota aquifers as well as during times of high flow and stage from the Missouri and Big Sioux Rivers (Niehus, 1994). The average annual recharge rate to the Missouri: Elk Point aquifer is estimated to be 3.8 in/yr based on observation well analysis (Hedges and others, 1985). Given the area of the management unit in Union County of 115,200 acres by Niehus, average annual recharge to the aquifer in Union County is estimated to be 36,480 ac-ft/yr (1994).

Discharge:

Discharge from the Missouri: Elk Point aquifer is by evapotranspiration, discharge to the Big Sioux and Missouri Rivers during low flow and to the underlying Dakota aquifer, and withdrawal from wells (Niehus, 1994). There are a number of completion reports on file with the SD DENR-Water Rights Program for domestic use wells completed into the Missouri: Elk Point aquifer (Water Rights, 2013b) and there are currently 507 water rights/permits appropriating water from the Missouri: Elk Point aquifer (Water Rights, 2013c). There are 297 water rights/permits appropriating water from this aquifer in Union County (Water Rights, 2013c). The distribution of these appropriations and their types are shown in Table 1.

Water Rights/Permits	Number
Commercial	3
Domestic	1
Industrial	2
Irrigation	286
Municipal	4
Recreational	1

Table 1. Water rights/permits from the Missouri: Elk Point aquifer in Union County (Water Rights, 2013c).

The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming:

1. Water rights/permits limited by an annual volume will pump the entire volume appropriated.
2. Water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time.

The expected water use for non-irrigation purposes, from the Missouri: Elk Point aquifer in Union County, is less than 5,700 ac-ft/yr based on current water appropriations.

The annual reported water use from the Missouri: Elk Point aquifer for irrigation purposes in Union County is displayed in Table 2. The average annual use due to irrigation over the period of record is 10,778 ac-ft/yr.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
1979	206	93310.02	7066
1980	210	94734.88	10063
1981	227	100428.6	8422
1982	209	91841.78	15429.85
1983	211	90519.28	6520.91
1984	211	93088.86	5746.3
1985	215	92328.88	10087.3
1986	215	90739.58	3191.3
1987	216	91579.88	9082
1988	218	92063.68	22195.3
1989	226	93847.88	18658.2
1990	230	95368.88	12730.5
1991	230	95168.88	11601.6
1992	228	94037.88	1010.6
1993	230	93782.3	1145.2
1994	226	90715.45	7721.45
1995	226	90563.45	13798.95
1996	229	92881	5121.58
1997	237	94643	11404
1998	244	96201.8	7259.62
1999	240	93873.8	10741.15
2000	240	93320.4	20369.1
2001	242	93065.6	12284.62
2002	241	92346	15353.97
2003	240	91692	19653
2004	244	92572	16550.28
2005	251	94321.6	17322.4
2006	256	95252.6	18149.43
2007	257	95974.6	18817.78
2008	261	97230.6	6141.62
2009	264	98914.6	3214.82
2010	267	99102.6	1518.01
2011	272	100120.6	7289.7
MIN	206	90519.28	1010.60
MAX	272	100428.60	22195.30
AVE	233.91	94110.09	10777.62

Table 2. Irrigation from the Missouri: Elk Point aquifer in Union County (Water Rights, 1979-2011).

Comparison of the estimated average annual withdrawal from the Missouri: Elk Point aquifer in Union County with the estimated average annual recharge for the aquifer in Union County indicated that the average annual withdrawals from the aquifer do not exceed the average annual recharge to the aquifer. There are a number of new permits and pending applications from the Missouri: Elk Point aquifer. Once they are developed, the average pumping for irrigation

purposes is expected to increase significantly. Since January 1, 2012, there have been 45 permits issued from the Missouri: Elk Point aquifer authorizing irrigation for a total of 5,546.1 acres. The pending permits for appropriation of water from the Missouri: Elk Point aquifer are shown in Table 3.

Permit No.	Diversion Rate (cfs)	Acres
7447-3	1.78	160
7460-3	3.11	264
7454-3	1.78	171
7527-3	1.11	117.5
7552-3	0.61	49
7553-3	1.55	136
7563-3	2.22	95
7565-3	1.89	160
7566-3	2.22	160
7554-3	1.89	136
7576-3	3.33	400
7577-3	2.0	70
7578-3	2.0	80
7579-3	2.0	152
7580-3	2.0	60
7593-3	1.5	105
7621-3	1.89	160
7622-3	1.89	142
7608-3	N/A	105
7606-3	N/A	78.8
7627-3	1.78	67
7630-3	3.34	160
7624-3	2.0	120
7625-3	1.67	120
TOTAL	43.56	3268.3

Table 3. List of pending permits and their appropriations from the Missouri: Elk Point aquifer (Water Rights, 2013a).

The average annual withdrawal is still expected to be significantly less than the average annual recharge; therefore, unappropriated water is available from the Missouri: Elk Point aquifer. Specifically, unappropriated water is available for the 314.2 ac-ft/yr appropriation proposed by this application.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge to the aquifer”.

The SD DENR-Water Rights Program monitors 37 observation wells completed into the Missouri: Elk Point aquifer with three of these observation wells located within two and one half

miles of the existing well site (Water Rights, 2013b). Hydrographs for these wells are shown in Figures 1, 2 and 3.

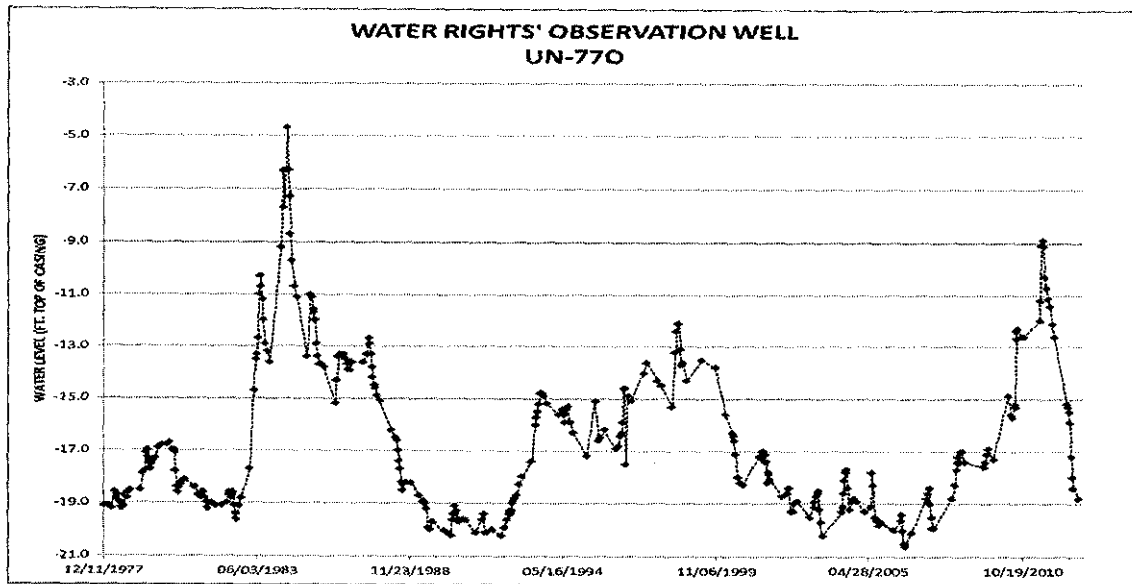


Figure 1. Hydrograph for SD DENR-Water Rights Observation Well UN-770 completed into the Missouri: Elk Point aquifer approximately one mile southeast of the existing well site authorized by Water Right No. 6247-3 (Water Rights, 2013a).

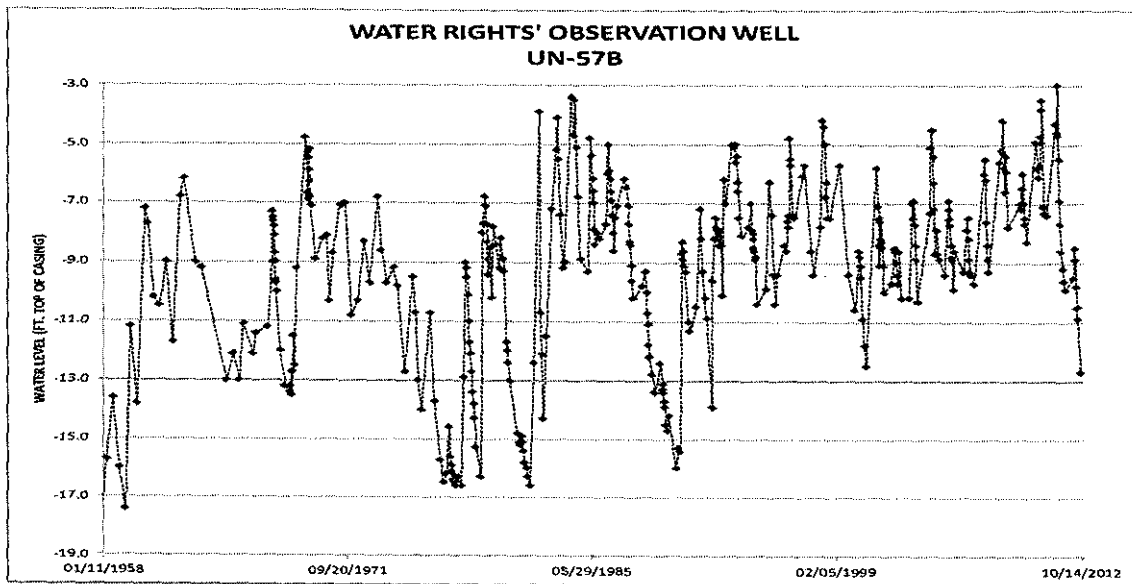


Figure 2. Hydrograph for SD DENR-Water Rights Observation Well UN-57B completed into the Missouri: Elk Point aquifer less than two and one half miles northeast of the existing well site authorized by Water Right No. 6247-3 (Water Rights, 2013a).

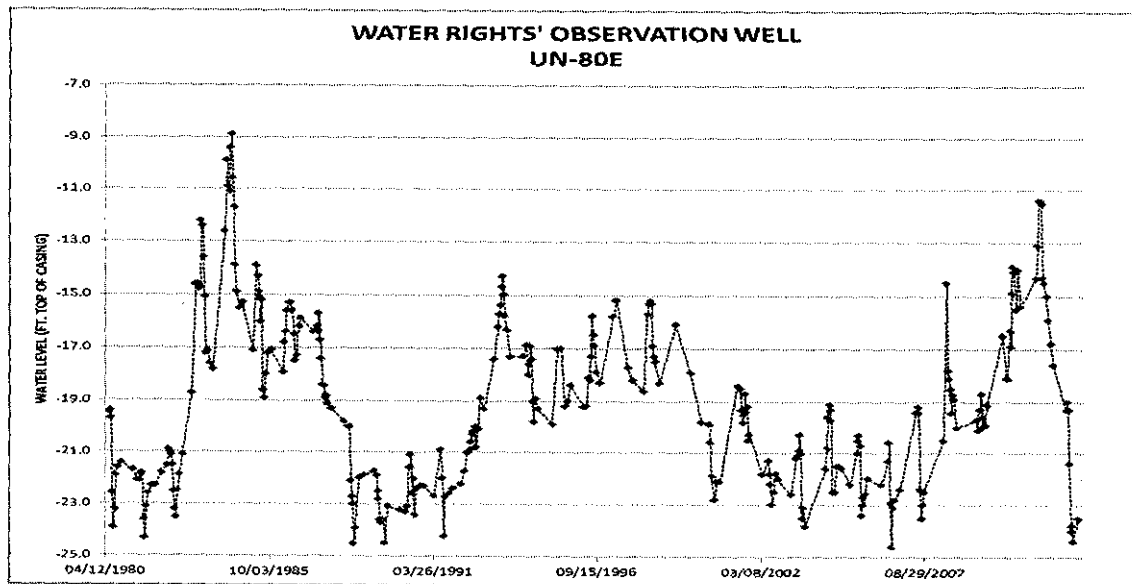


Figure 3. Hydrograph for SD DENR-Water Rights Observation Well UN-80E completed into the Missouri: Elk Point aquifer less than two and one half miles northeast of the existing well site authorized by Water Right No. 6247-3 (Water Rights, 2013a).

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. Observation Well UN-57B shows there are measureable effects due to pumping, but these are not significant due to the nature of the aquifer. The water level data shows that over the period of record, in general, discharge has not exceeded recharge. The observation well data shows that at the current level of development, climatic conditions greatly mask the temporal effects of well withdrawals. Therefore, recharge to and natural discharge from the Missouri: Elk Point aquifer significantly exceeds pumping. Recognizing that natural discharge from the aquifer can be captured for pumping. The hydrographs document that there is unappropriated water available from the aquifer to support this appropriation.

EXISTING WATER RIGHTS:

The existing well site is located in the southern part of Union County approximately one and three quarter miles east of the Missouri River and approximately seven and one half miles west of the Big Sioux River. There are eight water rights/permits that have diversion points within approximately one mile of the existing well site. The nearest water right/permit is Water Right No. 1297-3, for Rose J Moret, located more than 3,400 feet northeast from the existing well site. At the distance between wells, drawdown is not expected to be significant nor likely to cause adverse impacts to existing water rights.

Observation well UN-57B is located within 2,000 feet of Water Permit No. 6879-3, for Jerry Duhaime, and the hydrograph, shown in Figure 2, reports approximately 10 feet of drawdown, on average, at this distance due to pumping. With approximately 47 feet of saturated material available at this well site, drawdown is not expected to be relatively significant.

CONCLUSIONS:

1. This application proposes to appropriate up to 314.2 acre-feet annually for irrigation from the Missouri: Elk Point aquifer.
2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to supply this proposed appropriation.
3. The Missouri: Elk Point aquifer is confined in this area, but drawdown from pumping is not expected to be significant very far from a production well.
4. There is a reasonable probability that the appropriation proposed by this application will not adversely impact existing water rights or domestic wells.



Nicole Van Dyk
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- Niehus, C.A., 1994, Water Resources of Lincoln and Union Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 93-4195, 57 p.
- Water Rights, 1979-2011, Irrigation Questionnaire Summaries 1979-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2013c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

AFFIDAVIT OF PUBLICATION

RECEIVED

State of South Dakota)

:ss

MAR 25 2013

County of Union)

WATER RIGHTS
PROGRAM

Kelly Kruithoff,

an employee of the Leader-Courier, deposes and says that

The Leader-Courier

is a legal weekly newspaper of a general circulation, printed and published in Elk Point, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Application No. 7676-3

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Elk Point, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 21 day of March, 2013

and that the succeeding publications were

on Thursday, the _____ day of _____,

on Thursday, the _____ day of _____,

on Thursday, the _____ day of _____,

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 26.04, that the full amount of the fee charged insures to the benefit of the publisher of the 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 other person whomsoever.

Kelly Kruithoff
Subscribed and sworn to before me

this 21 day of March, 2013

My commission expires 6-21-17

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA

Notary Public

NOTICE OF APPLICATION NO. 7676-3

TO APPROPRIATE WATER

Notice is given that Cloverleaf Farms, c/o William J Curry, PO Box 517, Elk Point SD 57025 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one existing well completed into the Missouri Elk Point Aquifer (134 feet deep) located in the NW 1/4 NW 1/4 Section 8 for irrigation of 157.1 acres located in the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 8; all in T90N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7676-3 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 April 1, 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. Firmer, Secretary, Department of Environment and Natural Resources. Publish March 21, 2013. Published once at the total approximate cost of \$26.04 12-11-70

RECEIVED

MAR 25 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
PMB 2020
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3182

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Application No. 7676-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 21st DAY OF March 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$25.82 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND 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.

PUBLISHED ON: 3/21/2013

FILED ON: 3/21/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 21st DAY OF March

2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

3+21

NOTICE OF APPLICATION
NO. 7676-3 to Appropriate Water

Notice is given that Cloverleaf Farms, c/o William J. Curry, PO Box 517, Elk Point SD 57025 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one existing well completed into the Missouri Elk Point Aquifer (134 feet deep) located in the NW 1/4 NW 1/4 Section 8 for irrigation of 157.1 acres located in the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 8; all in T90N-R49W.

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Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is: "Water Rights Program, Foss Building, 523 E Capitol, Pierre, SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by April 1, 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 \$25.82.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

March 14, 2013

Leader-Courier
PO Box 310
Elk Point SD 57025

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7676-3 to Appropriate Water. Please publish the notice once on March 21, 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 Cloverleaf Farms, c/o William J Curry, PO Box 517, Elk Point SD 57025 (Ph # 712-251-9581).

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

March 14, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

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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 DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.**

March 14, 2013

Cloverleaf Farms
William J Curry
PO Box 517
Elk Point SD 57025

Dear Mr. Curry:

Water Permit Application No. 7676-3 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 Leader-Courier printed at Elk Point SD (Ph # 605-356-2632) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). 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 March 21, 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 NOS. 7676-3 to Appropriate Water

Notice is given that Cloverleaf Farms, c/o William J Curry, PO Box 517, Elk Point SD 57025 has filed an application for a water permit to appropriate 2.0 cubic feet of water per second from one existing well completed into the Missouri:Elk Point Aquifer (134 feet deep) located in the NW 1/4 NW 1/4 Section 8 for irrigation of 157.1 acres located in the S 1/2 NW 1/4, N 1/2 SW 1/4 Section 8; all in T90N-R49W.

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Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

MAY 20 2013

Cloverleaf Farms
c/o William J Curry
PO Box 517
Elk Point SD 57025

Dear Mr. Curry:

Enclosed is Water Permit No. 7676-3 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

1676-3
RECEIVED

JUL - 1 2013

WATER RIGHTS
PROGRAM**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**Date May 24, 2013TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181FROM: Cloverleaf Farms
(name)
P.O. Box 517 701 N Walnut
(address)
Elk Point, SD 57025 605/356-3366
(city, state, zip) (phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

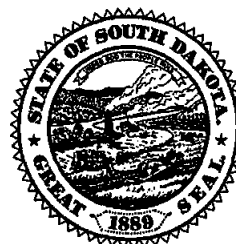
Water Permit No. 7676-3 states that the water use system is to be constructed by April 1, 2018, and water is to be put to beneficial use by April 1, 2022
(date) (date)

The water use system was completed on June 1, 2013.
(date)

Applying the water to beneficial use was completed on June 26, 2013.
(date)

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

William J. Curry
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

July 1, 2013

7676-3

William J Curry
Cloverleaf Farms
PO Box 517
Elk Point SD 57025 0517

Dear Mr. Curry:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with the irrigation system authorized under Water Permit No. 7676-3 (W ½ Section 8, T90N, R49W).

The system is now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of your project and the staff inspection has no bearing on your water permit.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. 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



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



November 3, 2014

3673-3
7676-3

William Curry
Cloverleaf Farms Inc
609 N Walnut St
Elk Point SD 57025 2217

Dear Mr. Curry:

Enclosed is a "Notice" dated October 17, 2014 concerning the 2014 irrigation questionnaire.

The notice was originally mailed to PO Box 517, Elk Point SD. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

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

enclosures