

WATER PERMIT NO. 8719-3

Name of Applicant: Lacey Land LLC

Address: 48456 266th St, Brandon SD 57005 Phone: 605 370-1085

Amount of Water Claimed: 2.00 cfs Total Acres: no add'l

Source of Water Supply: groundwater (1 existing well)

Water to be used for: irrigation County: Campbell

Type of Waste Disposal System:

Location: 8 miles south of Mound City

PRIORITY Date Received: 1-30-23 Application/License Fee: \$300

Corrected Application Received: Period of Annual Use: March 1 – November 30

Remarks: Additional well to Water Right No. 3882-3. This will allow pivots to operate independently.

Diversion Point: near E 1/4 corner of Sec 16-
T125N-R76W

Land to be Irrigated: E 1/2 Sec 16-T125N-R76W

Depth of Well: 300 feet deep

Well Driller: Manikowski Well Drilling

Remarks:

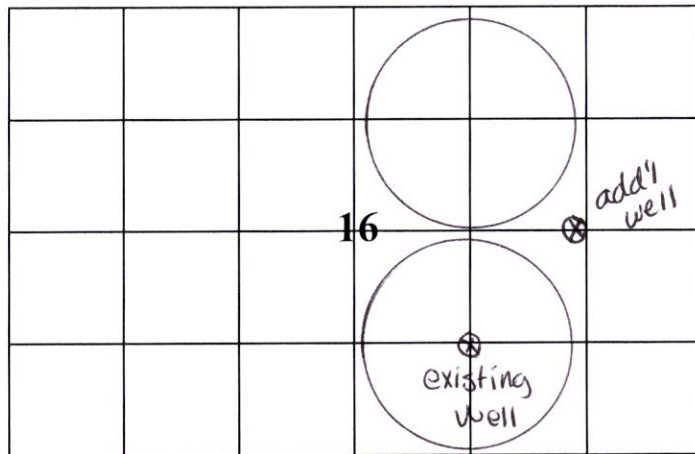
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 1-31-23

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



SOUTH DAKOTA
WATER PERMIT NO. 8719-3

Date of first receipt of application January 30, 2023.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8719-3 to Lacey Land, LLC, c/o Dick Lacey, 48456 266th Street, Brandon SD 57005 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. 8719-3 appropriates 2.0 cfs from one existing well completed into the Grand Aquifer (300 feet deep) located near the E 1/4 corner of Section 16-T125N-R76W. Water Right No. 3882-3 authorizes diversion of 2.0 cfs from one well in the SE 1/4 Section 16 for irrigation of 268 acres in the E 1/2 Section 16; all in T125N-R76W. The additional well will allow the center pivots in the E 1/2 Section 16 to operate independently and will increase the diversion rate by 2.00 cfs with no increase in the total acres irrigated and either well can be used to operate either irrigation system. The site is located approximately 6 miles south of Mound City SD.
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: March 1 – November 30.
3. The date from which applicant may claim right is January 30, 2023.
4. The date of approval of Permit No. 8719-3 is April 17, 2023.
5. One-fifth of the construction is to be completed on or before October 17, 2025.
6. All construction is to be completed on or before April 17, 2028.
7. Water is to be put to beneficial use on or before April 17, 2032.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

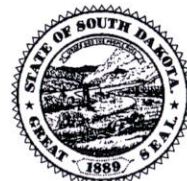
QUALIFICATIONS

1. The wells approved under Water Permit No. 8719-3 and Water Right No. 3882-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Water Right No. 3882-3 and Water Permit No. 8719-3 authorize a maximum diversion rate of 4.0 cfs for the irrigation of 268 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

MAY 15 2023
date



FORM 2: Application for irrigation in South Dakota
(type or print)

JAN 30 2023

OFFICE OF
WATER

PAID

JAN 30 2023

Ck# 38403

Rec't#

Mail to:

SD DANR, Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182

ph. (605) 773-3352

No. 8719-3 Hydrologic Unit 10130106

Basin Missouri River

Newspaper Prairie Pioneer

American News (office use only)

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 Lacey Land LLC

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 48456 266th St.

Brandon SD 57005

(Address)

(City)

(State)

(Zip Code)

Phone 605.757.6639

Mobile 605.370.1085

Email laceyhay@alliancecom.net

2. Amount of water claimed 2.00 *CFS or **GPM ***AF Total Acreage No add'l
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Ground water - one existing, additional well

4. Location of point of diversion Near the E1/4 corner of section 16-T125N-R76W

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Campbell

5. County or counties where water will be used Campbell

6. Annual period during which water is to be used March 1 - November 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
E1/2 section 16-T125N-R76W	268		

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

Water Right No. 3882-3 authorizes diversion of 2.00 cubic feet of water per second (cfs) from one well in the SE1/4 section 16 for irrigation of 268 in the E1/2 section 16; all in T125N-R76W. The additional well will allow the pivots to operate independently and will increase the diversion rate by 2.00 cfs with no increase in the total acres irrigated and either well can be used to operate either center pivot.

I, Dick Lacey

Name of Person

Owner

Title (if applicable)

, the applicant, certify under

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

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 _____ Have test holes been drilled? ☐ Yes ☐ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 1 addl Provide copy of log(s), if available. Drilled by Byron Marikowski

For either existing or proposed wells:

c) Well Depth (required) 300 ft Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____

d) Distance to nearest domestic well on applicant's property ? 1 mi or little less Property owned by others ? Iverson Farms

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)

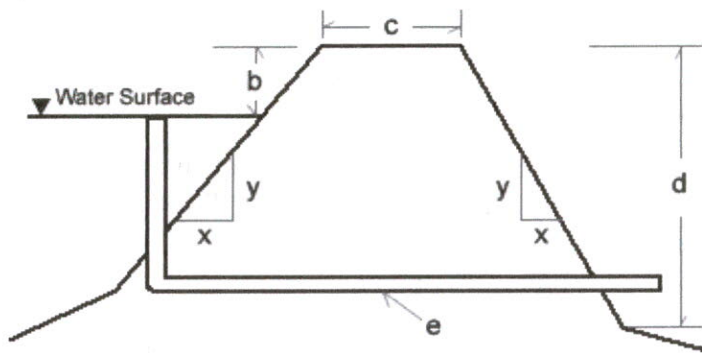
Upstream _____

Downstream _____

h) Area of Impoundment _____

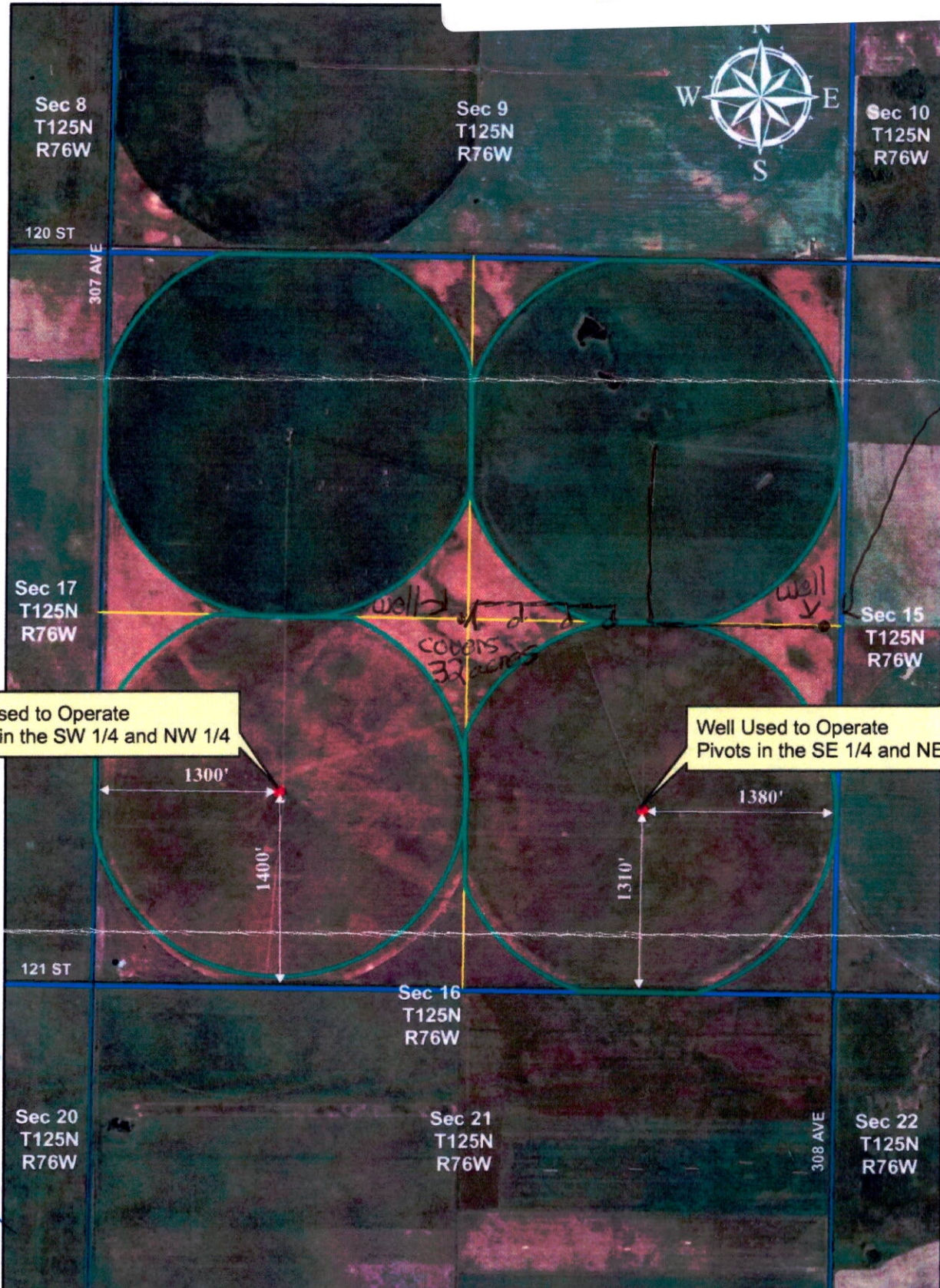
i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Miles Lacey
26511 485th Ave.
Valley Springs, SD 57068

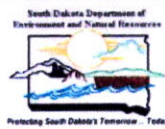
3881-3 covers W 1/2 Sec 16
V 3882-3 covers E 1/2 Sec 16



This well is used to irrigate the NE 1/4 using a pipeline that goes straight west and ties into the existing pipeline. Both wells on the East 1/2 can irrigate one 1/4 or both 1/4s

Mike DeFea

Mike DeFea
Natural Resources Engineer
DENR, Water Rights Program
January 22, 2008



0 370 740 1,480 2,220 2,960 Feet

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 3882-3

(1) Robert T Leisen originally filed Application No. 3882-3, March 4, 1977, for a water permit to divert 2.00 cubic feet of water per second from ground water, one well (Grand Aquifer), Campbell County, South Dakota for irrigation purposes. Permit No. 3882-3, with a priority date of March 4, 1977, was approved May 25, 1977, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 25, 1982, and for the application to beneficial use of water on or before May 25, 1984.

Water Permit No. 3368-3, with a priority date of November 19, 1976, authorized irrigation of the N ½ Section 16, T125N, R76W. The well that was to have been developed in the center of the N ½ of Section 16 was not completed. Water Permit No. 3882-3 authorized a well in the SE ¼ of Section 16 to irrigate the same quarter. The well developed under No. 3882-3 in the SE ¼ Section 16 also irrigates the NE ¼ Section 16 authorized under No. 3368-3.

On June 8, 2022, Nos. 3368-3 and 3882-3 were transferred to Lacey Land LLC.

The applicable portions of Water Permit No. 3368-3 are incorporated into Water License No. 3882-3.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 2.00 cubic feet of water per second for beneficial use. The location of the diversion point is:

- approximately 1,310' N and 1,380' W of the SE corner of Section 16, T125N, R76W (SW ¼ SE ¼)
Latitude 45.64087, Longitude -100.03292

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

Section 16, T125N, R76W					
NW ¼ NE ¼	33.5 acres	NW ¼ SE ¼	33.5 acres		
NE ¼ NE ¼	33.5 acres	NE ¼ SE ¼	33.5 acres		
SW ¼ NE ¼	33.5 acres	SW ¼ SE ¼	33.5 acres		
SE ¼ NE ¼	33.5 acres	SE ¼ SE ¼	33.5 acres		
268 acres					

Priority dates: SE ¼ Section 16: March 4, 1977, established under Water Permit No. 3882-3

NE ¼ Section 16: February 18, 1976, established under Water Permit No. 3368-3

(4) Pursuant to South Dakota Water Law 46-5-30.1 Lacey Land LLC, 48456 266th St., Brandon SD 57005 the holder and/or owner of Incorporated Water Right No. 3882-3 is issued a license to appropriate water, the right to use 2.00 cubic feet of water per second from ground water, one well (Grand Aquifer) with priority dates of March 4, 1977 (SE ¼) and February 18, 1976 (NE ¼) from the location specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Right No. 3882-3 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.

Eric Gronlund

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

JUL 05 2022

date



RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date January 30, 2023

RECEIVED OF Lacey Hay LLC 48456 266th St., Brandon SD 57005

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

Fee for Application for Permit No. <u>8719-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>100.00</u>
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>8719-3</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	\$ <u>300.00</u>

By Eric Monhusd
Chief Engineer vm

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, January 26, 2023 10:57 AM
To: laceyhay@alliancecom.net
Subject: FW: Water Permit Applications - sec 16-125N-76W
Attachments: LaceyLandLLC.FILE.docx; Lacey3882-3_D0499LDV6-IRRIG.pdf

This is just a reminder that we have not received this water permit application that Ron Duvall visited with you about. Please let me know if you wish us to proceed with the application received on December 28, 2022 for irrigation of 32 acres located in the middle of Section 16-T125N-R76W. We would then consider the other application that would allow the pivots to operate independently if/or when it is submitted.

Karen

From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Monday, January 9, 2023 3:11 PM
To: laceyhay@alliancecom.net
Cc: Schlaak, Karen <Karen.Schlaak@state.sd.us>
Subject: Water Permit Applications - sec 16-125N-76W

Tyler,

Attached is the application form I completed as much as possible (PDF document) and another document concerning our phone conversations (Word .docx). The application is to add the existing well in E1/4 of section 16 to irrigate the E1/2 section 16-125N-76W along with the other well (covered by Water Right No. 3882-3) in the center of the SE1/4 section 16. This application will allow use of another 2.00 cfs (900 gpm) so both pivots can operate at the same time and either well can be used for either pivot.

On the attached application form, I highlighted in yellow the location for a signature and needed well information (Form 2A – Supplemental Information) that you may have. At a minimum we need to know the depth of the well and, if possible, the approximate distance to the nearest existing domestic well on property owned by someone else (your neighbor). We could also use that distance information to the nearest neighbor's well on the application you submitted for the well in the center of the section for the 32 acre pivot. I can mail you a hard copy of the attachments if you prefer; otherwise, print the application, complete the highlighted blanks, and return the application with the \$300.00 fee (\$100.00 application and \$200.00 license). I can use the map submitted with your other application since it has both well locations already marked.

Please let me know if you have any questions. If you want a mailed copy, please let me know what the address is you would like the forms mailed to.

Thank you,

Ron Duvall
Dept. of Agriculture & Natural Resources
Office of Water, Water Rights Program
605.773.3352
danr.sd.gov



DANR
SOUTH DAKOTA



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

File No. 8694-3 and 3882-3

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME: Lacey Land LLC

ADDRESS: 48456 266th Street, Brandon SD 57005

DATE: January 5 & 9, 2023 **PHONE:** 605-370-1085

RE: Water Permit Application No. 8694-3 and Water Right No. 3882-3

COMMENTS:

I spoke to Tyler Lacey concerning Application No. 8694-3 received on December 28, 2022. Mr. Lacey requested that a second application be prepared to add an existing well near the E1/4 corner of section 16-T125N-R76W for irrigation of the E1/2 of section 16. Water Right No. 3882-3 authorizes diversion of 2.00 cubic feet of water per second (cfs) from one well in the SE1/4 section 16 for irrigation of 268 in the E1/2 section 16; all in T125N-R76W. The additional well will allow the pivots to operate independently and will increase the diversion rate by 2.00 cfs with no increase in the total acres irrigated and either well can be used to operate either center pivot.

Application No. 8694-3 will use an existing well in the center of section 16-T125N-R76W diverting 0.89 cfs for irrigation by a small, 32-acre, pivot in the center of the same section.

Ron Duvall, Water Rights Permitting Administrator
SD DANR, Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8719-3, Lacey Land LLC**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8719-3, Lacey Land LLC, Dick Lacey 48456 266th Street, Brandon SD 57005.

The Chief Engineer is recommending APPROVAL of Application No. 8719-3 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 domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The wells approved under Water Permit No. 8719-3 and Water Right No. 3882-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Water Right No. 3882-3 and Water Permit No. 8719-3 authorize a maximum diversion rate of 4.0 cfs for the irrigation of 268 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
March 27, 2023

Report to the Chief Engineer
On Water Permit Application Nos. 8694-3 and 8719-3

Lacey Land LLC

March 27, 2023

Water Permit Application No. 8694-3 proposes to divert water at a maximum instantaneous diversion rate of 0.89 cubic feet of water per second (cfs) from one existing completed into the Grand aquifer (260 feet deep) located in the approximate center of Section 16 for the irrigation of 32 acres located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 16; all in T125N-R76W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Water Permit Application No. 8719-3 proposes to appropriate 2.0 cfs from one existing well completed into the Grand aquifer (300 feet deep) located near the E $\frac{1}{4}$ of Section 16-T125N-R76W for the irrigation of land authorized by Water Right No. 3882-3. Water Right No. 3882-3 authorizes a diversion rate of 2.0 cfs from one well in the SE $\frac{1}{4}$ of Section 16 for the irrigation of 268 acres located in the E $\frac{1}{2}$ of Section 16; all in T125N-R76W. The additional well will allow the center pivots in the E $\frac{1}{2}$ of Section 16 to operate independently and will increase the diversion rate by 2.0 cfs with no increase in the total acres irrigated and either well can be used to operate either irrigation system. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. The site of interest for both applications is located in Campbell County approximately six miles south of Mound City, SD.

AQUIFER: Grand (G)

HYDROGEOLOGY:

The Grand aquifer is a deep, glacial aquifer that lies in a bedrock valley eroded by the ancient, pre-glacial Grand River (Christensen, 1977; Hamilton, 1982; Koch, 1970). The aquifer was deposited by glacial meltwater and is composed of stratified sand, gravel and silt, that can contain thin beds of silty clay (Hamilton, 1982; Koch, 1970). In Edmunds, Faulk, and McPherson Counties, the Grand aquifer has an average thickness of approximately 50 feet (Hamilton, 1982). The Grand aquifer abruptly increases in thickness from its margins to the deepest part of the bedrock channel in which it lies, with the greatest thicknesses occurring in the deepest areas of the bedrock channels (Hamilton, 1982). In the southwestern portion of McPherson County, the deepest area of the bedrock channel in which the aquifer lies is where a documented maximum thickness of 175 feet has been measured (Hamilton, 1982). Water in the Grand aquifer moves from groundwater divides (and recharge areas) toward major discharge areas - such as, towards southeastern Faulk County, towards northeastern Faulk and southeastern Edmunds Counties, and along the Missouri River (Koch, 1970; Hamilton, 1982). The Grand aquifer is primarily under artesian (confined) conditions (Koch, 1970; Hamilton, 1982). Water in some areas of the Grand aquifer has a medium sodium hazard and high salinity, which would indicate the potential need for special management when utilizing the Grand aquifer for irrigation purposes (Koch, 1970; Hamilton, 1982; Water Rights, 2023c).

For Faulk and Edmunds Counties, Kilts (2019) reviewed the delineation of the Grand aquifer by Hedges and others (1982) utilizing the updated drilling and mapping from the first occurrence of aquifer materials maps finalized by Rich (2008 and 2010). The first occurrence of aquifer materials maps and observation well data in Faulk (Rich, 2008) and Edmunds (Rich, 2010) Counties indicated there appears to be three separate portions of the Grand aquifer that are not hydrologically connected in the same locations mapped by Hedges and others (1982) (Water Rights, 2023b). The existing wells proposed to be used by Water Permit Application Nos. 8694-3 and 8719-3 are completed into the northwestern portion of the Grand aquifer (Water Rights, 2023c and 2023d). Figure 1 displays a map of the approximate delineation of the northwestern portion of the Grand aquifer (Hedges et al., 1982; Kilts, 2019; Rich, 2008; Rich, 2010), with the locations of the existing well sites (Water Rights, 2023d). For the remainder of this report, the terms “aquifer” or “Grand aquifer” will be referring to the northwestern portion of the Grand aquifer as shown in Figure 1.

For Campbell, Walworth, and McPherson Counties, the areal extent for the northwestern portion of the Grand aquifer was determined by utilizing the delineation based on Hedges and others (1982) (Table 1). Hedges and others (1982) estimated areal extent for those counties is the best information currently available since substantial drilling has not been completed. Additionally, the South Dakota Geological Survey (SDGS) “Current Projects – Aquifer Delineation” webpage for the First Occurrence of Aquifer Materials mapping work lists additional work in Campbell and McPherson Counties as “In Progress,” and as “Planned” for Walworth County (SDGS, 2023a). The drilling and studies needed to produce these maps are multi-year projects. In these counties, there is a greater presence of shallow aquifers overlying the Grand aquifer; therefore, those shallow aquifers would be mapped as the first occurrence of aquifer material rather than the Grand aquifer. It is likely it will be several years until enough data is available to further refine the extent of the Grand aquifer boundary in Campbell, Walworth, and McPherson Counties.

For Edmunds and Faulk Counties, the areal extent for the northwestern portion of the Grand aquifer was determined by utilizing the First Occurrence of Aquifer Materials Maps completed by Rich (2008 and 2010) (Table 1). Overall, the estimated area for the northwestern portion of the Grand aquifer (as displayed in Figure 1) is 360,621 acres (Hedges et al., 1982; Kilts, 2019; Rich, 2008; Rich, 2010).

Table 1. Estimated area of the northwestern portion of the Grand aquifer as displayed in Figure 1 (Hedges et al., 1982; Kilts, 2019; Rich, 2008; Rich, 2010)

County	Acres	Source
Campbell	97,900	Hedges et al., (1982) - report text
McPherson	44,200	Hedges et al., (1982) - report text
Walworth	67,200	Hedges et al., (1982) - report text
Edmunds	144,039	estimated from Rich (2010)
Faulk	7,282	estimated from Rich (2008)
Total	360,621	

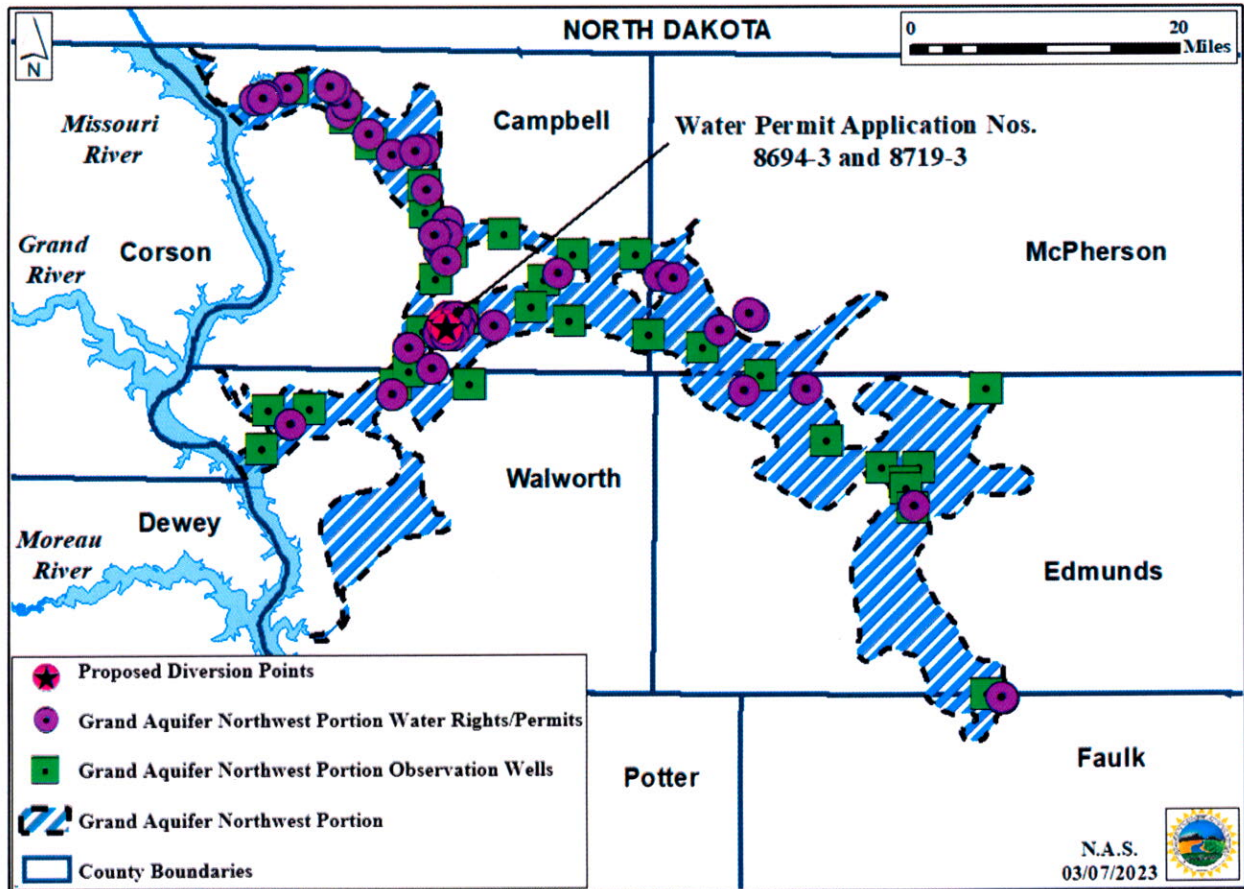


Figure 1. Map of the approximate delineation of the northwestern portion of the Grand aquifer (modified from: Hedges et al., 1982; Kilts, 2019; Rich, 2008; Rich, 2010), with the location of the existing well sites for Water Permit Application Nos. 8694-3 and 8719-3 (Water Rights, 2023c and 2023d), and the water rights/permits and observation wells within the northwestern portion of the Grand aquifer (Water Rights, 2023b and 2023c)

There is a water well completion report on file for the existing well proposed to be used by Water Permit Application No. 8694-3 (Water Rights, 2023c and 2023d). The report identifies a water bearing sand and gravel deposit 215 to 260 feet below the ground surface (Water Rights, 2023c and 2023d). The well was screened from 230 to 260 feet below the ground surface and had an approximate static water level of 89 feet at the time of well completion (June 20, 2015) (Water Rights, 2023d). Based on the well completion report on file, the Grand aquifer is confined at the existing well site (Water Rights, 2023c and 2023d).

There is a water well completion report on file for the existing well proposed to be used by Water Permit Application No. 8719-3 (Water Rights, 2023c). The report identifies “good coarse” sand and gravel deposits “with some blue clay layers from 205 to 236 feet below the ground surface, followed by “good” and “coarse” gravel from 236 to 245 feet below the ground surface (Water Rights, 2023c). This well log was dated February 5, 1977 (Water Rights, 2023c). Based on the well completion reports on file, the Grand aquifer is confined at the existing well sites (Water Rights, 2023c and 2023d).

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 diversion point can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Grand aquifer.

WATER AVAILABILITY:

Water Permit Application Nos. 8694-3 and 8719-3 propose to appropriate water from the Grand aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.” The Grand aquifer is not older than or stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010), and the applicant’s proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the Grand aquifer must be considered.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon 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 average annual recharge of the aquifer.

Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DANR-Water Rights Program monitors 33 observation wells completed into the northwestern portion of the Grand aquifer (Water Rights, 2023b). The four closest observation wells to the wells the applicant proposes to use are CA-78K (approximately 1.5 miles southwest), CA-78I (approximately 1.5 miles northeast), CA-78E (approximately 3.5 miles northwest), and CA-80F (approximately four miles southwest) (as shown in Figure 6) (Water Rights, 2023b). The hydrographs for these observation wells are displayed in Figures 2 to 5 (Water Rights, 2023b). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing. It is worth noting the hydrograph titles display DENR Water Rights Observation Well on the hydrographs when the titles should display DANR Water Rights Observation Well on the hydrographs.

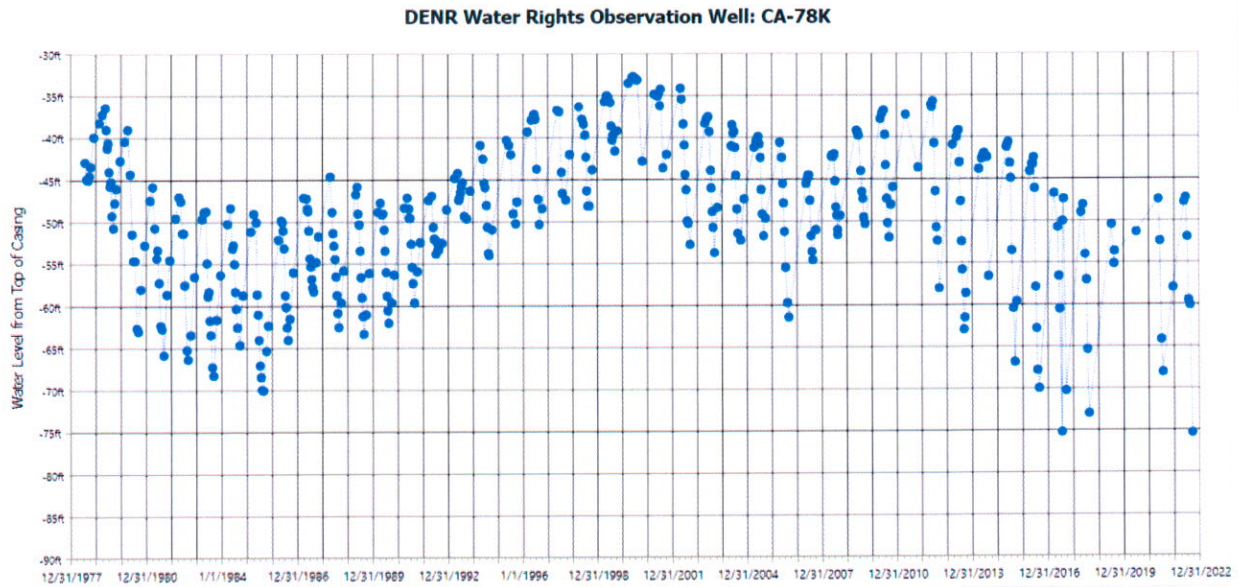


Figure 2. Hydrograph for observation well CA-78K (Water Rights, 2023b)

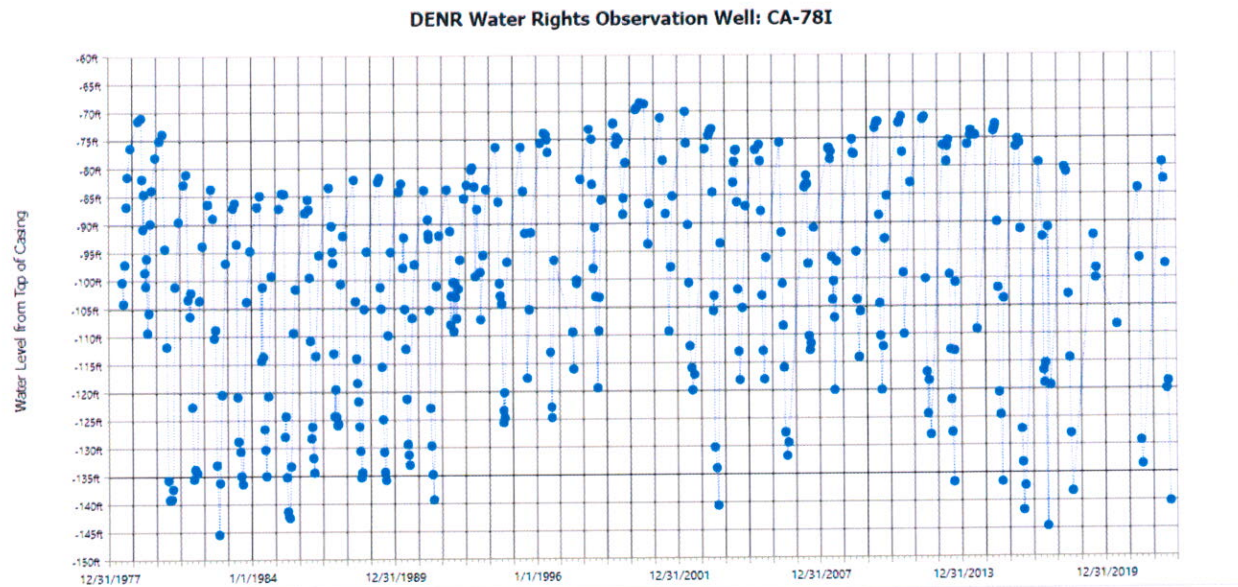


Figure 3. Hydrograph for observation well CA-78I (Water Rights, 2023b)

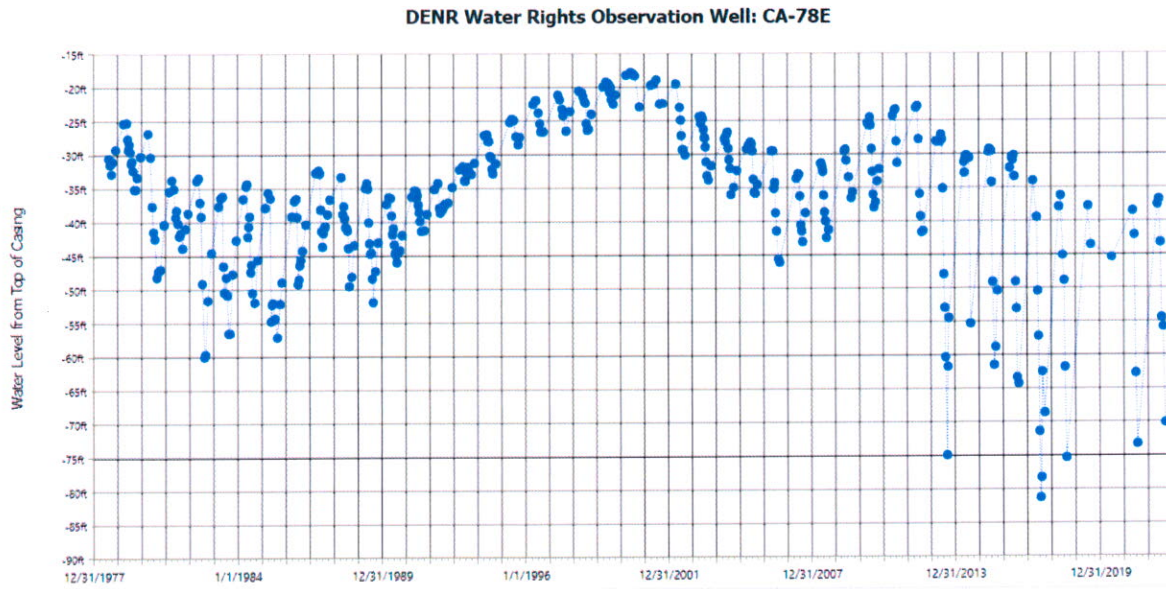


Figure 4. Hydrograph for observation well CA-78E (Water Rights, 2023b)

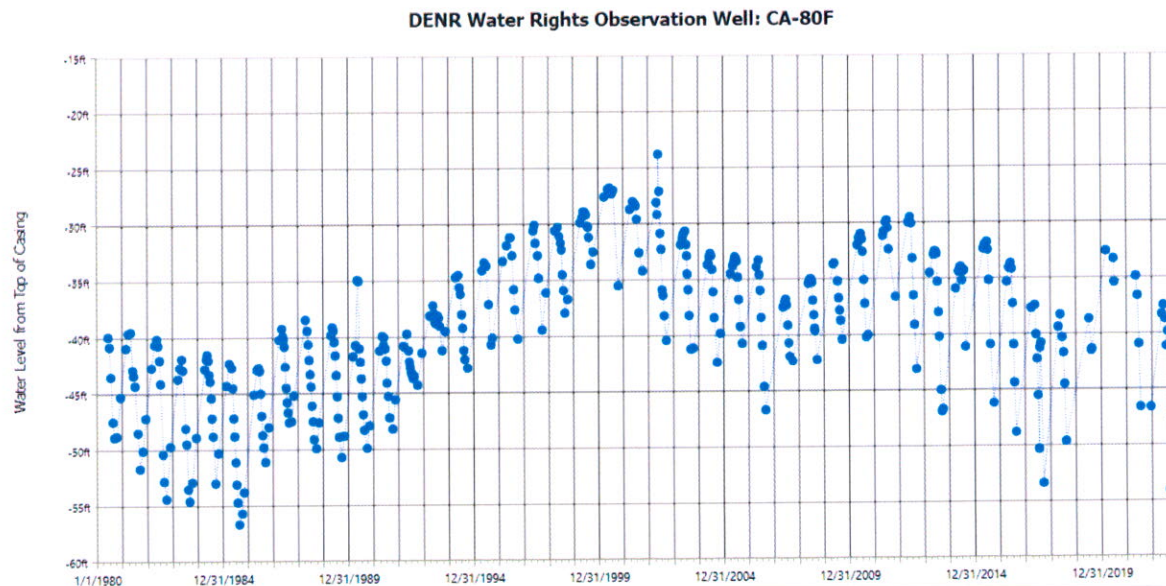


Figure 5. Hydrograph for observation well CA-80F (Water Rights, 2023b)

The hydrographs for the observation wells display generally stable water levels over their respective periods of record. The hydrographs for these four observation wells were compared to the hydrographs for the other observations wells completed into the Grand aquifer and each displayed a generally similar trend as shown on the hydrographs displayed in Figures 2 to 5 - apart from observation well ED-2000A which shows a declining water level over its respective period of record, which is likely due to the localized conditions in the aquifer, potentially due to

pumping from two nearby water rights and area aquifer boundaries (Water Rights, 2023b). However, in general the hydrographs for the Grand aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons when seasonal drawdown is evident. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Grand aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Grand aquifer is primarily through infiltration of precipitation through overlying sediments and by movement of water from overlying aquifers such as the Selby aquifer in northwestern Walworth County, and from the Bowdle aquifer in southeastern Walworth County (Hamilton, 1982; Kume and Howells, 1987).

Using observation well analysis, Hedges and others (1985) estimated a recharge rate to the unconfined portions of the aquifer to be approximately 4 inches per year. However, these unconfined portions of the Grand aquifer have not been mapped. Hedges and others (1985) have estimated an average annual recharge rate to buried, confined aquifers that ranges from 0.15 to 0.60 inches per year for use by management and development programs. Due to the northwestern portion of the Grand aquifer being mostly under confined conditions and the unconfined portions not being mapped, the lower average annual recharge range of 0.15 to 0.60 inches per year will be used for this analysis.

By multiplying the estimated areal extent of the northwestern portion of the Grand aquifer (360,621 acres) by the average annual recharge rate of 0.15 to 0.60 inches per year, the estimated average annual recharge rate to the northwestern portion of the Grand aquifer varies between 4,507 to 18,031 acre-feet per year (Hedges et al., 1982 and 1985; Rich, 2008; Rich 2010). This is a lower estimated average annual recharge rate, as the higher recharge rate estimated by Hedges and others (1985) to the unconfined portions of the Grand aquifer is not accounted for in that estimated recharge rate range.

Discharge

Discharge from the Grand aquifer is primarily through well withdrawals and groundwater movement to Lake Oahe (Kume and Howells, 1987; Water Rights, 2023c). Currently, there are 49 water rights/permits authorized to appropriate water from the northwestern portion of the Grand aquifer (Water Rights, 2023c).

Table 2 summarizes the twelve non-irrigation water rights/permits authorized to appropriate water from the northwestern portion of the Grand aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. The amount of water that can be withdrawn was estimated by assuming the non-irrigation water rights/permits limited by an annual volume will withdraw their entire appropriated volume every year. It is estimated that the non-irrigation water rights/permits limited only by a diversion rate will pump at their maximum permitted diversion rate for 60 percent of the time.

The Town of Pollock (Water Right Nos. 778-3 and 5366-3), Town of Glenham (Water Right No. 3998-3), Town of Mound City (Water Right No. 4144-3) and the City of Herreid (Water Right No. 5417-3) are all connected to a rural water system (Drinking Water Program, 2023). These wells for these municipalities are maintained for emergency/standby use (back-up water supply, fire protection etc.) As such, the average annual water use for these municipal rights has been estimated to be zero acre-feet per year in Table 2. The City of Hosmer and the City of Roscoe obtain approximately 90 percent of their water from WEB rural water system (Drinking Water Program, 2023). Therefore, it is likely these two municipalities (Water Right Nos. 1705-3 and 4814-3) appropriate less water than the estimated average use values assuming a 60 percent full time pumping rate reflected in Table 2.

Water Right No. 7841-3, held by Herreid Concrete Inc, is required to report their annual usage from the Grand aquifer (Water Rights, 2023c and 2023f). The average annual withdrawal rate based off the reported annual withdrawal rates averaged from 2013 to 2021 (period of reported record) for Water Right No. 7841-3 will be used in this analysis in Table 2. Overall, the average annual withdrawal rate for the northwestern portion of the Grand aquifer non-irrigation water rights/permits is approximately 855 acre-feet per year (Table 2) (Water Rights, 2023c).

Table 2. Estimated average annual water use from the non-irrigation water rights authorized to appropriate water within the northwestern portion of the Grand aquifer (Drinking Water Program, 2023; Water Rights, 2023c)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)	Estimated Use (acre-feet/year)
778-3	Town of Pollock	LC	MUN	0.56		0*
1705-3	City of Hosmer	LC	MUN	0.27		117.3
3998-3	Town of Glenham	LC	MUN	0.12		0*
4144-3	Town of Mound City	LC	MUN	0.22		0*
4914-3	City of Roscoe	LC	MUN	0.5		217.2
5366-3	Town of Pollock	LC	MUN	0.78		0*
5417-3	City of Herreid	LC	MUN	1.17		0*
6012-3	West Polluck Association	LC	COM	0.035		15.2
6111-3	Blumengard Colony	LC	COM	0.45		195.5
6185-3	Blumengard Colony	LC	COM	0.667		289.7
7184-3	Jensen Rock & Sand Inc	LC	IND	0.67	20	20
7841-3	Herreid Concrete Inc	LC	IND	1.39	282	12**
					TOTAL:	855
LC: Licensed Water Right; PE: Water Permit; COM: Commercial; IND: Industrial; MUN: Municipal						
*Identified as being connected to a rural water system **Average of annual reported volume						

Currently, there are 37 irrigation water rights/permits authorized to appropriate water from the northwestern portion of the Grand aquifer (Water Rights, 2023c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire since 1979. The estimated average annual withdrawal rate for the Grand aquifer irrigation water rights/permits that have reported over the period of record (1979 to 2021) is approximately 2,486 acre-feet per year (Table 3) (Water Rights, 2023a). However, there are several permits with usage not reflected in the long-term average (Water Rights, 2023a and 2023c). Water Permit Nos. 8402-3, 8405-3, 8429-3, 8454-3, 8539-3, 8540-3, and 8608-3 are all within their five-year construction period and have one year or less of reported irrigation (Water Rights, 2023a and 2023c). Collectively, these seven water permits authorize the irrigation of 893.6 acres and are all not to exceed two acre-feet of water annually for each authorized acre of land to which water is beneficially applied (Water Rights, 2023c). Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year (Water Rights, 2023a). However, to account for the fluctuation in wet and dry cycles from year to year, the one foot of water per acre per year application rate will be used to somewhat overestimate the annual withdrawal rate for these seven water permits. Therefore, the average annual withdrawal rate for these seven water permits is approximately 893.6 acre-feet per year (Water Rights, 2023c). Collectively, the estimated annual withdrawal rate for the northwestern portion of the Grand aquifer is approximately 3,380 acre-feet per year.

There are domestic wells completed into the northwestern portion of Grand aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2023d). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget. Additionally, with the development of rural water systems in areas where the northwestern portion of Grand aquifer is the uppermost aquifer available; it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the northwestern portion of the Grand aquifer.

Hydrologic Budget Summary

The estimated average annual recharge rate to the northwestern portion of the Grand aquifer ranges between approximately 4,507 to 18,031 acre-feet per year (Hedges et al., 1982 and 1985; Rich, 2008; Rich 2010).

The estimated average annual withdrawal rate to the northwestern portion of the Grand aquifer (including the estimated use for Water Permit Application Nos. 8694-3 and 8719-3, if approved) is approximately 4,267 acre-feet per year (non-irrigation: 855 acre-feet/year, irrigation: 3,380 acre-feet/year, and Water Permit Application Nos. 8694-3 and 8719-3 (if approved, assuming one-foot application rate): 32 acre-feet/year) (Water Rights, 2023a and 2023c).

The estimated average annual use for this balance is near the lower end of the average annual recharge rate estimated by Hedges and others (1985). It is expected that the withdrawals from the seven irrigation users within their construction period and Water Permit Application Nos. 8694-3 and 8719-3 would be less than what is being used for this balance, as these values are based on

an assumed water application rate of one foot for each permitted acre. Given the hydrologic budget, along with the observation well data indicating water is available, there is a reasonable probability unappropriated water is available in the northwestern portion of the Grand aquifer for the appropriation requested by Water Permit Application Nos. 8694-3 and 8719-3.

Table 3. Reported historic irrigation use from the northwestern portion of the Grand aquifer (Water Rights, 2023a)

Year	No. of Permits Reporting	Reported Pumpage (acre-ft)
1979	22	1,339
1980	21	2,334
1981	28	2,204
1982	22	2,956.4
1983	22	3,067.6
1984	25	3,407
1985	23	3,082
1986	22	2,333
1987	22	2,272
1988	20	2,845.9
1989	20	2,042.1
1990	20	2,335
1991	20	1,853
1992	19	1,205
1993	18	727
1994	17	1,695.4
1995	16	1,092.6
1996	15	1,172
1997	15	1,422
1998	15	1,245.1
1999	15	1,162.7
2000	16	1,317.8
2001	16	1,220.1
2002	17	2,646
2003	17	1,784.7
2004	17	1,621.8
2005	18	1,842.9
2006	18	3,892.6
2007	19	2,352
2008	19	2,660.4
2009	19	2,334.9
2010	19	2,903.8
2011	21	2,428.5
2012	23	3,206.3
2013	28	3,983.2
2014	29	2,984.3
2015	30	4,061.8
2016	34	4,115.2
2017	33	5,180.6
2018	33	4,797.9
2019	32	1,299.8
2020	34	3,619.5
2021	34	4,836.6
Max	34	5,181
Min	15	727
Avg	22	2,486

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 49 water rights/permits authorized to appropriate water from the northwestern portion of the Grand aquifer (Water Rights, 2023c). The closest water rights/permits (not held by the applicant) to the existing well sites are Water Right No. 4448-3A and Water Permit No. 7924-3, which are held by Iverson Farms LTD and Brandon Ritter (Water Rights, 2023c). The diversion points for Water Right No. 4448-3A and Water Permit No. 7924-3 are located approximately 0.7 miles northeast and southwest of the nearest existing well site for these applications (Figure 6) (Table 4) (Water Rights, 2023c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the northwestern portion of the Grand aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.6 miles southeast of the existing wells proposed to be used for these applications based on the location provided by the well driller (Water Rights, 2023d). There could potentially be other domestic wells completed into the northwestern portion of the Grand aquifer near the existing wells the applicant proposes to use that are not on file with the DANR-Water Rights Program.

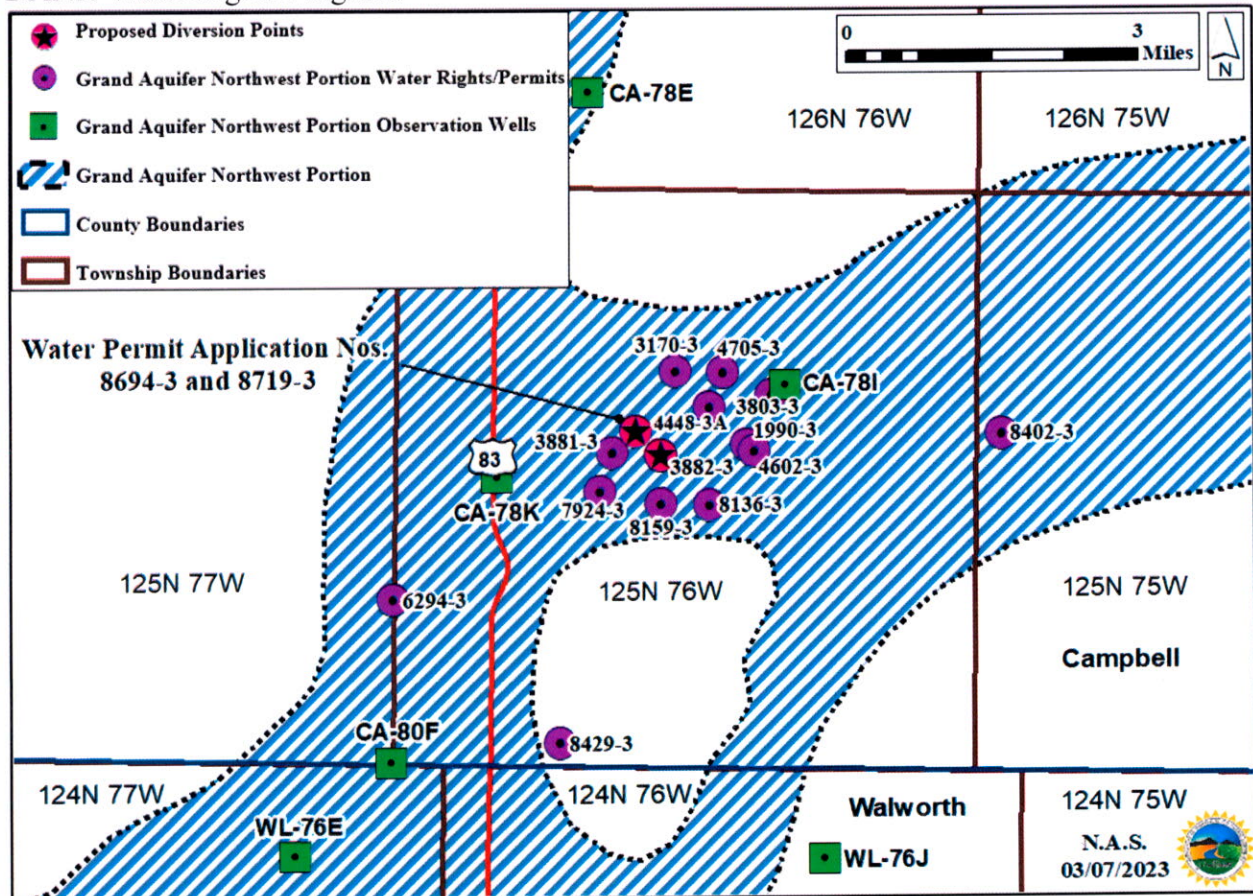


Figure 6. Location of the existing wells for Water Permit Application Nos. 8694-3 and 8719-3 (Water Rights, 2023c and 2023d) with the northwestern portion of the Grand aquifer water rights/permits and observation wells within approximately four miles (Water Rights, 2023b and 2023c)

Table 4. Water rights/permits authorized to appropriate water from the northwestern portion of the Grand aquifer within approximately four miles of the existing wells, as shown in Figure 6 (Water Rights, 2023c)

Permit No.	Name	Status	Use	Authorized Acres if IRR	Authorized Diversion Rate (cfs)
1990-3	Kenneth Brockel	LC	IRR	132	1.93
3170-3	Douglas L Salverson	LC	IRR	264	2.23
3803-3	Iverson Farms LTD	LC	IRR	264	1.78
3881-3	Lacey Land LLC	LC	IRR	268	2
3882-3	Lacey Land LLC	LC	IRR	268	2
4448-3A	Iverson Farms LTD	LC	IRR	132	1.89
4602-3	Kenneth R Brockel	LC	IRR	136	1.89
4705-3	Iverson Farms LTD	LC	IRR	264	1.78
6294-3	Lazy TV Ranch	LC	IRR	132	1.88
7924-3	Brandon Ritter	PE	IRR	270	2
8136-3	Lacey Land LLC	LC	IRR	272	1.78
8159-3	Lacey Land LLC	LC	IRR	78	1.78
8402-3	Roger Volzke	PE	IRR	240	3.33
8429-3	Rory Thorstenson	PE	IRR	60	1.78
LC: Licensed Water Right, PE: Water Permit, IRR: Irrigation					

The northwestern portion of the Grand aquifer is (expected to be) under confined conditions at the applicant's existing well sites based on the well completion reports on file and lithologic logs on file for nearby observation wells (SDGS, 2023b; Water Rights, 2023c and 2023d). Since the northwestern portion of the Grand aquifer is (expected to be) under confined conditions at the existing well sites, drawdown can extend some distance but the exact drawdown behavior of a well cannot be known without an aquifer performance test. However, observation wells completed into the Grand aquifer in southern Campbell County near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well CA-78I (approximately 1.5 miles northeast of the existing wells) has 12 high-yield irrigation wells (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) within approximately 2.5 miles of it (Water Rights, 2023b and 2023c). The lithologic log on file for CA-78I noted the well was drilled 320 feet deep, had a casing stickup height of 2.7 feet, and the top of aquifer materials are expected to be approximately 256 feet below the ground surface (SDGS, 2023b; Water Rights, 2023b). The lowest recorded static water level on the hydrograph is approximately 145 feet below the top of the well casing (as shown on Figure 3), which indicates there was still about 110 feet of artesian head pressure in CA-78I even during drier periods when high-yield irrigation wells are expected to be pumping more water and when water levels are generally naturally lower in response to drier conditions (Water Rights, 2023b).

Near the existing well sites, the Grand aquifer has a saturated aquifer thickness ranging from approximately 20 to 30 feet (SDGS, 2023b; Water Rights, 2023b and 2023d). This would generally allow for enough thickness for a pump to be placed 20 feet below the top of the

aquifer, which is required for the well to be considered adequate under ARSD 74:02:04:20(6). Any drawdown as a result of the proposed diversion is not expected to unlawfully impair nearby adequate wells. In McPherson County, there has been one complaint filed with the DANR-Water Rights Program regarding well interference in a glacial aquifer identified as the Hillsvieview aquifer; however, after investigation, the complaint was determined to be unsubstantiated (Water Rights, 2023e). In Campbell and Walworth Counties, there are no complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Grand aquifer (Water Rights, 2023e).

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“A well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs.”

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Grand aquifer at their location. However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the saturated thickness of the Grand aquifer in Campbell County, the artesian head pressure in observation wells and appropriative user’s wells completed into the Grand aquifer near the wells, and the lack of well interference complaints within Campbell and Walworth Counties, any drawdown created from the proposed diversions are not expected to cause an unlawful impairment on existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriations will not impose unlawful impairments on existing users with adequate wells.

SDCL 46-5-6:

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of 1.0 cfs per 70 acres, or “the equivalent thereof.” The statute does provide that: “The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires...”

If approved, Water Permit Application No. 8694-3 would authorize a maximum instantaneous diversion rate of 0.89 cfs from one well for the irrigation of 32 acres, from March through November, or at a rate of 1.95 cfs per 70 acres. The applicant did not provide a reason for the exceedance; however, it appears to be due to the center pivot size. Smaller pivots such as this the one being used often use a proportionally greater diversion rate to operate properly than their size would indicate is needed. This type of reason falls within SDCL 46-5-6 which allows the Water Management Board to allow a greater diversion rate. In addition, this well will supply the two standard quarter section pivots (268 acres) which appropriates 2.0 cfs under Water Right No. 3881-3 and the small pivot (32 acres) proposed by this application at a rate of 0.89 cfs. Collectively, this well will have a permitted diversion rate authority of 2.89 cfs for irrigation of 300 acres, which is less than statutory limit of 1 cfs per 70 acres.

If approved, Water Permit Application No. 8719-3 would authorize a maximum instantaneous diversion rate of 4.0 cfs from one well for the irrigation of 268 acres, from March through November, or at a rate of 1.04 cfs per 70 acres. The applicant did not provide a reason for the exceedance. The existing well proposed to be used would serve existing center pivots that are presumably nozzled to operate at 2.0 cfs, which is slightly over the statutory limit. This type of reason falls within SDCL 46-5-6 which allows the Water Management Board to allow a greater diversion rate.

CONCLUSIONS:

1. Water Permit Application No. 8694-3 proposes to divert water at a maximum instantaneous diversion rate of 0.89 cfs from one existing well completed into the Grand aquifer (260 feet deep) for the irrigation of 32 acres.
2. Water Permit Application No. 8719-3 proposes to appropriate 2.0 cfs from one existing well completed into the Grand aquifer (300 feet deep) for the irrigation of land authorized by Water Right No. 3882-3. Water Right No. 3882-3 authorizes a diversion rate of 2.0 cfs from one well for the irrigation of 268 acres. The additional well will allow the center pivots to operate independently and will increase the diversion rate by 2.0 cfs with no increase in the total acres irrigated and either well can be used to operate either irrigation system. The site of interest for both applications is located in Campbell County approximately six miles south of Mound City, SD.
3. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres for both Water Permit Application Nos. 8694-3 and 8719-3. The applicant did not provide a reason for the exceedance, but it is likely due to the center pivot size. This type

of reason falls within SDCL 46-5-6 which allows the Water Management Board to allow a greater diversion rate.

4. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the northwestern portion of the Grand aquifer to supply the proposed appropriation.
5. There is a reasonable probability that the proposed diversions by Water Permit Application Nos. 8694-3 and 8719-3 will not unlawfully impair adequate wells for existing water rights/permits and domestic users.



Nakaila Steen
Natural Resources Engineer II
SD DANR - Water Rights Program

Reviewed by:



Adam Mathiowetz, PE
Natural Resources Engineer IV
SD DANR -Water Rights Program

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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

March 29, 2023

Lacey Land LLC
c/o Dick Lacey
48456 266th St.
Brandon SD 57005

Dear Mr. Lacey:

Water Permit Application Nos. 8694-3 and 8719-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Prairie Pioneer printed at Pollock SD (Ph # 605 889-2320) and the American News printed at Aberdeen SD (see attachment for contact number). You will need to contact the newspapers 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 newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have 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,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(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 NOS. 8694-3 and 8719-3 to Appropriate Water

Notice is given that Lacey Land LLC, Dick Lacey, 48456 266th St, Brandon SD 57005 has filed the following applications for a water permit. Application No. 8694-3 proposes to appropriate 0.89 cubic feet of water per second (cfs) from one existing well completed into the Grand Aquifer (260 feet deep) located in the approximate center of Section 16 for irrigation of 32 acres located in the SE 1/4 NW 1/4, NE 1/4 SW 1/4, NW 1/4 SE 1/4, SW 1/4 NE 1/4 Section 16; all in T125N-R76W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 8719-3 proposes to appropriate 2.0 cfs from one existing well completed into the Grand Aquifer (300 feet deep) located near the E 1/4 corner of Section 16-T125N-R76W. Water Right No. 3882-3 authorizes diversion of 2.0 cfs from one well in the SE 1/4 Section 16 for irrigation of 268 acres in the E 1/2 Section 16; all in T125N-R76W. The additional well will allow the center pivots in the E 1/2 Section 16 to operate independently and will increase the diversion rate by 2.00 cfs with no increase in the total acres irrigated and either well can be used to operate either irrigation system. The applicant is requesting a combined diversion rate greater than the statutory limit of 1 cfs per 70 acres. The site of both applications is approximately 6 miles south of Mound City SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 8694-3 and 8719-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing the applications or recommendation shall allege that the applications, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the applications, or other matter concerning the applications within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the applications with BOTH the applicant and Chief Engineer. A petition opposing the applications shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by April 17, 2023.

The petition shall include a statement describing the unique injury upon approval of the applications on the petitioner, the petitioner's reasons for opposing the applications, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the applications with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by April 17, 2023.

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Published once at the total approximate cost of_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, March 28, 2023 2:46 PM
To: pioneer@valleytel.net
Subject: 8694-3 and 8719-3 Lacey Land LLC
Attachments: 8694-3_8719-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on April 6, 2023

Lacey Land LLC, Dick Lacey, 48456 266th Street, Brandon SD 57005, 605-370-1085 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 to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, March 28, 2023 2:50 PM
To: aan-legals@aberdeennnews.com
Subject: 8694-3 and 8719-3 Lacey Land LLC public notice
Attachments: 8694-3_8719-3 public.short_final.docx; FORM8.FRM.doc

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Notice of application to appropriate water

NOTICE OF APPLICATION
NOS. 8694-3 and 8719-3
to Appropriate Water

Notice is given that Lacey Land LLC, Dick Lacey, 48456 266th St, Brandon SD 57005 has filed the following applications for a water permit. Application No. 8694-3 proposes to appropriate 0.89 cubic feet of water per second (cfs) from one existing well completed into the Grand Aquifer (260 feet deep) located in the approximate center of Section 16 for irrigation of 32 acres located in the SE 1/4 NW 1/4, NE 1/4 SW 1/4, NW 1/4 SE 1/4, SW 1/4 NE 1/4 Section 16; all in T125N-R76W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Application No. 8719-3 proposes to appropriate 2.0 cfs from one existing well completed into the Grand Aquifer (300 feet deep) located near the E 1/4 corner of Section 16-T125N-R76W. Water Right No. 3882-3 authorizes diversion of 2.0 cfs from one well in the SE 1/4 Section 16 for irrigation of 268 acres in the E 1/2 Section 16; all in T125N-R76W. The additional well will allow the center pivots in the E 1/2 Section 16 to operate independently and will increase the diversion rate by 2.00 cfs with no increase in the total acres irrigated and either well can be used to operate either irrigation system. The applicant is requesting a combined diversion rate greater than the statutory limit of 1 cfs per 70 acres. The site of both applications is approximately 6 miles south of Mound City SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 8694-3 and 8719-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

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Published once at the total approximate cost of \$52.29 and can be viewed free of charge at www.sdpublicnotices.com

-040623

Affidavit of Publication

STATE OF SOUTH DAKOTA,
COUNTY OF CAMPBELL, ss.

I, Lori Cox, being first duly sworn, on oath says, that she is the bookkeeper of the Prairie Pioneer, a weekly newspaper published in Pollock, County of Campbell, and has full and personal knowledge of all the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies weekly, and has been published within said county for fifty-two successive weeks next prior to the publication of the notice herein mentioned; that the

Water Application Filed

Dick Lacey

a printed copy of which, taken from the paper in which same was published, is attached to this sheet, and is made a part of this Affidavit, was published in said newspaper at least once each week for 1 successive week, on the day of each week on which said newspaper was regularly published to-wit:

1- Prairie Pioneer: 4/6/2023

That the full amount of the fees for the publication of the annexed notice is \$52.29

Lori Cox

Subscribed and sworn to before me this 4/12/2023

Arden Pahl

Arden Pahl, Notary Public

State of South Dakota

My commission expires August 1, 2025





Aberdeen News
Watertown Public Opinion

PO Box 630567 Cincinnati, OH 45263-0567

PROOF OF PUBLICATION

Dick Lacey
Lacey Land LLC
48456 266Th ST
Brandon SD 57005-7212

STATE OF SOUTH DAKOTA, COUNTY OF BROWN

The AMERICAN NEWS is a daily newspaper of general circulation, printed and published in Aberdeen, Brown County, South Dakota, and has been such a newspaper during the times hereinafter mentioned; and personal knowledge of the facts herein state that the notice hereto annexed was Published in said newspapers in the issue dated:

04/06/2023

That said newspaper is a legal newspaper published five days or more each week; with a bona fide circulation of more than two hundred copies daily; published in the English language within the said county of Brown for more than one year prior to the first publication of said notice; and printed in whole in an office maintained at the place of publication of said newspaper.
Sworn to and subscribed before on 04/06/2023

Legal Clerk

Notary, State of WI, County of Brown

3/7/27

My commission expires

Publication Cost: \$59.04

Order No: 8632966

of Copies:

Customer No: 922145

1

PO #:

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

KAITLYN FELTY
Notary Public
State of Wisconsin

NOTICE OF APPLICATION NOS. 8694-3 and 8719-3 to Appropriate Water

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Published April 6, 2023, at the total approximate cost of \$60.44 and may be viewed free of charge at www.sdpublicnotices.com

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, March 28, 2023 4:27 PM
To: laceyhay@alliancecom.net
Subject: 8694-3 and 8719-3 Lacey Land LLC public notice information
Attachments: 0262.pdf

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for your water permit application. As stated in the letter, please contact the paper(s) as soon as possible to authorize publication and arrange for payment. This information is being mailed to you today.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

MAY 15 2023

Lacey Land LLC.
c/o Dick Lacey
48456 266th Street
Brandon SD

Dear Mr. Lacey:

Enclosed are Water Permit Nos. 8694-3 and 8719-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses 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,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8719-3

Name of Applicant: Lacey Land LLC, Dick Lacey

Date of Posting: 4/3/2023

Date of Removal: 5/15/2023



Ron Duvall, Water Rights Permitting Administrator

5/24/23

Date

Subscribed and sworn to before me, a notary public, this 24 day of May, 2023.



Notary Public - South Dakota
My commission expires: 4/1/2025

