

WATER PERMIT NO. 2044-1

Name of Applicant: **H2O Clear Solutions LLC**

Address: **PO Box 2711316, Flower Mound TX 75027**

Phone: **605-569-3646**

Amount of Water Claimed: **270 AF**

Total Acres: **N/A**

Source of Water Supply: **Groundwater**

Water to be used for: **WDS/COM**

County: **Lawrence**

Type of Waste Disposal System:

Location: **Approx. 4 miles west of Spearfish**

PRIORITY Date Received: **01-30-25**

Application/License Fee: **\$1,050.00**

Corrected Application Received: **02-19-25**

Period of Annual Use: **January 1 – December 31**

Remarks:

Diversion Point: **SE 1/4 NW 1/4 Sec 14-T5N-R4E**

Land to be Irrigated: **N/A**

Depth of Well: **1520**

Well Driller:

Remarks:

Type of Map: **aerial**

		11		
		14		

Reviewed and the Number Assigned on: **02-26-25**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 2044-1

Date of first receipt of application January 30, 2025.

Date of return to applicant for corrections, amendments or changes January 30, 2025.

Date of receipt of corrected application February 26, 2025.

The Acting Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2044-1 to H2O Clear Solutions LLC., PO Box 2711316, Flower Mound TX 75027, 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. 2044-1 appropriates up to 270 acre-feet of water annually at a maximum pump rate of 0.56 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 900 – 1500 feet deep) located in the SE 1/4 NW 1/4 Section 14-T5N-R4E. Water will be used for a water distribution system and commercial use. Water service is planned in portions of the N 1/2 Section 14; SW 1/4 NW 1/4 Section 13; W 1/2 Section 11; W 1/2 SW 1/4, SW 1/4 NW 1/4 Section 2; and SE 1/4 NE 1/4 Section 3; all in T5N-R4E. This well site is located approximately four miles west of Spearfish SD.
2. The water appropriated shall be used for commercial and water distribution system purposes and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 2044-1 is May 12, 2025.
5. The date from which applicant may claim right is January 30, 2025.
6. One-fifth of the construction is to be completed on or before November 12, 2027.
7. All construction is to be completed on or before May 12, 2030.
8. Water is to be put to beneficial use on or before May 12, 2034.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2044-1 is issued for a twenty-year term. Pursuant to SDCL 46-2A-21, the twenty-year term may be deleted at any time during the twenty-year period or following its expiration. If the twenty-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2044-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this permit must control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

(continued)

3. The well authorized by Permit No. 2044-1 must be constructed by a licensed well driller and construction of the well and installation of the pump must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
4. The Permit holder must report to the Chief Engineer annually the amount of water withdrawn from the Madison Aquifer.
5. Water Permit No. 2044-1 appropriates up to 270 acre-feet of water annually.

WATER MANAGEMENT BOARD

By: Mark Mayer
Mark Mayer, PE
Director of Office of Water
Department of Agriculture and Natural Resources

6/11/25
date



RECEIVED

JAN 30 2025

OFFICE OF
WATER

Mail to: SD DANR, Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2044-1</u> Hydrologic Unit <u>10120202</u> Basin <u>Belle Fourche</u> Newspaper <u>Spearfish Black Hills Pioneer</u> (office use only)
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Application for Permit to Appropriate Water in South Dakota

Check use(s) of water:

☐ Municipal	☒ Water Distribution System	☐ Recreational	☐ Institutional
☐ Rural Water System	☒ Commercial	☐ Fish & Wildlife	☐ Geothermal
☐ Domestic (over 18 gpm)	☐ Industrial	☐ Other _____	

Type of Application: (check one)

☒ New	☐ Vested Right (Use predates Mar 2, 1955)	☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____		
☐ Amendment/Correction to Permit No. _____		

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

Claiming the remainder of the original water rights of 0.67 CFS that was allotted under Permit 1840-1.

- Name to Appear on Water Permit H2O Clear Solutions LLC
Mailing Address P.O. Box 2711316 Flower Mound TX 75027
(Address) (City) (State) (Zip Code)
Phone (605)569-3646 Mobile (214)402-9810 Email mike@liveapplesprings.com
- Amount of water claimed 0.39 ^{0.56} *CFS or 175 ^{251.3} **GPM and (1 well) ***AF or _____ Gallons
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use)
- Source of water supply Well, Madison Aquifer
- Location of point of diversion SW1/4 NW1/4 Section 11, T5N, R4E, BHM. County Lawrence
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☒ Yes ☐ No
If "Yes," where will water be used? In the water distribution system of Apple Springs Water Works District
(example - NW1/4 section 12-T104N-R53W)
- County or counties where water will be used Lawrence
- Annual period during which water is to be used Jan. 1 - Dec. 31 (year-round)
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Proposed development Layout is shown in attached Figure 1. Total site is 541 acres served by the existing well 1(150 GPM) and this proposed well (175 GPM).

I, Mike Short CEO, the applicant, certify under
Name of Person Title (if applicable)

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)

RECEIVED

JAN 30 2025

OFFICE OF
WATER

1. Well Information (check one or both as applicable)

☒ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many 1 Have test holes been drilled? ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)
- b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

For either existing or proposed wells:

- c) Well Depth (required) 1520' Depth to Top of Water Bearing Material 450' Depth to Water from Surface 400'
- d) Distance to nearest domestic well on applicant's property 2650' (Mads) Property owned by others 1200' (Min)

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) Central Collection and treatment plant
- b) System Capacity (gallons) 27,500 gpd Year Constructed 2021
- c) Connected to the City of N/A Sanitary System

3. Dugout Information

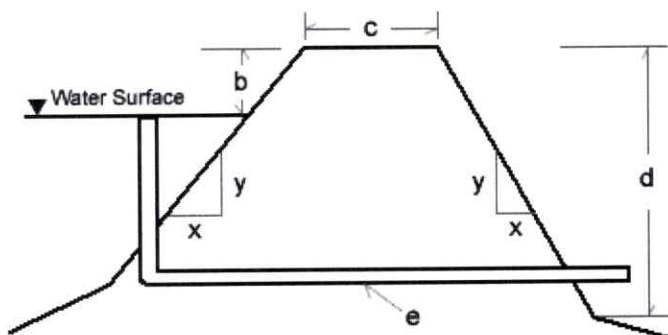
- a) Surface Dimensions N/A Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

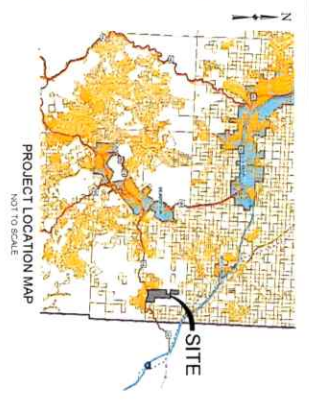
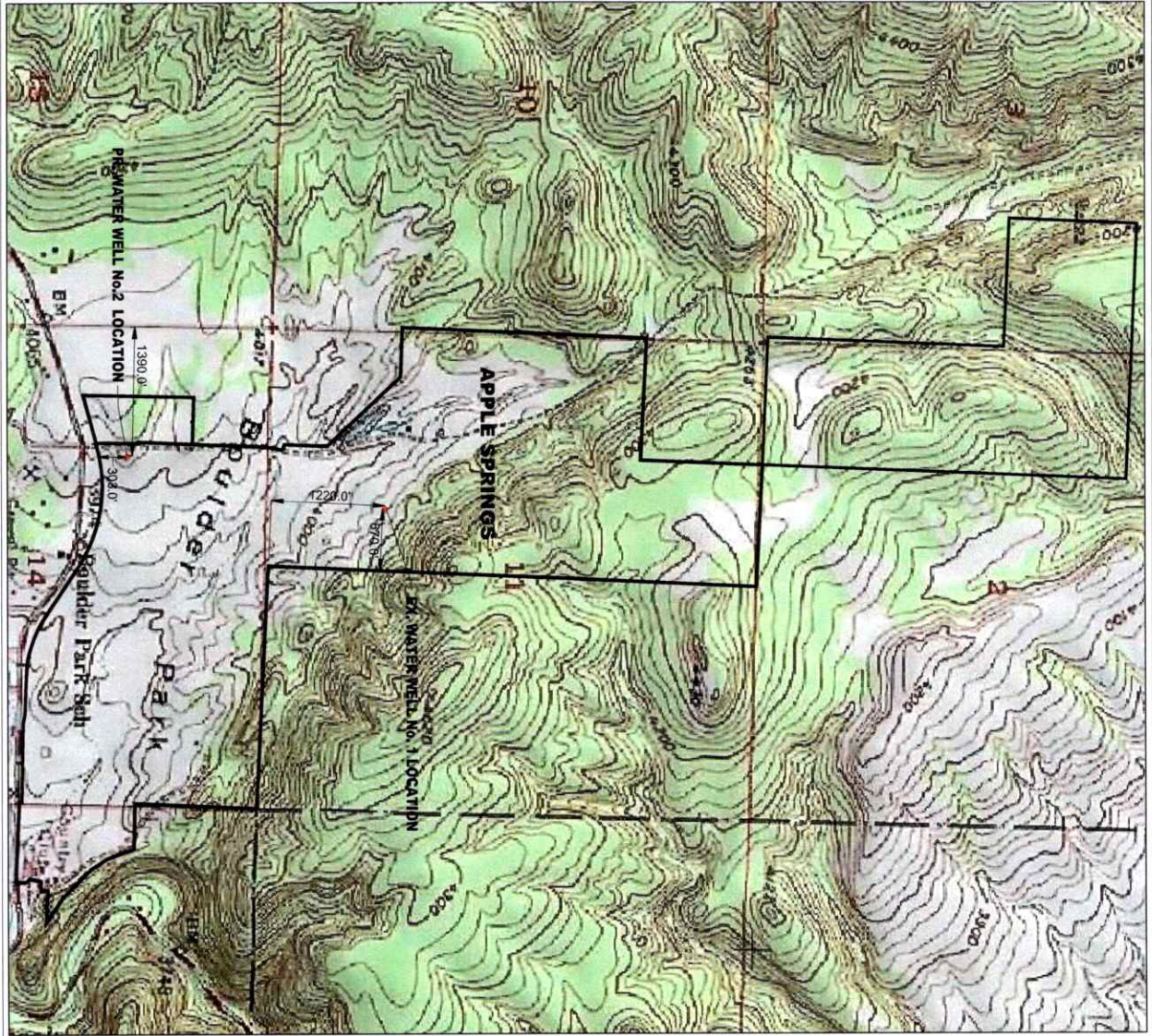
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- 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



OWNER
BENESCH & COMPANY, LLC
PO BOX 277113
LINCOLN, NE 68527
P/N 2140000000

benesch
Alfred Benesch & Company
625 M Street - Suite 100
Lincoln, Nebraska 68508
402-479-2200
Job No. - 112515

DESIGNED BY	REVIEWED BY	CHECKED BY	DATE

APPLE SPRINGS DEVELOPMENT
APPLE SPRINGS,
LAWRENCE COUNTY,
SOUTH DAKOTA

WATER WELL LOCATION MAP

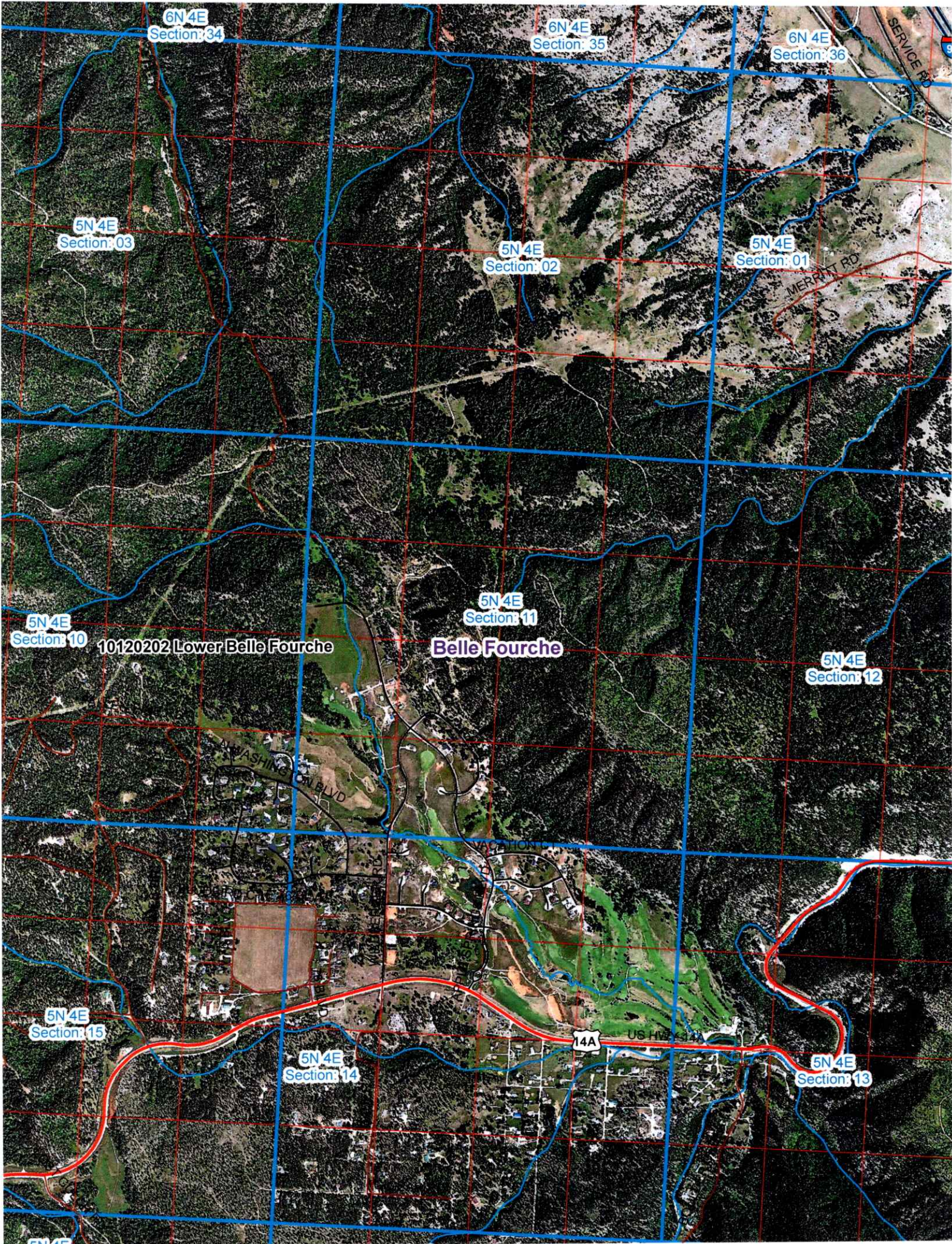
PER STATE REVIEW 9-15-24		
NO.	REVISIONS	DATE

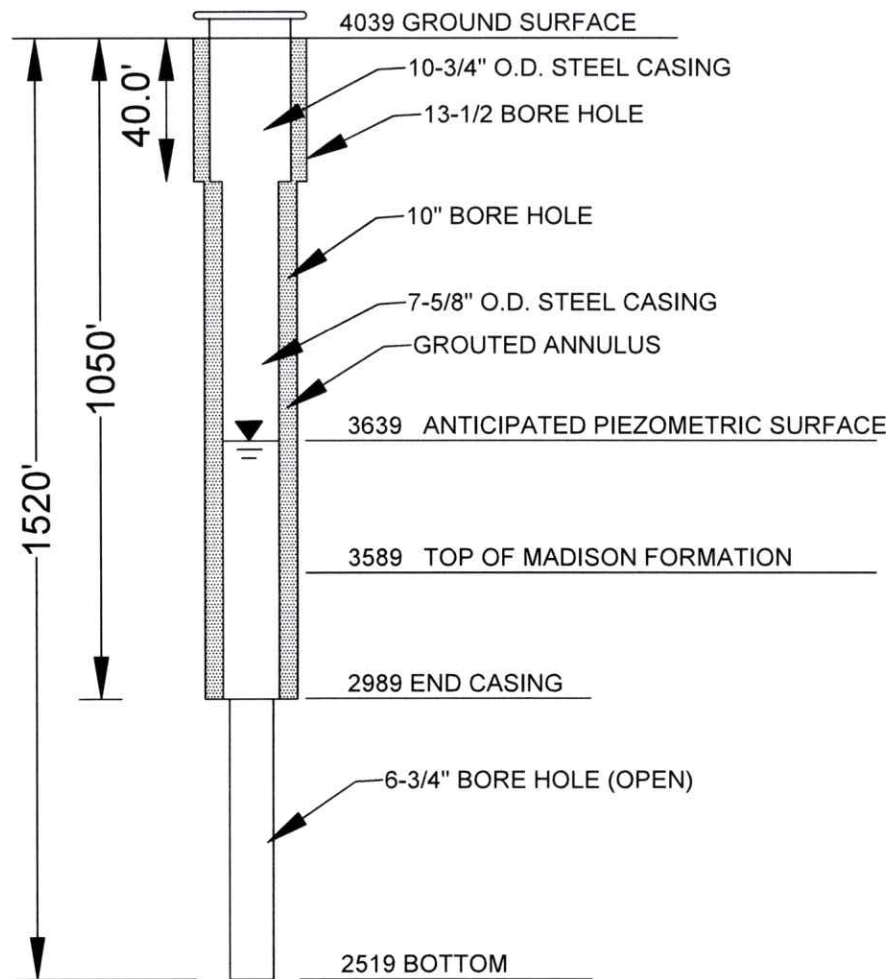
SE 1/4 of the NW 1/4 of Section 14 Township 5 North, Range 4 East Black Hills Principal Meridian South Dakota Area: 39.8 acres

Lat: Long: 44.39769, -103.60351 Find lat long

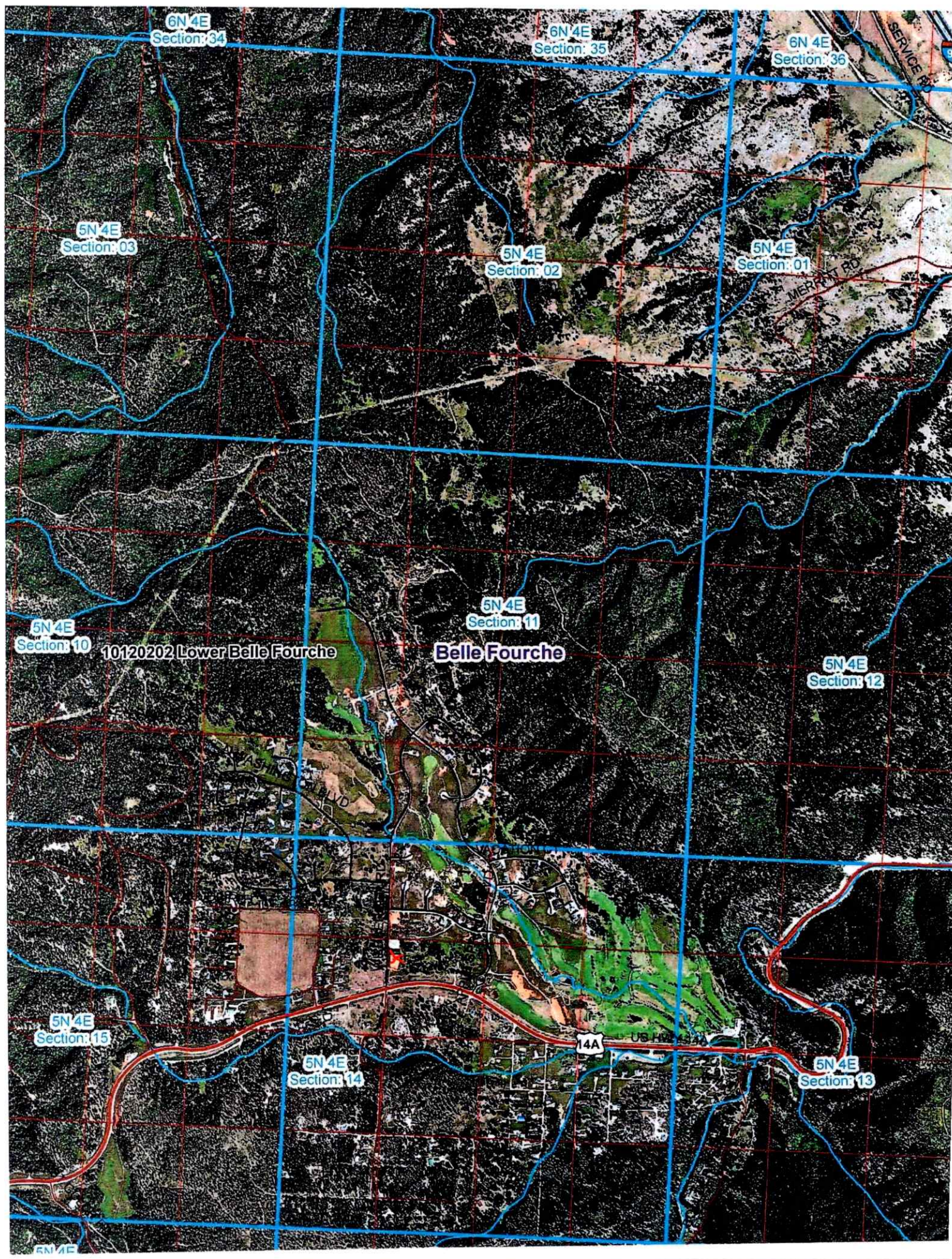
Q Search places (e.g. address, city)







ANTICIPATED WELL PROFILE FOR
APPLE SPRINGS WELL No. 2





Project Description for Apple Springs in Boulder Canyon

Developer: H2O Clear Solutions LLC
PO Box 271316
Flower Mound, TX 75027
Attn. Mike Short (mike@liveapplesprings.com)

Engineer: Benesch
825 M Street, Suite 100
Lincoln, NE 68508
Attn. Anthony Theodorou PE (atheodorou@benesch.com)

General Description of the Project

The proposed development layout is shown in the attached Figure 1. Total site is 542 acres.
The projected water use is as follows:

Residential

Townhomes:	80 units
Single Family:	318 units
	398 dwelling units

Commercial

Commercial Miscellaneous:	7,500 square feet floor area
Public Service Lot:	5,000 square feet floor area
Clubhouse/Restaurant:	5,000 square feet floor area

Development began in 2006 and is currently at 80 homes. The Boulder Canyon Golf Course has 18 holes and is pursuing its own wells to provide for irrigation water independent of the development.

Water Demands

Residential Properties / Rentals:.....398 dwelling units

Commercial/Clubhouse Restaurant:.....17,500 square feet floor area

Average Day at full build-out

Residential:	$398 \text{ d.u.} \times 2.5 \text{ people/d.u.} \times 100 \text{ gpcd} =$	99,641 gpd
Commercial:	$17,500 \text{ s.f.a.} \times 250 \text{ gpd} / 1000 \text{ sffa} =$	4,375 gpd

Peak Day Demand (3.0 x average day)

$3.0 \times 104,016 \text{ gdp} = 312,048 \text{ gallons per day or } 216.7 \text{ gpm}$



Pumping Rate

Proposed project will have two wells, both completed into the Madison aquifer. Anticipated total well yield required is 1.5 times ultimate peak day demand.

Total well pumping rate required = $1.5 \times 216.7 \text{ gpm} = 325 \text{ gpm}$

Split between the two wells.

Pump Rate Well 1 (existing): 150 gpm

Pump Rate Well 2 (proposed) 175 gpm

Irrigation

Lawn and grounds irrigation is included in the projected domestic demands.

The golf course will be pursuing their own additional water rights permits to keep their impoundment ponds full. Some wastewater recycling from the Wastewater treatment plant may augment the golf course lower 9 pond (near Highway 14A at the base of the canyon).

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

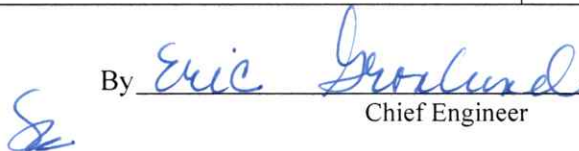
Date February 18th 2025

RECEIVED OF Mike Short for H2O Clear Solutions LLC PO Box 2711316 Flower Mound TX 75027

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

Fee for Application for Permit No. <u>2044-1</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>750.00</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. _____	\$ _____
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>750.00</u>

By


Chief Engineer

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date February 26th 2025

RECEIVED OF Mike Short for H2O Clear Solutions LLC PO Box 2711316 Flower Mound TX 75027

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

Fee for Application for Permit No. <u>2044-1</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>2044-1</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 Groslund
Sc Chief Engineer



532496307

ANNUAL REPORT

Secretary of State
500 E. Capitol Ave
Pierre, SD 57501-5070
(605) 773-4845

Domestic Limited Liability Company
SDCL 47-34A-211; 59-11-24, 24.1

Filing Fee: \$50

2024
FILING YEAR

Please Type or Print Clearly in Ink
Please submit one Original
Make payable to the SECRETARY OF STATE

Total Fee: \$50

1. Business ID and Name:

DL035367
BUSINESS ID

H2O Clear Solutions, LLC
BUSINESS NAME

2. The jurisdiction under whose law it is formed **SOUTH DAKOTA**

3. The address of the principal executive office (business address):

Actual Street Address

2834 JACKSON BLVD
201
RAPID CITY, SD 57702

Mailing Address

2834 JACKSON BLVD
201
RAPID CITY, SD 57702

4. The South Dakota Registered Agent's Name:

South Dakota law permits the registered agent to be either (a) a noncommercial registered agent, or (b) a commercial registered agent.

(a) The South Dakota Noncommercial Registered Agent's name

Name **MICHAEL C. LOOS**

Actual Street Address in this State

2834 JACKSON BOULEVARD SUITE 201
RAPID CITY, SD 57702

Mailing Address in this State

PO BOX 9129
RAPID CITY, SD 57709

5. If the LLC is manager-managed, list the names and addresses of its Managers. SDCL 59-11-24. If the LLC is member-managed, this section may be left blank.

6. 43-2A-1. "Agricultural land" defined.

For purposes of this chapter, the term "agricultural land" means land capable of use in the production of agricultural crops, timber, livestock or livestock products, poultry or poultry products, milk or dairy products, or fruit and other horticultural products but does not include any royalty interest, any oil, gas, or other mineral interest, or any lease, right-of-way, option, or easement relating thereto, or any land zoned by a local governmental unit for a use other than and nonconforming with agricultural use

Does the entity own any Agricultural land? (Required)

No

If the answer is yes, please answer below

"Foreign Beneficial Owner" "Foreign entity" is registered outside of the United States or its territories or has more than ten percent ownership by a foreign government, foreign person, or any combination thereof. "Foreign Government" A Government or state- controlled enterprise of a government, other than the United States, its states, its territories, or its federally recognized Indian Tribes. "Foreign Person" A natural Person who is not a United States Citizen or a resident.

Does the entity have any foreign beneficial owners/interests?



N/A

If the answer is yes to the questions above, please provide the information below

Provide a legal description of the agricultural land or a description of the land's common location in the space provided below.

N/A

The total acreage of agricultural land held by the entity.

N/A

The Current use of the agricultural land. As defined in SDCL 43-2A-1.

Check all that apply:

N/A

7. Beneficial Owners (optional): A beneficial owner is a person who has or in some manner controls an equity security. Please consult an attorney for legal advice if you have any questions concerning this entry. Any question under this heading is considered a request for legal advice and the secretary of state's office is, by statute, not permitted, to provide legal advice.

Name	Address
Melinda M Short	204 Colonial Ct, Double Oak Texas, 77077
Michael L Short	PO Box 271316, Flower Mound, Texas 75027

No person may execute this report knowing it is false in any material respect. Any violation may be subject to a criminal penalty (SDCL 22-39-36).

08/05/2024

Dated

Email (Optional)

Michael L Short

Signature of an Authorized Person

Michael L Short

Printed Name

B0323-3158 08/05/2024 4:24PM Rec'd by SD SOS



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF ACTING CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2044-1, H2O Clear Solutions LLC**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Acting Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 2044-1, H2O Clear Solutions LLC, PO Box 2711316, Flower Mound TX 75027.

The Acting Chief Engineer is recommending APPROVAL of Application No. 2044-1 with a twenty-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, 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. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2044-1 is issued for a twenty-year term. Pursuant to SDCL 46-2A-21, the twenty-year term may be deleted at any time during the twenty-year period or following its expiration. If the twenty-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2044-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits must control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. The well authorized by Permit No. 2044-1 must be constructed by a licensed well driller and construction of the well and installation of the pump must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
4. The Permit holder must report to the Chief Engineer annually the amount of water withdrawn from the Madison Aquifer.
5. Water Permit No. 2044-1 appropriates up to 270 acre-feet of water annually.

See report on application for additional information.

Mark Mayer, PE
Director of Office of Water
April 23, 2025

Report to the Chief Engineer
On Water Permit Application No. 2044-1

H2O Clear Solutions

03/14/2025

Water Permit Application No. 2044-1 proposes to appropriate up to 270 acre-feet of water annually at a maximum pump rate of 0.56 cubic feet of water per second (cfs) from one well to be completed into the Madison aquifer (approximately 900 to 1500 feet deep) in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14-T5N-R4E. Water is proposed to be used in a water distribution system and for commercial use. Water service is planned in portions of the N $\frac{1}{2}$ Section 14; SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 13; W $\frac{1}{2}$ Section 11; W $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 2; and SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 3; all in T5N-R4E. This area of interest is located in Lawrence County approximately four miles west of Spearfish, SD.

AQUIFER: Madison (MDSN)

HYDROGEOLOGY:

The Madison Group in South Dakota is a Lower Mississippian and Upper Devonian aged group of formations that in the Black Hills consists of the Englewood and Pahasapa Limestone formations (Fahrenbach et al., 2010). The Pahasapa Limestone is a “white, light-gray to tan, fine- to medium-grained limestone and dolomite containing brown to gray chert” (Martin et al., 2004). The Englewood Limestone is a “pink to lavender to light-gray, thin- to medium-bedded, fine- to medium-grained, argillaceous, dolomitic limestone” (Martin et al., 2004). The Madison aquifer consists of the permeable and porous portions of the Madison Group that are sufficiently saturated to deliver useful quantities of water. The Madison aquifer extends over more than 210,000 square miles in Montana, Wyoming, North Dakota, South Dakota, and Nebraska (Downey, 1984) although, it may not be suitable as a source of water in all those areas due to extreme depth to the aquifer and poor water quality far from the outcrops (Carter, 2002). It crops out in the Black Hills and is buried elsewhere in South Dakota (Downey, 1984). The Madison aquifer may be hydrologically connected to the underlying Deadwood aquifer. It is also hydrologically connected to the overlying Minnelusa aquifer (Long, 2002). The Minnelusa aquifer overlies the Madison unconformably (Fahrenbach et al., 2010), which means there was a period of erosion or weathering between when the Madison Group and the Minnelusa Formation were deposited. Transmissivity in the Madison aquifer mainly comes from secondary porosity features such as solution cavities, faults, and fractures (Long, 2002). Because most of the transmissivity in the Madison aquifer comes from secondary porosity features, aquifer characteristics in the Madison aquifer vary greatly from location to location (Long, 2002).

No well completion report was filed for this application, but the proposed well depth and location corresponds to the Madison aquifer. At the location of this application, land surface elevation ranges between 4,020 feet and 4,040 feet (NGVD29). Carter and Redden (1999) estimated the top of the Madison Limestone at approximately 3,575 feet mean sea level (ft msl) (NGVD29) and McKaskey (2013) potentiometric surface mapping of the Madison aquifer

estimated the water level of the Madison aquifer at approximately 3,725 ft msl (NAVD 88). Since both of these references are for use on a regional scale, the exact top of the Madison Limestone from these estimates and water levels may vary due to climatic variability. However, given the scale of the area, the difference between the vertical datums is negligible. Historically, both of these references have generally provided good insight into the Madison aquifer (Water Rights, 2025c). Based on the estimated elevations, the Madison aquifer is expected to be under confined conditions at the well site. The well completion reports on file for Madison aquifer wells within two miles support the aquifer being under confined conditions at the proposed well site (Water Rights, 2025d).

SOUTH DAKOTA CODIFIED LAW (SDCL)

Water Permit Application No. 2041-1 proposes to appropriate water from the Madison aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering *SDCL 46-6-3.1*, *SDCL 46-2A-9* & *SDCL 46-2A-20*.

Pursuant to SDCL 46-6-3.1,

“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 Madison Group is stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010) and the water for this application, if approved, will be used by a water distribution system. Therefore, the Water Management Board’s authority to approve this application is not restricted by whether recharge exceeds withdrawals. However, a statewide and local hydrologic budget is included in this report for the information of the Chief Engineer and the Water Management Board.

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 Madison aquifer.

Pursuant to SDCL 46-2A-20,

“Notwithstanding §§ 46-1-14 and 46-2A-7, no water permit for construction of works to withdraw water from the Madison formation in Butte, Fall River, Custer, Lawrence, Meade and Pennington counties may be issued for a term of more than twenty years, unless the Water Management Board determines, based upon the evidence presented at a hearing that:

- (1) Sufficient information is available to determine whether any significant adverse hydrologic effects on the supply of water in the Madison formation would result if the proposed withdrawal were approved; and*
- (2) The information, whether provided by the applicant or by other means, shows that there is a reasonable probability that issuance of the proposed permit would not have a significant adverse effect on nearby Madison formation wells and springs.”*

Water Permit Application No. 2044-2 proposes to withdraw water from the Madison aquifer in one of the counties listed above. Therefore, in addition to the requirements set forth by SDCL 46-2A-9, the Water Management Board must consider the effect this application may have on nearby Madison aquifer wells and springs. This application is subject to a 20-year term limit.

HYDROLOGIC BUDGET:

Statewide Recharge

The Madison aquifer receives recharge from the infiltration of precipitation and streamflow on the outcrop area and may also receive inflow from the underlying Deadwood aquifer (Carter, et al., 2001). There are several reports available that estimate recharge to the Madison aquifer.

Woodward-Clyde Consultants (1981) estimated recharge to the outcrop of the Madison aquifer in the Black Hills to assess the potential impacts of then-proposed ETSI Coal Slurry Pipeline Project on ground and surface water resources. The upper-bound estimate of recharge in the Woodward-Clyde Consultants (1981) report is approximately 400,000 ac-ft/yr, assuming almost all of the precipitation that falls on the outcrop infiltrates into the aquifer. Woodward-Clyde Consultants (1981) produced a lower-bound recharge estimate of 140,000 ac-ft/yr based on the Rahn and Gries (1973) report. However, the Rahn and Gries report (1973) estimated recharge for all Paleozoic limestone in the Black Hills, which includes the Madison Group, the Minnelusa Formation, and the Minnekahta Formation. Rahn and Gries (1973) reported that 146.6 cfs was their minimum estimated recharge rate for the Paleozoic limestone from infiltration of precipitation, which converts to approximately 106,000 ac-ft/yr for all Paleozoic formations. The Woodward-Clyde Consultants report does not acknowledge that the Rahn and Gries (1973) report estimated minimum recharge for a larger group of formations than only the Madison aquifer and therefore the minimum recharge to the Madison aquifer as stated in the Woodward-Clyde Consultants (1981) is likely an overestimate.

Carter, et al. (2001) analyzed streamflow and precipitation data from water years 1931 to 1998 in the Black Hills area in South Dakota and Wyoming to determine the average annual recharge to

the Madison and Minnelusa aquifers. They estimated a combined average annual recharge to both aquifers to be 344 cfs, or approximately 249,000 ac-ft/yr, not including possible flow from the Deadwood aquifer (Carter, et al., 2001). Carter, et al., (2001) estimated that approximately 55% of the recharge goes to the Madison aquifer, resulting in the total estimated average recharge to the Madison aquifer from the outcrop in the Black Hills to be approximately 137,000 ac-ft/yr, not including possible inflow from adjacent aquifers or from the Madison aquifer outside of South Dakota. The Carter, et al., (2001) report uses more years of data, more recent data, and better assumptions than the Woodward-Clyde Consultants (1981) and Rahn and Gries (1973) reports. Therefore, the best estimate of recharge to the Madison aquifer is based on the Carter, et al., (2001) report.

Statewide Discharge

Discharge from the Madison aquifer in South Dakota is mainly by outflow to other aquifers when the hydraulic head in the Madison aquifer is higher than other aquifers, outflow to springs and seeps, and withdrawals by domestic and appropriative wells (Carter, et al., (2001); Water Rights, 2025d). Due to the presence of overlying aquifers and water distribution systems in many areas of the aquifer, domestic well withdrawals are a negligible portion of the hydrologic budget of the Madison aquifer. There are 178 water rights/permits currently authorized to withdraw from the Madison aquifer and 12 future use water rights/permits reserving water from the Madison aquifer (Water Rights, 2025c). Table 1 lists the future use permits.

Future Use Permit Nos. 369-1 and 439-2 are assigned to multiple aquifers, but Table 1 will only list the reserved water from the Madison aquifer. Future Use Permit No. 369-1 reserves 1,238 acre-feet annually from the Spearfish Creek alluvium, 620 acre-feet annually from the Minnelusa aquifer, and 620 acre-feet from the Madison aquifer. Future Use Permit No. 439-2 reserves 3,367 acre-feet annually from the Madison aquifer for the Meadowbrook Gallery. The remaining 2,172 acre-feet reserves water from the Minnelusa aquifer for Jackson Springs and Sioux Park Gallery.

Table 1. Future Use Permits from the Madison aquifer (Water Rights, 2025c)

Permit No.	Name/Business	County	Use	Priority Date	Amount Reserved (ac-ft/yr)
369-1	City of Belle Fourche	LA	MUN	12/10/1958	620
*439-2	City of Rapid City	PE	MUN	09/22/1956	3,367
1833-2	Weston Heights Home Owners	MD	RWS	02/18/1983	211
1872-1	City of Spearfish	LA	MUN	11/13/2006	2,704
1995-1	Black Hawk Water User District	MD	RWS	04/15/2020	1,300
2028-1	Bear Butte Valley Water, Inc	MD	RWS, WDS	03/23/2023	440
2086-2	City of Rapid City	PE	MUN	05/18/1989	4,075
2086A-2	City of Rapid City	PE	MUN	01/26/2023	**
2560-2	Fall River Water Users District	FR	RWS	05/16/2005	358
2560A-2	Fall River Water Users District	FR	RWS	05/16/2005	**
2560B-2	Fall River Water Users District	FR	RWS	05/16/2005	**
2580-2	Southern Black Hills Water System	FR	RWS	03/02/2006	1,474
				Total	14,549
FR - Fall River, LA - Lawrence, MD - Meade, PE - Pennington					
MUN - Municipal, RWS - Rural Water System, WDS - Water Distribution System					
* This permit reserves water from multiple aquifers but is assumed to withdraw solely from the Madison for estimation of the hydrologic budget; ** expands the future use area that was authorized by future use permit numbers 2086-2 and 2560-2					

Of the 178 active water rights/permits, 109 are primarily for water distribution systems (rural water system, municipal, suburban housing development, etc.), 34 primarily for irrigation, 15 for commercial use, 11 for industrial use, 4 for domestic use, 2 for geothermal use, 2 for institutional use, and one for recreation (Water Rights, 2025c). The use type determined for each water right/permit was based on the primary use categorized for each water right/permit as some permits have multiple uses (Water Rights, 2025c). Historically, average water use by non-irrigation appropriations limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at the respective permitted diversion rate. Water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. This is a standard method used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer (Water Rights, 2025c).

There are seven water rights/permits authorized to appropriate water from the Madison aquifer that are identified as being connected to a rural water system (RWS) and likely maintain their wells for standby purposes (Drinking Water Program, 2025; Water Rights, 2025c). These include Water Right/Permit Nos. 1628-2, 1709-1, 1858-2, 272-1, 568-2, 574-2, and 743-1. As a result, the average annual water use for these water rights has been estimated to be zero acre-feet per year.

Table 2. The non-irrigation water rights/permits authorized to appropriate from the Madison aquifer with estimated annual use determined by their respective diversion rate or annual volume (Drinking Water Program, 2025; Water Rights, 2025c)

Use Type	Count	Diversion Rate (cfs)	Estimated Diversion Rate Total (ac-ft/yr)	Limited by Volume (ac-ft/yr)	Total Estimated Use (ac-ft/yr)
Commercial	15	0.89	386.6	1,076	1,463.4
Domestic	4	0.22	95.6	71	166.6
Geothermal	2	1.43	621.2		621.2
Industrial	11	4.88	2,119.9	301.3	2,421.2
Institutional	2	0.2	86.9		86.9
Municipal	36	16.82	7,306.6	18,156	25,462.6
Recreational	1	1	434.4	N/A	434.4
Rural Water System	20	3.85	1,672.4	5,152	6,824.4
Suburban Housing Development	40	7.19	3,123.3	339.2	3,462.5
Water Distribution System	13			3,331.8	3,331.8
Total:	144	37.52	16,300	28,427	44,275
COM: Commercial; DOM: Domestic; GEO: Geothermal; IND: Industrial; INS: Institutional; MUN: Municipal; REC: Recreation; RWS: Rural Water System; SHD: Suburban Housing Development; WDS: Water Distribution System					

Overall, the estimated average annual withdrawal rate from the Madison aquifer by the non-irrigation water rights/permits is approximately 44,275 acre-feet per year (Table 2) (Water Rights, 2025c).

Currently, there are 34 irrigation water rights/permits authorized to appropriate water from the Madison aquifer (Water Rights, 2025c). 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 Madison aquifer irrigation water rights/permits that have reported over the period of record (1982 to 2023) is approximately 841 acre-feet per year (Water Rights, 2025a). To reflect the current development of irrigation water rights/permits more accurately, the average annual withdrawal rate for irrigation appropriations from 2014 to 2023 is approximately 828 acre-feet per year (Water Rights, 2025a).

For comparison purposes, the average annual withdrawal rate for the 34 water rights/permits authorized for irrigation use from the Madison aquifer was estimated utilizing the following method: When there are more than 10 years of data available, the average reported irrigation was used to estimate irrigation withdrawals. When there were fewer than 10 years of irrigation reports available, withdrawals are assumed to equal two acre-feet per acre, although actual usage is likely less for non-turf irrigation. In addition to the two acre-feet per acre annual estimation, permit holders with non-irrigation as a secondary use are also assumed to withdraw at their maximum instantaneous diversion rate 60% of the time. Estimated withdrawals for irrigation use are shown in Table 3. In the case of Water Right No. 1885-1, with irrigation also as a permitted use, if assumed to withdraw at their maximum instantaneous diversion rate 60% of the time plus applying 2 feet of water to each authorized acre, that sum (approximately 91 acre-feet/year) would cause the total estimated withdrawal to exceed the rate they are physically capable of withdrawing, so instead their total estimated withdrawal is 100% of their maximum instantaneous diversion rate (approximately 80 acre-feet/year).

Table 3. Permits with irrigation listed as one beneficial use, or are connected to an irrigation permit (Water Rights, 2025c)

Permit No.	Name/Business	Status	Authorized Diversion Rate (cfs)	Acres Licensed/ Permitted	Average Report (ac-ft/yr)	Years of Irrigation Reports	Est. Average Irrigation (ac-ft/yr)	Est. Non-Irr. Use (ac-ft/yr)	Total Est. Withdrawal (ac-ft/yr)
2773-2	ARROWHEAD COUNTRY CLUB	PE	1.11	100	0	6	200	0	200
1635-1	BLACK HILLS NATIONAL CEMETERY	LC	0.82	54.5	94.1	28	94.1	356.4	450.5
1452-1	BLACK HILLS STATE COLLEGE	LC	3.33	25.4	24.23	35	24.23	1,447.35	1,471.6
1670-1	BUDDY L. PEGGY A. KAMI S IRELAND	LC	3.61	253	45.64	26	*	*	*
1096A-1	BUTTE MEADE SANITARY DIST	PE	1.33	0	N/A	0	*	*	963.5
2458-2	CITY OF RAPID CITY	LC	0.8	107	109.4	23	109.4	0	109.4
2002-1	CITY OF SPEARFISH	PE	1.33	40	0	3	80	0	80
2313-2	COCA-COLA BOTTLING	LC	0.33	3	7.96	29	7.96	143.4	151.4
1899-1	DAVIS RANCHES INC	LC	1.43	100	0	15	0	0	0
1650-1	DENNIS L MILLER	LC	0.89	0	85.4	1	*	*	55.9
2673-2	DIOCESE OF RAPID CITY	LC	0.12	7	8.5	11	8.5	0	8.5
1009-1	DONALD F/ANN J BRADY	LC	0.78	53.7	29	42	29		29
1185-1	DONALD F/ANN J BRADY	LC	0.38	22.5	109.9	42	109.9	***	109.9
2286-2	DONALD KONECHNE	LC	0.1	38.5	10.2	30	10.2	0	10.2
1931-1	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	LC	0.17	3.3	3	11	3	73.9	76.9
1707A-1	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	PE	3.705	100	0	4	0	1,610.3	1,610.3
1707E-1**	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	PE	0	0	48.2	17	48.2	0	48.2
1945-1	FRAWLEY RANCHES LLC	PE	1.11	265	59.2	10	59.2	0	59.2
1858-1	GLENCOE CAMP RESORT II LLC	LC	0.86	34	0	18	0	373.8	373.8
2593-2	HART RANCH DEVELOPMENT	LC	0.49	72.5	31.72	17	31.72	213	244.7
1911-2	HART RANCH DEVELOPMENT CO	LC	0.88	124	116.7	30	116.7	382.5	499.2
1725-2	JANICE R CROWSER	LC	1.07	75.1	2.02	26	2.02	0	2.02
2037-1	JARED AND ANNA LUKENS-BLACK	PE	0.055	0.6	0	0	1.2	23.9	25.1
2012-1	JESSE HORSTMANN	PE	0.5	43.5	0	2	87	0	87
858-2	JOHN & HEIDI MCBRIDE	LC	9.36	655.8	6.4	40	6.4	0	6.4
1885-1	JOHN T & VERONICA WIDDOSS	LC	0.11	22	18.4	7	44	47.8	79.6
1960-1	ONE DIAMOND INC	LC	1.28	150	130.1	8	300	29****	329
1223-1	P & L WATER AND HAY LLP	LC	0.67	263	186.1	42	186.1	0	186.1
1923-1	ROGER & JEAN RANSCHAU	LC	0.11	3	0.87	13	0.87	47.8	48.7
2013-1	SANTA MARIA LAND & CATTLE CORP	PE	2.22	460	0	1	920	0	920
1363-1	SPEARFISH CANYON COUNTRY CLUB	LC	0.9	80.1	66.3	37	66.3	0	66.3
2106-2	STUART RICE	LC	0.08	2.8	0.74	32	0.74	34.8	35.5
1842-1	TOM C DAVIS	LC	0.44	330	0	19	0	0	0
2741-2	TUBBS LAND & CATTLE LLC	PE	3.34	567	194.6	5	1,134	0	1,134
2879-2	WEINREIS BROTHERS	PE	0.5	75	0	0	150	0	150
419-2	WIND CAVE NATIONAL PARK	LC	0.15	6	N/A	0	12	65.2	77.2
2880-2	JEREMIAH & WENDY WALLA	PE	0.39	23.5	0	0	47		47
								TOTAL:	9,746

*Discussed in text. ** gives additional time to develop 1707A-1. *** Reports all use types in irrigation report ****Non-irrigation use(s) limited by annual volume

Water Right/Permit Nos. 1096A-1, 1496-1, and 1670-1 are all authorized to withdraw from the same well and one dam. Water Right Nos. 1096A-1 and 1670-1 authorize diversion of water for irrigation use and Water Right No. 1096A-1 and Water Permit No. 1496-1 authorize diversion of water for rural water system use. Documentation in the administrative file for Water Right No. 1670-1 indicates that the well is not valved such that it can be shut off when not in use for the beneficial uses listed on the permits. A letter dated September 9, 1988, indicates that when the water for that well is not being used for the beneficial uses described in the permits, it is used for fish and wildlife propagation. The person writing the letter indicated they would prefer the Water Management Board not order the well to be shut off when not used for irrigation or rural water listed in Water Right No. 1096A-1 of 1.33 cfs, that well withdraws approximately 963 ac-ft/yr from the Madison aquifer.

Water Right No. 1650-1 does not require the water right holder to report annual withdrawals and allocates no acreage. It provides supplemental water supply from a flowing well for Water Right No. 1231-1. Water Right No. 1231-1 permits a 110 acre-ft dam to provide water for a commercial livestock operation and irrigation of 134 acres. Water Right No. 1650-1 allows for direct irrigation from a Madison aquifer well of up to 2 acre-ft per acre for the land permitted by Water Right No. 1231-1. Kilts estimated that Water Right No. 1650-1 withdraws 55.9 ac-ft/yr (Kilts, 2019). This water right was transferred to a new owner in 2021. For the 2023 irrigation season, the owner reported using 85.36 ac-ft of water for irrigation. As this is the only year this owner has reported, the value of 55.9 ac-ft/yr will be used as their average until more years of reporting can establish an average.

Using the methods described above, the estimated average annual withdrawal rate for the Madison aquifer water rights/permits used for irrigation, as well as other uses, is approximately 9,746 acre-feet per year (Table 3) (Water Rights, 2025a and 2025c). This value will be used in this analysis to estimate the average annual withdrawal rate for the water rights/permits authorized for irrigation primarily and other uses from the Madison aquifer.

Water Permit Application No. 2585-2 for Southern Black Hills Water System proposes to appropriate 1,600 ac-ft/yr but is deferred for further study. Water Permit Application No. 2685-2 for Powertech, Inc is held in abeyance pending federal permitting and proposes to appropriate 889 ac-ft/yr.

There is one pending application for the Madison aquifer. Water Permit Application No. 2886-2 for Angostura Resort LLC, if approved, plans to appropriate up to 149 ac-ft/yr at a maximum pump rate of 0.67 cfs from one existing well and up to two additional wells for commercial use in Fall River County.

There are domestic wells completed into the Madison aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2025d). Due to their relatively low diversion rates, withdrawals from domestic wells are generally not considered to be a significant portion of the hydrologic budget. Additionally, with the development of water distribution systems in some areas where the Madison aquifer is present; it is likely some domestic users may have transitioned to water distribution systems. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the Madison aquifer.

Statewide Hydrologic Budget Summary

The estimated average annual recharge rate to the Madison aquifer is approximately 137,000 acre-feet per year. The estimated average annual withdrawal rate from the Madison aquifer is approximately 71,478 acre-feet per year (listed on Table 4). This application proposes to withdraw up to 270 ac-ft/yr, if approved, assuming the applicant withdraws their full volume appropriation. Therefore, based on the statewide hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Table 4. Statewide Approximated Appropriative withdrawals from Madison aquifer

Use Type	Estimated Use (acre-feet/year)
Future Use Reservations	14,549
Non-Irrigation	44,275
Irrigation	9,746
Deferred and pending applications	2,638
Water Permit App. No. 2044-1, <i>if approved</i> , assuming full volume	270
Total	71,478

Local Hydrologic Budget

While the statewide hydrologic budget is used as the basis for determination of availability of water, other studies exist which have focused on smaller areas of the Black Hills. This section will address estimated withdrawals within those areas for the information of the Chief Engineer and the Water Management Board.

Carter, et al. (2001)

Carter, et al. (2001) used streamflow, precipitation, spring flow, estimated ground water flow, and well withdrawal data from 1987 to 1996 for hydrologic budgets for subareas of the Minnelusa and Madison aquifers. This application is in Subarea 2 of their report. The boundaries of the Carter, et al. (2001) subareas were designed to minimize flow across subarea boundaries. Carter, et al. (2001) estimated the total recharge to the Madison and Minnelusa aquifers in Subarea 21 was 37.9 cfs. Assuming 55% of the recharge goes to the Madison aquifer, the estimated recharge to the Madison aquifer in Subarea 2 is 20.8 cfs, or approximately 15,101 ac-ft/yr (Carter et. al, 2001). Carter, et al. (2001) do not provide values for the recharge area of the Madison and Minnelusa formations for each subarea in their report, so it is possible the proportion of recharge area to those two aquifers is different within each subarea. There are 41 water rights/permits authorized to withdraw from Subarea 2 and two future use permits reserving water from Subarea 2 Domestic well withdrawals are negligible on the scale of this hydrologic budget. Using the same methods as described in the Statewide Discharge section, the total estimated withdrawal from Subarea 2 is 11,901 ac-ft/yr as compared to the estimated recharge of 15,101 ac-ft/yr. This application proposes to withdraw up to 270 acre-feet/yr, if approved. Therefore, based on the local budget in combination with other information available, there is reasonable probability unappropriated water is available for this application.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires the Water Management Board to 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 25 observation wells completed into the Madison aquifer (Water Rights, 2025b). The three closest observation wells in order of proximity to the proposed diversion point are LA-96D (approximately 1.1 miles southwest) (Figure 1), LA-90A (approximately 2.5 miles north) (Figure 2), and MD-86A (approximately 4 miles east) (Figure 3) (Water Rights, 2025b). The hydrographs for these observation wells are displayed in Figures 1 through 3 (Water Rights, 2025b). 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 which were then converted to elevation in feet from the NGVD29 datum.

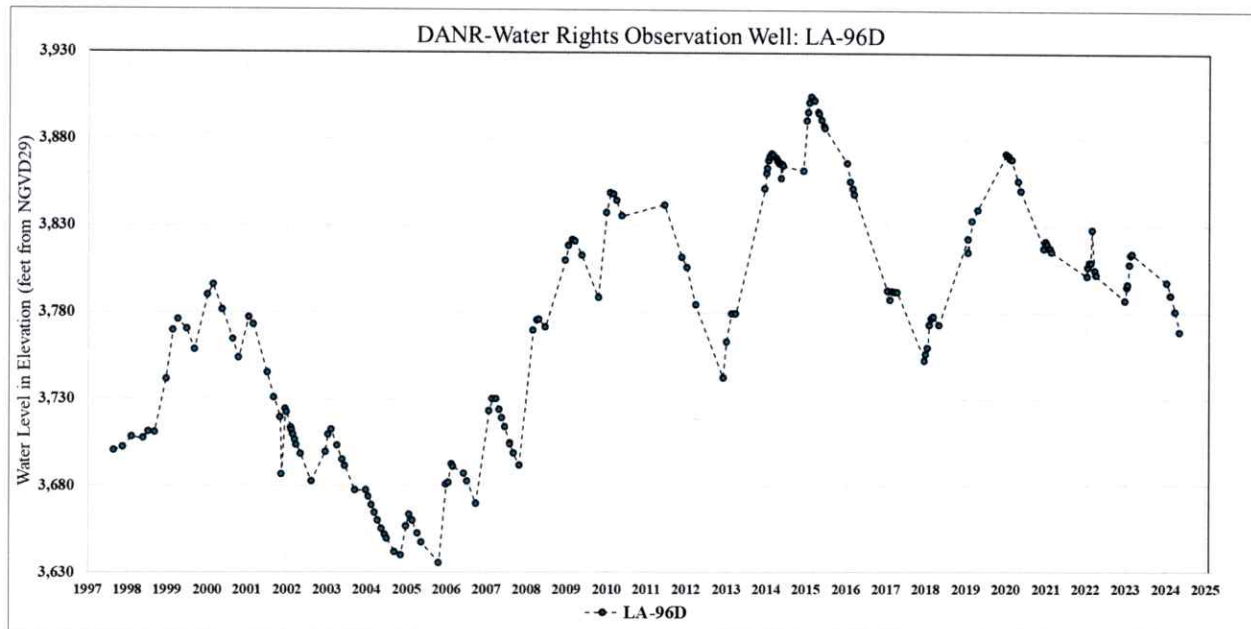


Figure 1. A graph showing the water level in elevation for observation well: LA-96D (Water Rights, 2025b)

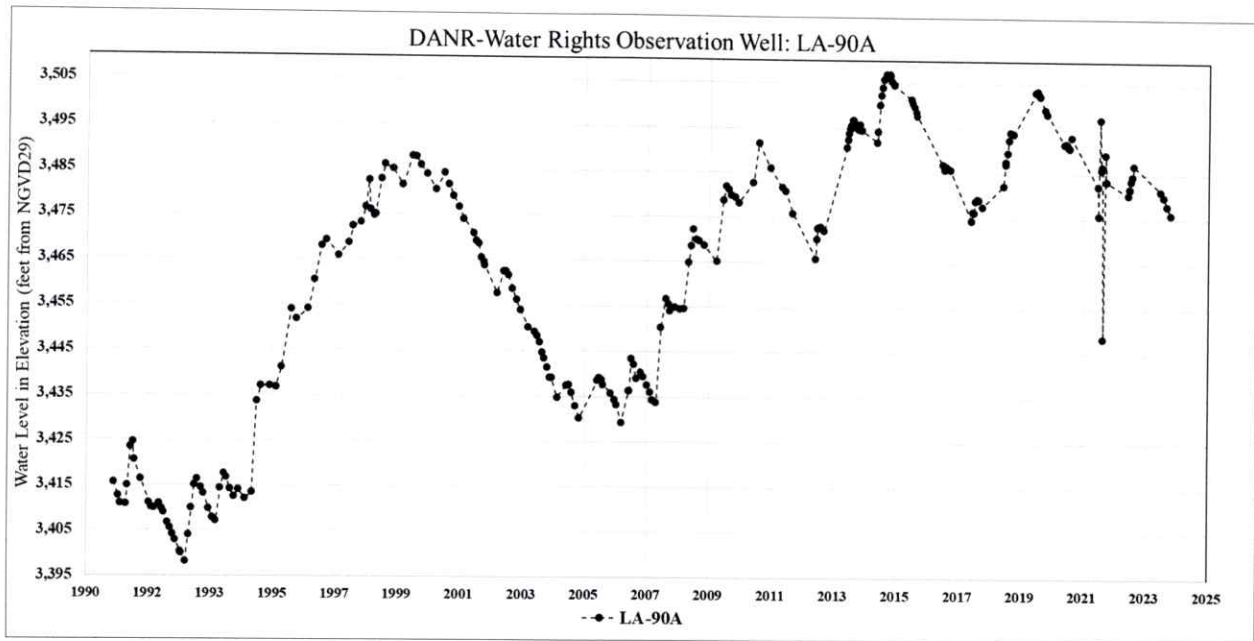


Figure 2. A graph showing the water level in elevation for observation well: LA-90A (Water Rights, 2025b)

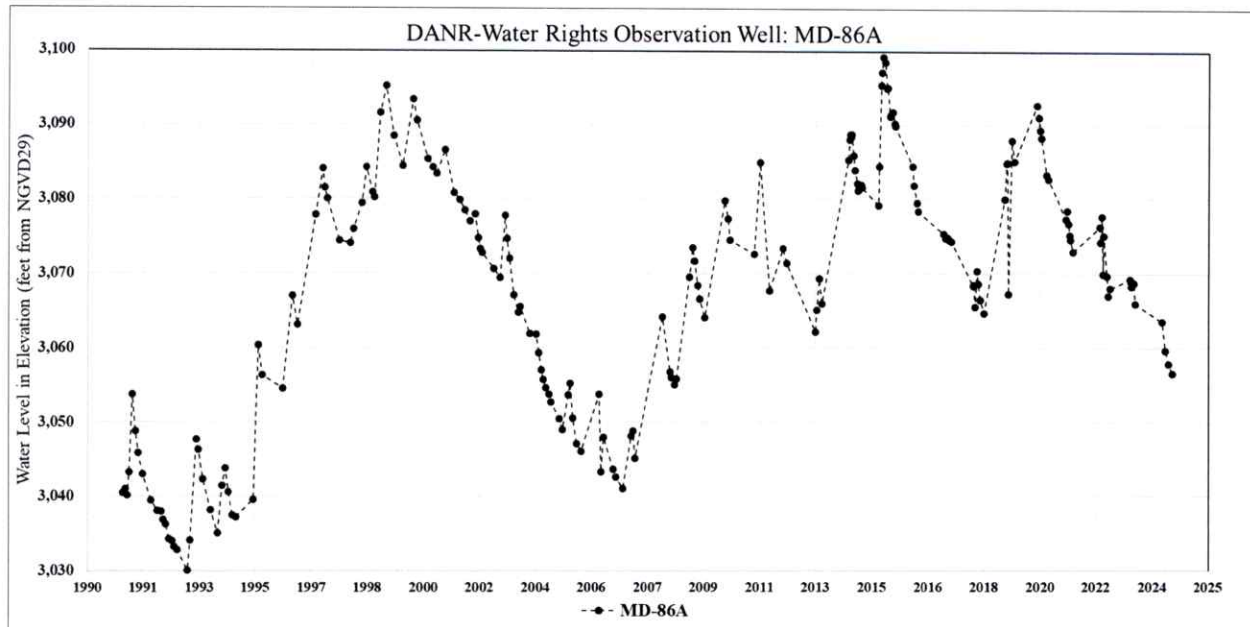


Figure 3. A graph showing the water level in elevation for observation well: MD-86A (Water Rights, 2025b)

The hydrographs for these observation wells were compared to hydrographs for other observations wells completed into the Madison aquifer and all displayed a generally similar trend as shown on the hydrographs displayed in Figures 1 through 3 (Water Rights, 2025b). The hydrographs for the observation wells display stable to increasing water levels over their respective periods of record. The hydrographs for the Madison 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 responding to recharge events during the primary recharge season of late winter through spring. 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 Madison 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

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

The closest water right/permit to the proposed diversion point is Water Right No. 1680-1, which is held by Boulder Park Water User's Association. The diversion point for Water Right No. 1680-1 is located approximately 0.4 miles northwest of the proposed diversion point for this application (Water Rights, 2025c).

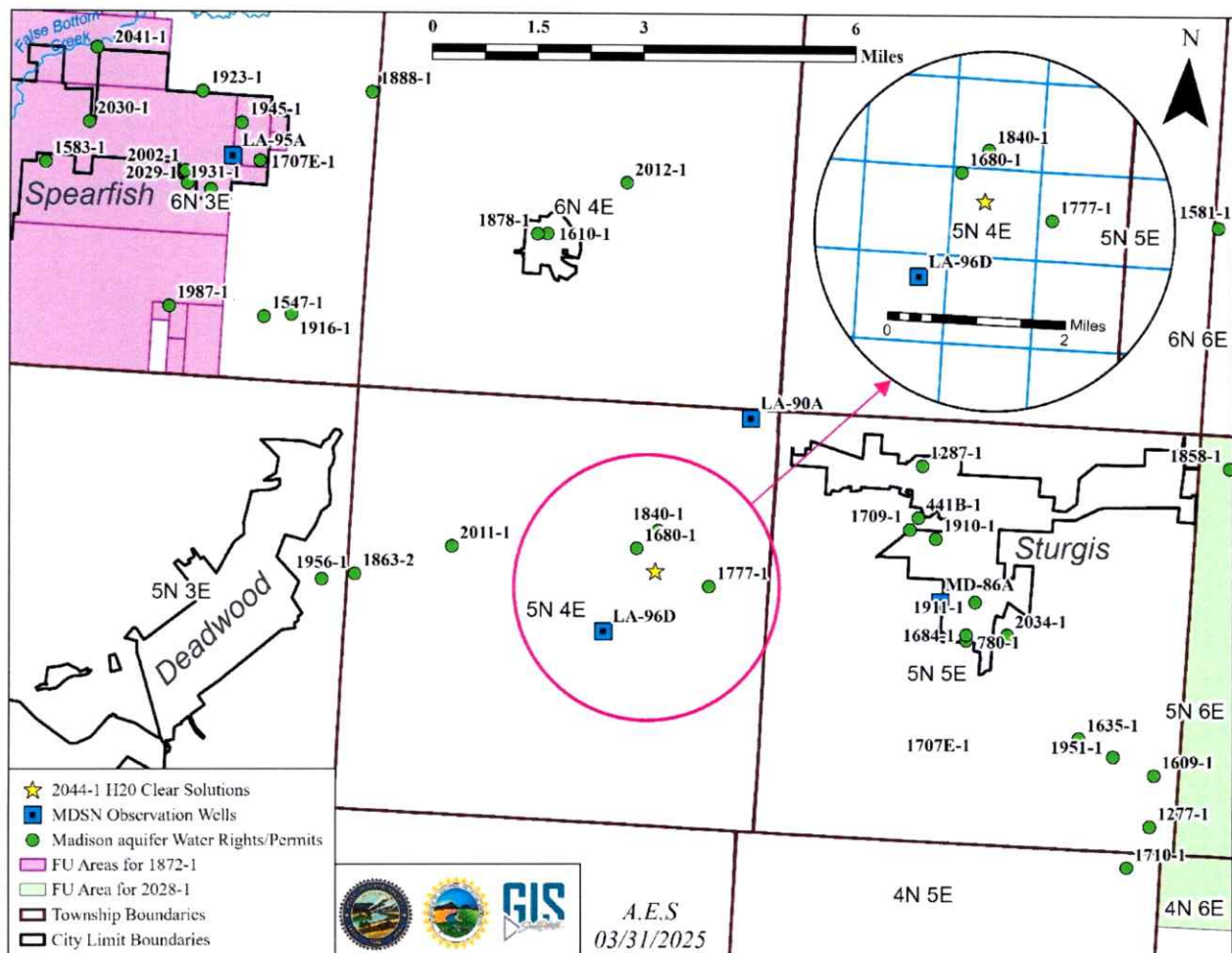


Figure 4. Approximate location of the proposed diversion for Application No. 2044-1, and the nearby Madison aquifer observation wells and water rights/permits (Water Rights, 2025b and 2025c)

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Madison aquifer, with the closest domestic well on file (not held by the applicant) located approximately 0.2 miles southeast of the proposed diversion point (Water Rights, 2025d). There could potentially be other domestic wells completed into the Madison aquifer near the well the applicant proposes to use that are not on file with the DANR-Water Rights Program. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

Table 5. Water rights/permits authorized to withdraw or reserve water from the Madison aquifer within 6 miles of Water Permit Application No. 2044-1 as shown in Figure 2 (Water Rights, 2025c)

Permit No.	Name	Status	Use Type	Authorized Diversion Rate (cfs)	Permitted Volume (ac-ft/yr)	Authorized Acres
441B-1	CITY OF STURGIS WATER DEPT	LC	MUN	0.51		
780-1	CITY OF STURGIS WATER DEPT	LC	MUN	0.66		
1287-1	CITY OF STURGIS WATER DEPT	LC	MUN	0.89		
1547-1	SIMON CONTRACTORS	LC	IND	0.09		
1610-1	CITY OF WHITEWOOD	LC	MUN	1.11		
1680-1	BOULDER PARK WATER USER'S ASSOCIATION	LC	COM	0.2		
1684-1	MIKE RINGER	LC	COM, DOM	0.022		
1709-1	MURRAY WATER COMPANY	LC	SHD, COM	0.333		
1777-1	VALHALLA ADDITION	LC	SHD	0.089		
1840-1	H2O CLEAR SOLUTIONS LLC	LC	SHD, COM	0.33		
1863-2	SEVENTY-SIX RANCH ESTATE	LC	SHD	0.07		
1878-1	CITY OF WHITEWOOD	LC	MUN	0.78	50	
1910-1	STURGIS WATER DEPARTMENT	LC	COM	2.44	1004	
1911-1	STURGIS WATER DEPARTMENT	LC	MUN	1.67	773	
1916-1	SIMON CONTRACTORS	LC	IND	0.22		
1956-1	SHIRT TAIL GULTCH HOMEOWNERS ASSN	LC	SHD	0.056	15	
2011-1	MEADOW CREST SANITARY DISTRICT	PE	WDS	0.089	5.83	
2012-1	JESSE HORSTMANN	PE	IRR	0.5		43.5
2034-1	CITY OF STURGIS	PE	MUN, WDS	1.0	500	

LC: License; PE: Permit; FU: Future Use; COM: Commercial; DOM: Domestic; IND: Industrial; IRR: Irrigation; MUN: Municipal; SHD: Suburban Housing Development; WDS: Water Distribution System

No well completion report was filed for this application, but the Madison is expected to be under confined conditions at the proposed well site. Based on information from Carter and Redden (1999) as well as well completion reports in this area (Water Rights, 2025d), there is expected to be at least 200 feet of saturated aquifer thickness at the proposed well location. This would 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 diversion for this application is not expected to unlawfully impair nearby adequate wells. In Lawrence County, there are no substantiated complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Madison aquifer (Water Rights, 2025e).

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Water Management 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 Water Management 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 Madison 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)), and stable to increasing observation well water levels, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment to existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments to existing users with adequate wells.

Impact to Springs

There are no major springs sourced from the Madison aquifer within 2 miles of this application (C. A. Naus et. al, 2011). Upon considering the deferral of Water Permit Application No. 2585-2 for Southern Black Hills Water System, the Board adopted a conclusion of law stating in part, “...The only protection South Dakota law provides when considering an application for an underground water permit for flow from an artesian spring is under the public interest criteria” (South Dakota Water Board, 1997). Given the distance between the proposed well site and the nearest springs there is reasonable probability this application can be developed without noticeably impacting flow from the spring.

CONCLUSIONS:

1. Water Permit Application No. 2044-1 proposes to appropriate up to 270 acre-feet of water annually at a maximum pump rate of 0.56 cfs from one well to be completed into the Madison aquifer (approximately 900 to 1500 feet deep) in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14-T5N-R4E. Water is to be used for a water distribution system, and commercial use purposes. Water service is planned in portions of the N $\frac{1}{2}$ Section 14; SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 13; W $\frac{1}{2}$ Section 11; W $\frac{1}{2}$ Section SW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 2; and SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 3; all in T5N-R4E. This well site is located approximately four miles west of Spearfish, SD.
2. Based on the statewide hydrologic budget and observation well data, there is a reasonable probability that unappropriated water is available from the Madison aquifer to supply the proposed appropriation.
3. There is reasonable probability that the proposed diversion by Water Permit Application No. 2044-1 will not unlawfully impair adequate wells for existing water rights/permits and domestic users.



Austin Settje
Natural Resources Engineer I
SD DANR - Water Rights Program



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

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**Water Rights Program
File Documentation**

NAME OF PERSON OR FILE: Mike Short w/ H2O Clear Solutions
Anthony Theodorou w/ Benesch

DATE: March 17, 2025 TELEPHONE: Mike (214) 402-9810
Anthony (605) 569-3646

RE: Apple Springs development estimated well depth

COMMENTS:

Called Mike Short to discuss the proposed well depth (1,520 ft) and target aquifer (Madison aquifer) listed on Water Permit Application No. 2044-1. Review of area well logs and other information determined the likely well depth for the Madison aquifer is closer to 900 ft. One outlier well log shows 1,505 ft total depth for a Madison aquifer well.

Discussion with both Mike and Anthony determined it would be reasonable to list a well depth of 900 to 1,500 ft deep on the application because the Madison is the target aquifer.



Adam Mathiowetz
Natural Resources Engineer
DANR-Water Rights Program

Mathiowetz, Adam (DENR)

From: Mike Short <mike@liveapplesprings.com>
Sent: Monday, March 17, 2025 11:04 AM
To: Mathiowetz, Adam (DENR)
Cc: atheodorou@benesch.com
Subject: Re: [EXT] Apple Springs c/o H2O Clear Solutions well depth

Thank you for your thoroughness and follow-up.

Regards,

Mike Short
M (214)402-9810
mike@liveapplesprings.com



From: Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us>
Date: Monday, March 17, 2025 at 11:01 AM
To: Mike Short <mike@liveapplesprings.com>
Cc: atheodorou@benesch.com <atheodorou@benesch.com>
Subject: Apple Springs c/o H2O Clear Solutions well depth

Mike,

I discussed the proposed well depth for your project at Apple Springs. After that, I spoke with Anthony of Benesch. During my discussion with Anthony, I determined it would be most reasonable to list a proposed well depth as 900 to 1,500 ft deep. This is based on your and his discussions with Kim Taylor, your well driller, and me finding a Madison aquifer well completion report mislabeled in our database that is in approximately ½ mile of your proposed well site.

Please let me know if you approve of this change.



Adam Mathiowetz, PE
Engineer, Water Rights Program
Department of Agriculture and Natural Resources
523 E. Capitol Ave. Pierre SD, 57501
605.773.3352
danr.sd.gov

Dewell, Amanda

From: Mike Short <mike@liveapplesprings.com>
Sent: Wednesday, March 5, 2025 5:51 PM
To: Dewell, Amanda
Cc: Theodorou, Anthony
Subject: Re: [EXT] H2O Clear Solutions_Water Permit Application

Good catch Amanda! Thank you.

After speaking to Anthony with Benesch, the new calculation is based on an allocation of 270 acre-feet of water per year.

Since we want a 1.5 pumping rate, that would mean 243 days per year of pumping or 1.11 acre-feet per day. That equals 0.560 cfs or 251.3 gpm diversion rate.

Thus, we request that our NEW permit will have a diversion rate of 251.3 gpm.

Please let me know if all this makes sense. I am cc'ing Anthony to make sure we get this correct. It is super important that we get this right. Again, thank you for your patience and taking the extra time to help.

Regards,

Mike Short
M (214)402-9810
mike@liveapplesprings.com



From: Dewell, Amanda <Amanda.Dewell@state.sd.us>
Date: Monday, March 3, 2025 at 4:51 PM
To: Mike Short <mike@liveapplesprings.com>
Subject: RE: H2O Clear Solutions_Water Permit Application

Thank you,

I'd also note that Water Right No. 1840-1 authorizes the appropriation of 0.33 cfs (150 gpm) and was issued at a time when annual volumes were not required, therefor could appropriate as much as 238 ac-ft annually. Water

Dewell, Amanda

From: Dewell, Amanda
Sent: Monday, March 3, 2025 4:51 PM
To: Mike Short
Subject: RE: [EXT] H2O Clear Solutions_Water Permit Application

Thank you,

I'd also note that Water Right No. 1840-1 authorizes the appropriation of 0.33 cfs (150 gpm) and was issued at a time when annual volumes were not required, therefor could appropriate as much as 238 ac-ft annually. Water Right No. 1840-1, with the addition of this new application, if approved, would authorize a combined total annual volume of 508 ac-ft @ 325 gpm.

Amanda Dewell
DANR - Water Rights Program
Permitting Administrator
Main Phone: 605 773-3352
Website: danr.sd.gov



From: Mike Short <mike@liveapplesprings.com>
Sent: Monday, March 3, 2025 4:43 PM
To: Dewell, Amanda <Amanda.Dewell@state.sd.us>
Subject: Re: [EXT] H2O Clear Solutions_Water Permit Application

Thank you for your email, Amanda. I will review and discuss with Benesch.

Regards,

Mike Short
M (214)402-9810
mike@liveapplesprings.com



From: Dewell, Amanda <Amanda.Dewell@state.sd.us>
Date: Monday, March 3, 2025 at 4:38 PM
To: Mike Short <mike@liveapplesprings.com>
Subject: H2O Clear Solutions_Water Permit Application

Mike,

I'm reviewing the application you'd submitted on behalf of H2O Clear Solutions LLC and just wanted to confirm that 175 gpm is the maximum volume you're able to obtain from the new well, with an annual volume of 270 acre-feet of water. The reason I'm checking into those figures are due to the fact that at 175 gpm, you'd have to pump near constantly "24/7/365" to obtain that volume.

If you maintain that those figures are correct, we will proceed with processing the application accordingly; however, if the diversion rate (pump rate) needs to be increased to make pumping less frequent, now would be the time to change that.

Thank you,

Amanda Dewell

DANR - Water Rights Program

Permitting Administrator

Main Phone: 605 773-3352

Website: danr.sd.gov



Rodriguez, Rachel

From: Theodorou, Anthony <ATheodorou@benesch.com>
Sent: Tuesday, February 18, 2025 2:06 PM
To: Rodriguez, Rachel
Cc: Mike Short
Subject: Re: [EXT] Water Permit Application

Hello Rachel,

I can answer your question and Mike can handle the billing.

Our permit is for one well. The second well references already exists. The two wells will serve the needs of the full build out of the community.

Thanks,

Get [Outlook for Android](#)

Anthony Theodorou, PE

Project Manager

atheodorou@benesch.com

direct: 605-910-7095 mobile: 605-569-3646



From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Sent: Tuesday, February 18, 2025 12:24:59 PM
To: Theodorou, Anthony <ATheodorou@benesch.com>
Cc: Mike Short <mike@liveapplesprings.com>
Subject: RE: Water Permit Application

Good afternoon,

I was looking at the attachments and under "pumping rate" I see that you are proposing 2 well whereas the application states one well. Please confirm the number of wells. Also, I received payment via credit card. However, we are still short \$300.00. Application fee \$850 and the inspection fee \$200.

Thank you,

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

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, February 18, 2025 1:25 PM
To: Theodorou, Anthony
Cc: Mike Short
Subject: RE: [EXT] Water Permit Application

Good afternoon,

I was looking at the attachments and under "pumping rate" I see that you are proposing 2 well whereas the application states one well. Please confirm the number of wells. Also, I received payment via credit card. However, we are still short \$300.00. Application fee \$850 and the inspection fee \$200.

Thank you,

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



From: Theodorou, Anthony <ATheodorou@benesch.com>
Sent: Friday, January 31, 2025 9:09 AM
To: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Cc: Mike Short <mike@liveapplesprings.com>
Subject: Re: [EXT] Water Permit Application

Hello Rachel,

- On a second look, you are correct (see below for a better aerial location pin. Yes, can you please update that in the permit for me?
- Attached is the outline of the updated boundaries for the Apple Springs Water Works District.
- I was close with the permit fees; I guess I was using an old summary. Please advise what forms of payment the department accepts?

In addition,

- Please find the well profile for our proposed well 2 (attached)
- Attached is our Project Description

Rodriguez, Rachel

From: Mathiowetz, Adam (DENR)
Sent: Thursday, January 16, 2025 9:46 AM
To: Dewell, Amanda
Cc: Gronlund, Eric; Duvall, Ron; Rodriguez, Rachel
Subject: 1804-1, new permit, test well permission

Well driller Kim Taylor called to talk about 1840-1. 1840-1 is currently licensed for 0.33 cfs from the Madison aquifer. This was done in 2010. The original permit was for 0.67 cfs and two wells into the Madison aquifer/

The current permit holder, H2O Solutions LLC [Mike Short], thought they still had the ability to develop the second well and "remaining" 0.33 cfs. Kim stated he is pretty sure they were looking at the 20-year term limit on the Madison aquifer. Kim will likely request permission to drill a test well and will be telling Mr. Short that he needs to get a new permit.



Adam Mathiowetz, PE
Engineer, Water Rights Program
Department of Agriculture and Natural Resources
523 E. Capitol Ave. Pierre SD, 57501
605.773.3352
danr.sd.gov

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, January 30, 2025 3:14 PM
To: mike@liveapplesprings.com
Subject: Water Permit Application
Attachments: map.pdf

Good afternoon,

I am in receipt of your online water permit application. A few items are needed:

- Enclosed is a map of the location described on the application. On the map, please mark the well location with an "X" and outline the area of the Apple Springs Water Works District.
- We need the annual AF. Once we have the AF, we can determine the fees.
- Feel free to attach Figure 1 you refer to in the description of the project.

Thank you,

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



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, January 31, 2025 7:44 AM
To: Theodorou, Anthony
Cc: Mike Short
Subject: RE: [EXT] Water Permit Application

Thanks for the quick reply. Based on the map, the proposed location appears to actually be in the SE 1/4 NW 1/4 Sec 14—T5N-R4E; not in the SW 1/4 NW 1/4 Sec 11. Would you like me to correct the application? Also, I still need the area of the Apple Springs Water Works District outlined.

In fact, the fee is \$1,050.00, \$850 for the application, and \$200.00 for the inspection fee.

Thank you,

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



From: Theodorou, Anthony <ATheodorou@benesch.com>
Sent: Thursday, January 30, 2025 3:33 PM
To: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Cc: Mike Short <mike@liveapplesprings.com>
Subject: Fw: [EXT] Water Permit Application

Hello Rachel,

I helped Mike write this permit. I can answer your questions.

1. The map with the X on it where the well is proposed is attached.
2. The annual AF = 270 acre feet per year (175 gallons per minute). I think the fee is \$783.33
3. We are updating Figure 1 as the boundary of the service area is going to be about 12 acres larger due to the AF estimate. I'll get you that in the morning.

I also will provide in my follow up email the project description and the anticipated well profile.

Thanks,

Anthony Theodorou, PE
Project Manager



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

April 24, 2025

H2O Clear Solutions LLC.
c/o Mike Short
PO Box 2711316
Flower Mound TX 75027

Dear Mr. Short:

Water Permit Application No. 2044-1 for water distribution system and commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Black Hills Pioneer printed in Spearfish SD (Ph # 605 642-2761). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Acting 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 to authorize publication of your Notice and to arrange for payment. Early contact with the paper 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,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

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

NOTICE OF APPLICATION NO. 2044-1 to Appropriate Water

Notice is given that H2O Clear Solutions LLC., PO Box 2711316, Flower Mound TX 75027, has filed an application for a water permit to appropriate 270 acre-feet of water annually at a maximum pump rate of 0.56 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 900 – 1500 feet deep) located in the SE 1/4 NW 1/4 Section 14-T5N-R4E. Water will be used for a water distribution system and commercial use. Water service is planned in portions of the N 1/2 Section 14; SW 1/4 NW 1/4 Section 13; W 1/2 Section 11; W 1/2 SW 1/4, SW 1/4 NW 1/4 Section 2; and SE 1/4 NE 1/4 Section 3; all in T5N-R4E. This well site is located approximately four miles west of Spearfish SD.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 2044-1 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 Acting 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 this application or recommendation shall allege that the application, 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 application, or other matter concerning the application 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 application with BOTH the applicant and Acting Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Acting Chief Engineer. The Acting 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 Acting 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 May 12, 2025.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, 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 application with the Acting Chief Engineer. The comment shall be filed on a form provided by the Acting Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Acting 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 May 12, 2025.

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

Published once at the total approximate cost of_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, April 24, 2025 8:23 AM
To: legals@bhpioneer.com
Subject: 2044-1 H2O Clear Solution LLC - Public Notice
Attachments: 2044-1 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on May 1, 2025.

H2O Clear Solutions LLC., PO Box 2711316, Flower Mound TX 75027, 605-569-3646, 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 Ave, 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



RECEIVED

MAY 13 2025

OFFICE OF
WATER

Affidavit of Publication

STATE OF SOUTH DAKOTA:

COUNTY OF LAWRENCE:

Letitia Lister of said County and State being first duly sworn, on her oath says: That the BLACK HILLS PIONEER is a legal daily newspaper of general circulation, printed and published in the City of Spearfish, in said County and State by Letitia Lister, and has been such a newspaper during the times hereinafter mentioned; and that said newspaper has a bonafide circulation of at least 200 copies weekly, and has been published within said County in the English language for at least one year prior to the first publication of the notice herein mentioned, and is printed in whole or in part in an office maintained at the place of publication; and that I, Letitia Lister, the undersigned, am the Publisher of said newspaper and have personal knowledge of all the facts stated in this affidavit; and that the advertisement headed:

Notice of Application NO. 2044-1
to Appropriate Water

a printed copy of which is hereto attached, was printed and published in said newspaper for 1 successive and consecutive weeks, the first publication being made on the 1st day of May, 2025, and the last publication on the _____ day of _____, _____, that the full amount of fees charged for publishing same, to-wit: The sum of \$ 42.70, insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.


Subscribed and sworn to before me this 10th day of May, 2025



Notary Public, Lawrence County, South Dakota

My commission expires: 7-18-2025

**NOTICE OF
APPLICATION
NO. 2044-1 to
Appropriate Water**

Notice is given that H2O Clear Solutions LLC., PO Box 2711316, Flower Mound TX 75027, has filed an application for a water permit to appropriate 270 acre-feet of water annually at a maximum pump rate of 0.56 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 900 – 1500 feet deep) located in the SE 1/4 NW 1/4 Section 14-T5N-R4E. Water will be used for a water distribution system and commercial use. Water service is planned in portions of the N 1/2 Section 14; SW 1/4 NW 1/4 Section 13; W 1/2 Section 11; W 1/2 SW 1/4, SW 1/4 NW 1/4 Section 2; and SE 1/4 NE 1/4 Section 3; all in T5N-R4E. This well site is located approximately four miles west of Spearfish SD.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 2044-1 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 Acting 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 this application or recommendation shall allege that the application, 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 application, or other matter concerning the application 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 application with BOTH the applicant and Acting Chief Engineer. A petition opposing the application shall be filed on a form provided by the Acting Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Act-

ing Chief Engineer. The Acting 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 Acting 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 May 12, 2025.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, 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 application with the Acting Chief Engineer. The comment shall be filed on a form provided by the Acting Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Acting 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 May 12, 2025.

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

Published once at the total approximate cost of \$43.67 and can be viewed free of charge at www.sd-publicnotices.com.

#239
May 1

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, April 24, 2025 8:25 AM
To: Mike Short
Subject: 2044-1 H2O Clear Solution LLC - Public Notice
Attachments: 2044-1 Rec.pdf; 2044-1 Ltr.pdf; 2044-1 PubNotice.pdf

Good morning,

Attached is a copy of the report, chief engineer's 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 also being mailed to you today.

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





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 11 2025

H2O Clear Solutions LLC.
c/o Mike Short
PO Box 2711316
Flower Mound TX 75027

Dear Mr. Short:

Enclosed is Water Permit No. 2044-1 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

Mark Mayer, PE
Director of Office of Water

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
Posting on DANR Website**

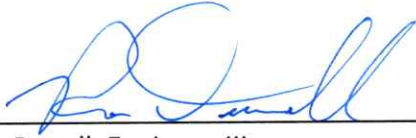
Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the 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.: 2044-1

Name of Applicant: H2O Clear Solutions LLC, Mike Short

Date of Posting: 4/28/2025

Date of Removal: 6/11/2025



Ron Duvall, Engineer III

6/11/2025

Date

Subscribed and sworn to before me, a notary public, this 11th day of June, 2025.



Notary Public - South Dakota
My commission expires:

**Rachel Rodriguez
My Commission Expires
May 16, 2029**

(SEAL)

