

WATER PERMIT NO. 2894-2

Name of Applicant: **Rapid Valley Sanitary District – Water Service**

Address: **4611 Teak Drive, Rapid City SD 57703** Phone: **605-393-1050**

Amount of Water Claimed: **197 AF** Total Acres: **N/A**

Source of Water Supply: **Groundwater**

Water to be used for: **WDS** County: **Pennington**

Type of Waste Disposal System:

Location: **On the east side of Rapid City, SD along Highway 44**

PRIORITY Date Received: **05-29-25**

Application/License Fee: **\$750.00**

Corrected Application Received: **06-06-25**

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

Remarks: **Request for additional flow rate and additional annual volume of 197 AF**

Diversion Point: **SE 1/4 SW 1/4 Sec 10-T1N-R8E**

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

Depth of Well: **4124**

Well Driller: **Hydro Resources**

Remarks:

Type of Map: **aerial**

10

x

Reviewed and the Number Assigned on: **06-06-25**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 2894-2**

Date of first receipt of application May 29, 2025.

Date of return to applicant for corrections, amendments or changes June 3, 2025.

Date of receipt of corrected application June 6, 2025.

The Acting Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2894-2 to Rapid Valley Sanitary District – Water Service, 4611 Teak Drive, Rapid City SD 57703, 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. 2894-2 appropriates an additional 0.67 cubic feet of water per second (cfs) and an additional 197 acre-feet of water annually from the Madison Aquifer to what is currently authorized by Water Permit No. 2848-2. Water Permit No. 2848-2 appropriates 720 acre-feet of water annually at a maximum pump rate of 1.56 cfs from one well completed into the Madison Aquifer located in the SE 1/4 SW 1/4 Section 10-T1N-R8E. Water is used for rural water system use in the Rapid Valley Sanitary District water distribution system. This permit, and Water Permit No. 2848-2 combined, will authorize a total of 917 acre-feet annually at a maximum pump rate of 2.23 cfs. This site is located on the east side of Rapid City, SD along Highway 44.
2. The water appropriated shall be used for the purpose of water distribution system 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. 2894-2 is August 25, 2025.
5. The date from which applicant may claim right is May 29, 2025.
6. One-fifth of the construction is to be completed on or before February 25, 2028.
7. All construction is to be completed on or before August 25, 2030.
8. Water is to be put to beneficial use on or before August 25, 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. 2894-2 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. 2894-2 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 shall 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 Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Madison aquifer.
4. Water Permit No. 2848-2 and this Permit, combined, appropriate up to 917 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

10/27/25
date



FORM 2: Application for uses other than irrigation
(type or print)

Mail to: SD DANR, Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2894-2</u> Hydrologic Unit <u>10120110</u>
	Basin <u>Cheyenne</u>
	Newspaper <u>Rapid City Journal</u>
	(office use only)

RECEIVED
MAY 29 2025
OFFICE OF
WATER

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.)

- Name to Appear on Water Permit Rapid Valley Sanitary District-Water Service
Mailing Address 4611 Teak Dr. Rapid City S.D. 57703
(Address) (City) (State) (Zip Code)
Phone 605-393-1050 Mobile 605-381-2904 Email rschmidt@rvsd.com
- Amount of water claimed .67 *CFS or 197 **GPM and 197 ***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 Madison aquifer SE 1/4 SW 1/4 Sec 10-T1N-R8E
- Location of point of diversion 4611 Teak Dr. RC S.D. 57703 County Pennington
(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? _____
(example - NW1/4 section 12-T104N-R53W)
- County or counties where water will be used Pennington
- Annual period during which water is to be used January through December
- 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)

The District has completed drilling their Madison well, permit no.2848-2. However after air development and pump testing the well is able to easily sustain a 2.23cfs (1000gpm), our current permit is for 1.56cfs (700gpm) this permit request is for an additional flow rate of .67cfs and an additional annual volume of 197 acre feet, this is to provide for the future demand of the District and also the surrounding communities (Box Elder, Valley Heights, Green valley etc.)

I, Rusty Schmidt manager, 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

MAY 29 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 _____ 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) _____ Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____
- d) Distance to nearest domestic well on applicant's property _____ Property owned by others _____

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

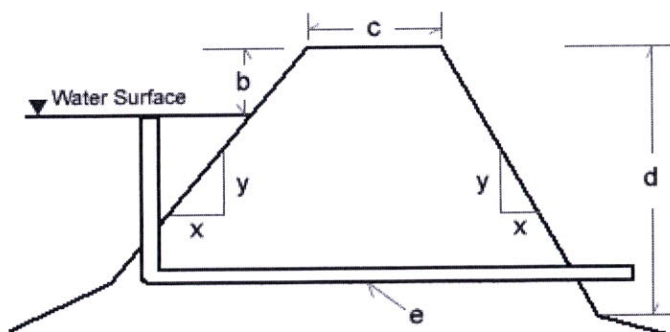
3. Dugout Information

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

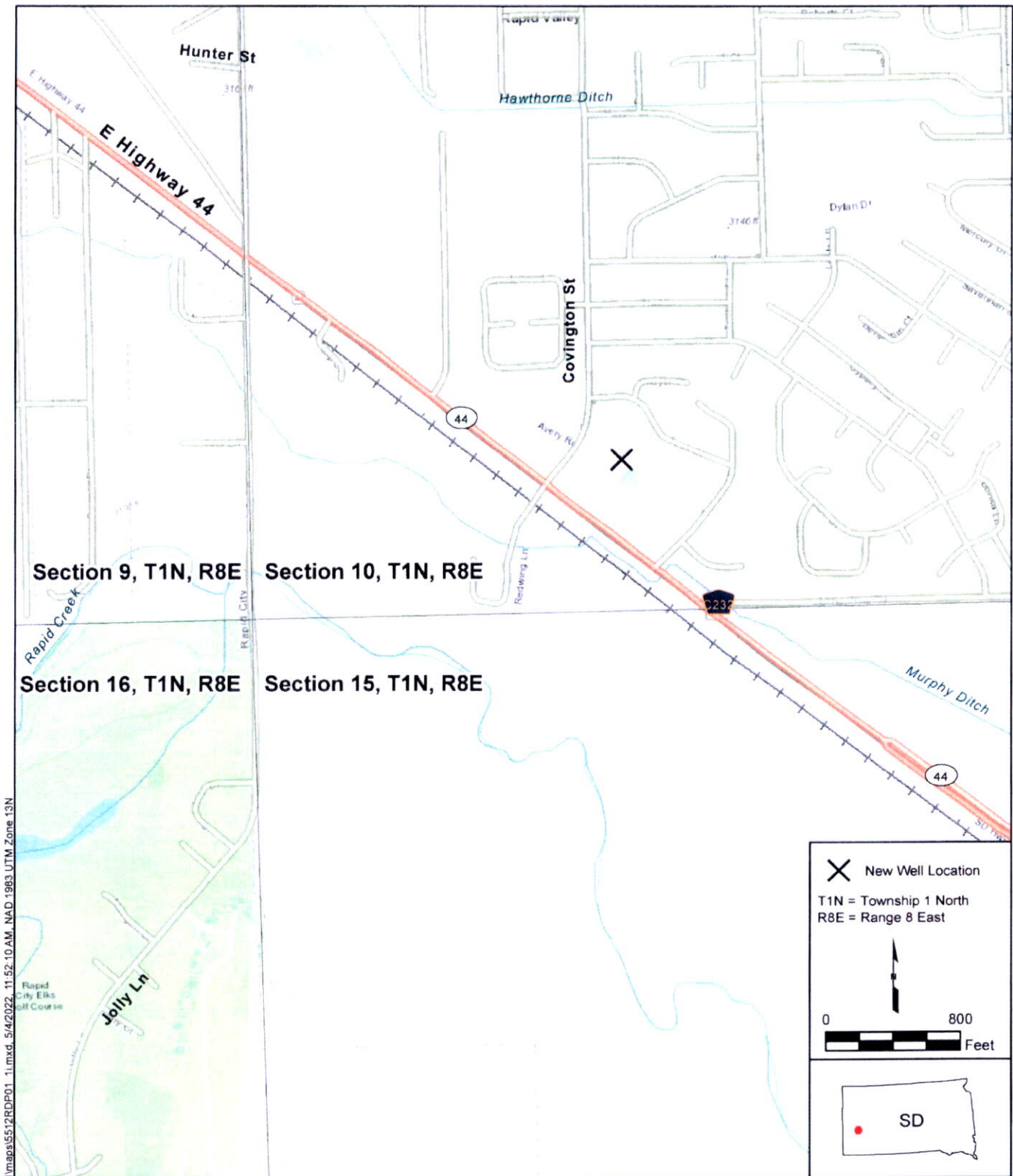
4. Water Storage Dams

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



C:\GIS\GIS\SD\5512RDP01\Images\5512RDP01_1.mxd, 5/4/2022, 11:52:10 AM, NAD 1983 UTM Zone 13N

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance

Structure Data provided by USGS, "Geologic Map of the Rapid City East Quadrangle, South Dakota"



Prepared By:
LRE Water
 Innovative Water Resource Solutions
 South Dakota Office
 Sioux Falls, South Dakota
 (605) 310-1721

RAPID VALLEY SANITARY DISTRICT WATER SERVICE RVSD WELL SITING DESKTOP EVALUATION RAPID CITY, SD		
WATER PERMIT APPLICATION PROPOSED WELL LOCATION		
FILE:5512RDP01_1.MXD	DATE:5/4/2022	FIGURE: 1

1N 8E
Section: 04

1N 8E
Section: 03

1N 8E
Section: 02

1N 8E
Section: 09

10120110 Rapid

1N 8E
Section: 10

Cheyenne

1N 8E
Section: 11

1N 8E
Section: 16

1N 8E
Section: 15

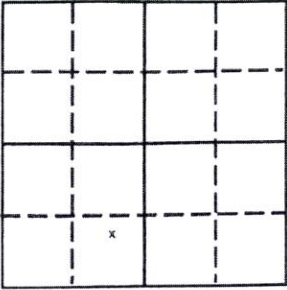
1N 8E
Section: 14



2848-2

SOUTH DAKOTA WATER WELL COMPLETION REPORT

2024

Location <u>se</u> $\frac{1}{4}$ <u>sw</u> $\frac{1}{4}$ Sec <u>10</u> Twp <u>1n</u> Rg <u>8e</u> County <u>Pennington</u> GPS Coordinates Lat: <u>44.055305</u> Lon: <u>103.142875</u>  Please mark well location with an "X" on section grid Well Completion Date <u>4/12/2025</u>  Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.) ? _____ ft. from _____ (identify source)	Well Owner: <u>Rapid Valley Sanitary District</u> Business Name: <u>Rapid Valley Sanitary District</u> Address: <u>4611 Teak Drive</u> City, State, Zip: <u>Rapid City, South Dakota 57703</u> WELL LOG: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:80%;">FORMATION</th> <th style="width:10%;">FROM</th> <th style="width:10%;">TO</th> </tr> </thead> <tbody> <tr><td>See attached lithology</td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> </tbody> </table> STATIC WATER LEVEL <u>589.8</u> FEET If flowing: closed in pressure _____ PSI GPM flow _____ through _____ Inch pipe Controlled by ☐ Valve ☐ Reducers ☐ Other _____ Reduced flow rate _____ GPM Can well be completely shut in? _____ WELL TEST DATA: ☒ Pumped Describe: ☐ Bailed ☐ Air ☐ Other _____ Pumping Level Below Land Surface <u>1,221.0</u> Ft. After <u>24.0</u> Hrs. pumped <u>1,000.0</u> GPM _____ Ft. After _____ Hrs. pumped _____ GPM If pump installed, pump rate: <u>1,000.0</u> GPM REMARKS <u>Variance No. 03-2024</u> <u>AWM 5/8/2025</u> RECEIVED MAY 07 2025 OFFICE OF WATER This well was drilled under license # <u>774</u> And this report is true and accurate. Drilling firm: <u>Hydro Resources</u> Signature of License Representative: _____ Signature of Well Owner or Equitable Property Holder: <u>Rusty Schmidt</u> Date: <u>4-30-2025</u>	FORMATION	FROM	TO	See attached lithology																													
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PROPOSED USE: ☐ Domestic/Stock ☒ Municipal ☐ Business ☐ Monitoring Well ☐ Irrigation ☐ Industrial ☐ Institutional ☐ Test Hole ☐ Dewatering Well ☐ Geothermal ☐ Other _____ METHOD OF DRILLING: flooded reverse CASING DATA: ☒ Steel ☐ Plastic ☐ Other If other describe _____ <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>PIPEWEIGHT</th> <th>DIAMETER</th> <th>FROM</th> <th>TO</th> <th>HOLE DIAMETER</th> </tr> </thead> <tbody> <tr> <td>118 LB/FT</td> <td>24 IN</td> <td>0 FT</td> <td>81 FT</td> <td>30 IN</td> </tr> <tr> <td>62.5 LB/FT</td> <td>16 IN</td> <td>+2 FT</td> <td>1830 FT</td> <td>22 IN</td> </tr> <tr> <td>41.5 LB/FT</td> <td>10.75 IN</td> <td>1774 FT</td> <td>3880 FT</td> <td>14.75 IN</td> </tr> </tbody> </table> GROUTING DATA: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Grout Type</th> <th>No. of Sacks</th> <th>Grout Weight</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>cement neat</td> <td>3,425</td> <td>15.0 Lb/gal</td> <td>0.0 Ft</td> <td>1,830.0 Ft</td> </tr> <tr> <td>cement near</td> <td>3,886</td> <td>15.8 Lb/gal</td> <td>1,774.0 Ft</td> <td>3,880.0 Ft</td> </tr> </tbody> </table> Describe grouting procedure <u>Tremme pipe from bottom</u> SCREEN: ☐ Perforated pipe ☐ Manufactured Diameter <u>9 7/8</u> Inches Length <u>4,124.0</u> Feet Material _____ Slot Size _____ Set From _____ Feet to _____ Feet Other information <u>Open hole completion</u> WAS A PACKER OR SEAL USED? ☐ Yes ☒ No If so, what material? _____ Describe packer(s) and location _____ DISINFECTION: Was well disinfected upon completion? ☒ Yes, How? <u>30 gallons of 10% Sodium Hypochlorite</u> ☐ No, Why Not? _____ Lab sample sent to for water quality analysis _____	PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER	118 LB/FT	24 IN	0 FT	81 FT	30 IN	62.5 LB/FT	16 IN	+2 FT	1830 FT	22 IN	41.5 LB/FT	10.75 IN	1774 FT	3880 FT	14.75 IN	Grout Type	No. of Sacks	Grout Weight	From	To	cement neat	3,425	15.0 Lb/gal	0.0 Ft	1,830.0 Ft	cement near	3,886	15.8 Lb/gal	1,774.0 Ft	3,880.0 Ft	This well was drilled under license # <u>774</u> And this report is true and accurate. Drilling firm: <u>Hydro Resources</u> Signature of License Representative: _____ Signature of Well Owner or Equitable Property Holder: <u>Rusty Schmidt</u> Date: <u>4-30-2025</u>
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Please return White Copy to DANR Water Rights 523 E. Capitol Ave., Pierre SD 57501

Rapid Valley Sanitary District Madison Aquifer Well

Depth (ft. bgs)	Formation Tops
0	Unconsolidated Terrace Deposits
24	Niobrara Formation
81	Carlile Shale
495	Greenhorn Formation
700	Belle Fourche
1210	Newcastle Sandstone
1230	Skull Creek Shale
1470	Fall River Sandstone
1610	Fuson Shale
1650	Lakota Formation
1810	Morrison Formation
1990	Unkpapa Sandstone
2100	Sundance Formation
2482	Spearfish Formation
2880	Minnekahta Limestone
2920	Opeche Formation
3070	Minnelusa Formation
3816	Madison Limestone
4125	Englewood Limestone?
4128	Total Depth

ft. bgs = feet below ground surface

Logged by: Logan Tiensvold & Mitch Kannenberg, LRE Water

RECEIVED

MAY 07 2025

OFFICE OF
WATER

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date June 6th, 2025

RECEIVED OF Rapid Valley Sanitary District 4611 Teak Drive Rapid City SD 57703

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

Fee for Application for Permit No. <u>2894-2</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 Mark Mayer
Chief Engineer



**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. 2894-2, Rapid Valley Sanitary District**

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. 2894-2, Rapid Valley Sanitary District, 4611 Teak Drive, Rapid City SD 57703.

The acting Chief Engineer is recommending APPROVAL of Application No. 2894-2 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 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. 2894-2 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. 2894-2 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 shall 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 Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Madison aquifer.
4. Water Permit No. 2848-2 and this Permit, combined, appropriate up to 917 acre-feet of water annually.

See report on application for additional information.

Mark Mayer, PE
Director of Office of Water
August 4, 2025

Report to the Chief Engineer
On Water Permit Application No. 2894-2
2894-2 Rapid Valley Sanitary District Water Service

August 1st, 2025

Water Permit Application No. 2894-2 proposes to appropriate an additional 0.67 cubic feet of water per second (cfs) and an additional 197 acre-feet of water annually from the Madison aquifer to what is currently authorized by Water Permit No. 2848-2. Water Permit No. 2848-2 appropriates 720 acre-feet of water annually at a maximum pump rate of 1.56 cfs from one well completed into the Madison aquifer located in the SE ¼ SW ¼ Section 10-T1N-R8E. Water is used for rural water system use in the Rapid Valley Sanitary District water distribution system. This application, if approved, and Water Permit No. 2848-2 combined, will authorize a total of 917 acre-feet annually at a maximum pump rate of 2.23 cfs. This site is located on the east side of Rapid City, SD along Highway 44 in Pennington County.

AQUIFER: Madison (MDSN)

HYDROGEOLOGY:

Surface outcrops of the Madison Limestone, as well as Minnelusa Formation & Inyan Kara Group, surround the outer extent of the Black Hills of South Dakota (Carter, 2001a, Carter 2003). The Madison aquifer generally occurs within the karstic upper part of the Madison Limestone (Carter, 2001a). However, Carter & Redden (1999) included the entire Madison Limestone and the Englewood Formation in their delineation of the aquifer (Carter, 2001a). The Madison aquifer is confined by low permeability layers in the overlying Minnelusa Formation, except where it outcrops in the Black Hills (as seen in Figure 1) (Carter, 2001a). Although the Madison aquifer is generally confined between the overlying Minnelusa aquifer and the underlying Deadwood aquifer, seepage/hydraulic conductivity has been recorded at the Madison outcrop from the Minnelusa & Deadwood aquifers (Long, 2002). The general direction of groundwater flow is outwards from the outcrops in the Black Hills, South Dakota (Carter, 2001a).

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 & others, 2010). The Pahasapa Limestone is a white, light gray to tan, fine to medium-grained limestone and dolomite containing brown to gray chert (Martin & others, 2004). The Englewood Limestone is a pink to lavender to light-gray, thin- to medium-bedded, fine- to medium-grained, argillaceous, dolomitic limestone (Martin & others, 2004). 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 (Driscoll, 2002).

The Madison aquifer may be hydrologically connected to the underlying Deadwood aquifer (Carter et al, 2003; SDGS, 2025; Water Rights, 2025b). Putnam and Long (2007) postulate that "the hydraulic connection between the Madison Limestone and the Minnelusa Formation is spatially variable and probably results from faults, fractures, and breccia pipes." The Minnelusa aquifer overlies the Madison aquifer 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 and Putnam, 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 and Putnam, 2002).

A well completion report was submitted with this application. The well is located in SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 10-T1N-R8E, and was completed on April 12th, 2025 (Water Rights, 2025d). The water well completion report shows the top of aquifer material 3,816 feet below ground surface and a total well depth of 4,128 ft which is at the approximate base of the Madison Formation. The static water level at the time of well completion was 589.8 feet below ground surface (Water Rights, 2025b, SDGS, 2025). Based on the top of aquifer material, the static water level, and total well depth (4,128 ft), the aquifer is confined with a saturated aquifer thickness of at least 312 feet (Water Rights, 2025b; Water Rights, 2025d). The artesian head pressure in this well lifts the water 3,226 feet above the top of the aquifer formation. The well completion report indicates the aquifer material is overlain by the Minnelusa Formation and is similar to other nearby test hole reports and well completion reports.

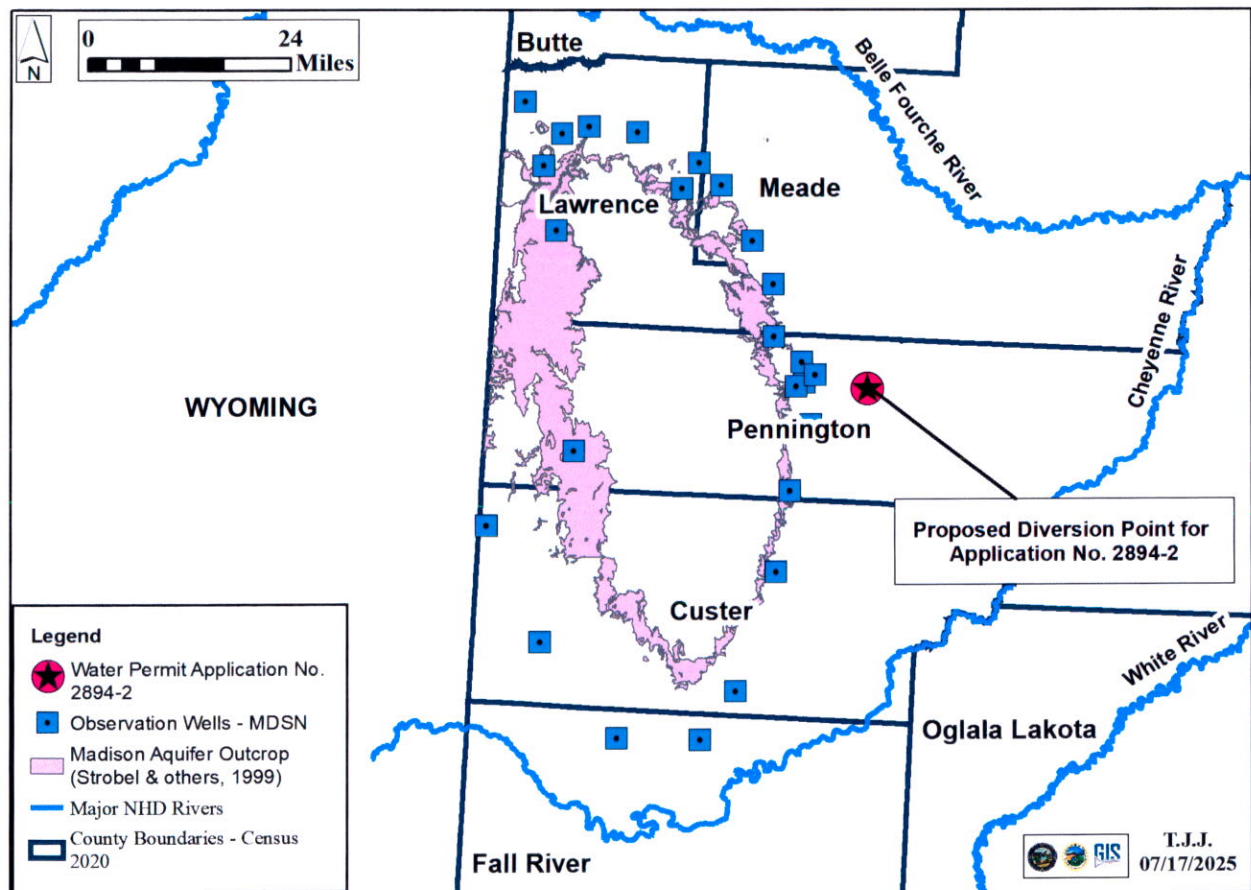


Figure 1. Madison Limestone outcrop in South Dakota (Strobel et al., 1999), the Madison aquifer observation wells in the Black Hills (Water Rights, 2025b), and the proposed diversion point for Water Permit Application No. 2894-2 (Water Rights, 2025d)

South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-9,

“A permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available for the applicant’s proposed use, the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, the proposed use is a beneficial use, and the permit is 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 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. 2894-2 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.

WATER AVAILABILITY:

Water Permit Application No. 2894-2 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,

“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 aquifer is older and stratigraphically lower than the Greenhorn Formation and the applicant is a water distribution system as defined in SDCL 46-1-6(17). 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.

STATEWIDE HYDROLOGIC BUDGET:

Statewide Recharge

Recharge to the Madison aquifer in South Dakota occurs through streamflow losses and the infiltration of precipitation where the formation outcrops in the Black Hills (Cater, 2001a; Driscoll, 2002). Carter and others (2001a) analyzed streamflow and precipitation data from 1931 to 1998 within the Black Hills of South Dakota and Wyoming to determine the average annual recharge to the Madison and Minnelusa aquifers. The average annual recharge rate to the

Madison and Minnelusa aquifers from streamflow contributions was estimated to be approximately 93 cfs, or 67,500 acre-feet per year; plus 251 cfs, or 181,760 acre-feet per year from precipitation falling on the outcrop in the Black Hills, for a combined estimated average annual recharge rate of 344 cfs, or 249,260 acre-feet per year. Carter and others (2001a) determined that of the combined estimated average annual recharge rate, approximately 55% of the total recharge goes to the Madison aquifer, and the remaining 45% recharges to the Minnelusa aquifer. Therefore, the estimated average annual recharge rate to the Madison aquifer is approximately 137,093 acre-feet per year. This recharge rate estimate does not include possible inflow from adjacent aquifers or from the Madison aquifer outside of the Black Hills of South Dakota and Wyoming. There have been other estimates of recharge rates to the Madison aquifer and other aquifers in the Black Hills (Rahn and Gries, 1973; Woodward-Clyde Consultants, 1981). However, these other recharge rate estimates used assumptions that were incorrect (all precipitation falling on the outcrop infiltrates into the aquifer), combined multiple aquifers (Madison, Minnelusa, and Minnekahta aquifers), and had less and much older data to work with. Therefore, the Carter and others (2001a) recharge rate is the best recharge rate estimate available.

Statewide Discharge

Discharge from the Madison aquifer in South Dakota occurs through well withdrawals, leakage to other aquifers, and flow to headwater and artesian springs (Carter, 2001a; Water Rights, 2025a). Currently, there are 192 water rights/permits, including future use permits, authorized to appropriate water from the Madison aquifer (Water Rights, 2025c). This application (No. 2894-2) is requesting 0.67 cfs and 197 acre-feet in addition to what is currently authorized by Water Permit No. 2848-2. Additionally, there are two other pending water permit applications, No. 2893-2 requesting 463 acre-feet per year for municipal use, and No 2895-2 requesting 28 acre-feet per year for rural water system use.

There are 12 future use permits reserving 14,549 acre-feet/year of water from the Madison aquifer, shown on Table 1 (Water Rights, 2025c). Future Use Permit Nos. 369-1 and 439-2 are assigned to multiple aquifers, but Table 1 only lists the portion of 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 (Water Rights, 2025c). Future Use Permit No. 439-2 reserves 3,367 acre-feet annually from the Madison aquifer for the Meadowbrook Gallery and 2,172 acre-feet is to reserve water from the Minnelusa aquifer for Jackson Springs and Sioux Park Gallery (Water Rights, 2025c).

Table 1. Future use permits reserving water from the Madison aquifer (Water Rights, 2025c)

Future Use Permit Holder	Amount of Reserved Water (acre-feet)
City of Belle Fourche (369-1*)	620
City of Rapid City (439-2*)	3,367
Weston Heights Homeowners (1833-2)	211
City of Spearfish (1872-1)	2,704
Black Hawk Water User District (1995-1)	1,300
Bear Butte Valley Water Inc. (2028-1)	440
City of Rapid City (2086-2, 2086A-2)	4,075
Fall River Water Users District (2560-2, 2560A-2, 2560B-2)	358
Southern Black Hills Water System (2580-2)	1,474
Total:	14,549
*This permit reserves water from multiple aquifers so only the portion reserving water from the Madison aquifer will be accounted for.	

Table 2 summarizes the 146 non-irrigation water rights/permits authorized to appropriate water from the Madison 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 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 60 percent estimation was established by Water Rights Staff to be a reasonable and safe overestimate of average annual withdrawals by non-irrigation appropriations. Historically, the 60 percent estimate has been accepted by the Water Management Board. There are also some water permits/rights that divert their water from more than one aquifer, only the diversion from the Madison aquifer will be accounted for in Table 2 (Water Rights, 2025c). It should be noted that some of the water permits/rights on Table 2 are connected to other water systems and use water from those systems rather than their own wells; therefore, it is assumed these water rights/permits will not contribute to the annual withdrawal rate. This includes Water Rights/Permit Nos. 1628-2, 1709-1, 1858-2, 272-1, 568-2, 574-2, and 743-1 which purchase 100% of their drinking water from another system (Drinking Water, 2025). As a result, the average annual water use for these water rights has been estimated to be zero acre-feet per year. Overall, the estimated average annual withdrawal rate for the Madison aquifer non-irrigation water rights/permits is 44,614 acre-feet/year (Table 2) (Water Rights, 2025c).

Table 2. Estimated annual use for non-irrigation water rights/permits authorized to divert water from the Madison aquifer (Water Rights, 2025c)

Type of Use	No. of Water Rights/Permits	Authorized Annual Volume (acre-feet)	Authorized Diversion Rate (cfs)	Estimated Annual Use (acre-feet/year)
COM	17	1,495	1.041	1,947
DOM	4	71	0.22	167
GEO	2	N/A	1.43	621
IND	11	301.3	4.88	2,421
INS	2	N/A	0.20	87
MUN	36	18,156	16.82	25,463
REC	1	N/A	1.00	434
RWS	21	5,154	3.853	6,826
SHD	40	339	6.856	3,317
WDS	12	3,330	N/A	3,330
Total:	146	28,847	36.30	44,614
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				

Currently, there are 33 irrigation water rights/permits (excluding Water Permit No. 2773-2) appropriating water from the Madison aquifer (Water Rights, 2025c). Irrigation water rights/permits have been typically required to report their annual usage by submitting an irrigation questionnaire since 1979. The 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 (Table 4) (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 (Table 4) (Water Rights, 2025a).

For comparison purposes, the average annual withdrawal rate for the 33 water rights/permits authorized for irrigation use from the Madison aquifer was estimated utilizing the following method: When there are more than ten years of data available, the average reported irrigation was used to estimate irrigation withdrawals. When there were fewer than ten 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 calculated using this method 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 two 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).

Using the methods described above, the estimated average annual withdrawal rate for the Madison aquifer water rights/permits used primarily for irrigation, as well as other uses, is approximately 9,546 acre-feet per year (Table 3) (Water Rights, 2025a and 2025c).

Table 3. Reported historic irrigation use from the Madison aquifer (Water Rights, 2025a)

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	0	6	200	0	*
1635-1	Black Hills National Cemetery	LC	0.82	54.5	94.1	28	94	356	451
1452-1	Black Hills State College	LC	3.33	25.4	24.2	35	24	1,447	1,472
1670-1	Buddy L, Peggy A, Kami S Ireland	LC	3.61	253.0	45.6	26	*	*	*
1096A-1	Butte Meade Sanitary Dist	PE	1.33	0.0	N/A	0	*	*	964
2458-2	City of Rapid City	LC	0.80	107.0	109.4	23	109	0	109
2002-1	City of Spearfish	PE	1.33	40.0	0	3	80	0	80
2313-2	Coca-Cola Bottling	LC	0.33	3.0	7.96	29	8	143	151
1899-1	Davis Ranches Inc	LC	1.43	100.0	0	15	0	0	0
1650-1	Dennis L Miller	LC	0.89	0.0	85.4	1	*	*	56
2673-2	Diocese Of Rapid City	LC	0.12	7.0	8.5	11	9	0	9
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	110	***	110
2286-2	Donald Konechne	LC	0.10	38.5	10.2	30	10	0	10
1931-1	Elkhorn Ridge @ Frawley Ranches LLC	LC	0.17	3.3	3	11	3	74	77
1707A-1	Elkhorn Ridge @ Frawley Ranches LLC	PE	3.705	100.0	0	4	0	1,610	1,610
1707E-1**	Elkhorn Ridge @ Frawley Ranches LLC	PE	0.00	0.0	48.2	17	48	0	48
1945-1	Frawley Ranches LLC	PE	1.11	265.0	59.2	10	59	0	59
1858-1	Glencoe Camp Resort Li LLC	LC	0.86	34.0	0	18	0	374	374
2593-2	Hart Ranch Development	LC	0.49	72.5	31.72	17	32	213	245
1911-2	Hart Ranch Development	LC	0.88	124.0	116.7	30	117	383	499
1725-2	Janice R Crowser	LC	1.07	75.1	2.02	26	2	0	2
2037-1	Jared And Anna Lukens-Black	PE	0.055	0.6	0	0	1	24	25
2012-1	Jesse Horstmann	PE	0.50	43.5	0	2	87	0	87
858-2	John & Heidi McBride	LC	9.36	655.8	6.4	40	6	0	6
1885-1	John T & Veronica Widdoss	LC	0.11	22.0	18.4	7	44	48	80
1960-1	One Diamond Inc	LC	1.28	150.0	130.1	8	300	29****	329
1223-1	P & L Water And Hay LLP	LC	0.67	263.0	186.1	42	186	0	186
1923-1	Roger & Jean Ranschau	LC	0.11	3.0	0.87	13	1	48	49
2013-1	Santa Maria Land & Cattle Corp	PE	2.22	460.0	0	1	920	0	920
1363-1	Spearfish Canyon Country Club	LC	0.90	80.1	66.3	37	66	0	66
2106-2	Stuart Rice	LC	0.08	2.8	0.74	32	1	35	36
1842-1	Tom C Davis	LC	0.44	330.0	0	19	0	0	0
2741-2	Tubbs Land & Cattle Llc	PE	3.34	567.0	194.6	5	1,134	0	1,134
2879-2	Weinreis Brothers	PE	0.50	75.0	0	0	150	0	150
419-2	Wind Cave National Park	LC	0.15	6.0	N/A	0	12	65	77
2880-2	Jeremiah & Wendy Walla	PE	0.39	23.5	0	0	47		47
PE: Water Permit; LC: Licensed Water Right								TOTAL:	9,546
*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 Permit No. 2773-2 is authorized for use from either the Minnelusa or Madison aquifers; however, the construction period has passed for this permit and the annual irrigation questionnaire indicates the well has not been constructed (Water Rights, 2025c). Therefore, the estimated use for Water Permit No. 2773-2 will not be included in this analysis.

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.

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 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). However, Carter and others (2001b) estimated that the average annual withdrawal from the Madison aquifer for domestic and livestock use between 1987 and 1996 was approximately 247 acre-feet. There is a high possibility that water withdrawals from the Madison aquifer for domestic and livestock use has increased since 1996; however, with the development of rural water systems in some of the areas where the Madison aquifer is a viable aquifer, it is likely some domestic users may have transitioned to rural water. Additionally, due to their relatively low diversion rates, withdrawals from domestic wells are generally not considered to be a significant portion of the hydrologic budget. Therefore, the quantity of water estimated by Carter and others (2001b) (approximately 247.4 acre-feet per year) for average annual withdrawals for domestic and livestock use from the Madison aquifer will be assumed to be a probable minimum average annual withdrawal rate from the aquifer for these uses.

Table 4. Reported historic irrigation use from the Madison aquifer (Water Rights, 2025a)

Year	No. of Permits	Reported
1982	9	400.65
1983	10	786.94
1984	10	688.00
1985	11	1,690.62
1986	13	506.05
1987	14	422.90
1988	13	1,043.30
1989	14	1,010.40
1990	15	1,012.00
1991	18	704.30
1992	18	857.40
1993	16	413.80
1994	16	1,324.82
1995	17	813.35
1996	17	527.72
1997	17	832.00
1998	17	940.98
1999	17	922.65
2000	16	807.89
2001	17	912.05
2002	18	1,362.57
2003	18	944.85
2004	18	1,271.87
2005	20	950.75
2006	20	1,020.12
2007	22	868.50
2008	22	797.13
2009	20	700.19
2010	20	718.92
2011	21	538.45
2012	23	685.04
2013	24	569.97
2014	24	451.79
2015	23	544.36
2016	24	868.48
2017	25	1,063.55
2018	26	635.72
2019	27	278.93
2020	27	859.25
2021	28	1,273.77
2022	29	1,523.59
2023	30	778.43
Min	9	278.93
Max	30	1690.62
Avg (1982-2023)	19	841.05
Avg (2014-2023)	26	827.79

Statewide Hydrologic Budget Summary

The estimated average annual recharge rate to the Madison aquifer is approximately 137,093 acre-feet per year. The estimated average annual withdrawal rate from the Madison aquifer is approximately 71,936 acre-feet per year (Future Use: 14,549 acre-feet/year, Non-Irrigation Permit/Water Rights: 44,614 acre-feet/year, Irrigation water rights/permits: 9,546 acre-feet/year, Deferred and Pending Applications: 2,980 acre-feet/year, and livestock and domestic use: 247 acre-feet/year). This application, if approved, proposes to withdraw up to 197 acre-feet per year 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.

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 and others (2001b) calculated hydrologic budgets for subareas of the Madison and Minnelusa aquifers for the Black Hills (in SD and WY) during the water years of 1987 to 1996. The budgets were calculated by dividing the Black Hills into nine subareas with the intent of minimizing groundwater flow to and from adjacent subareas. These subareas were determined based on several factors, including locations of major artesian springs, streamflow loss zones, and areas dominated by precipitation recharge. The proposed diversion point for Water Permit Application No. 2894-2 is located in Subarea 4 (Figure 2). The hydrologic budget for Subarea 4 is displayed in Table 5 (Carter et al., 2001b)

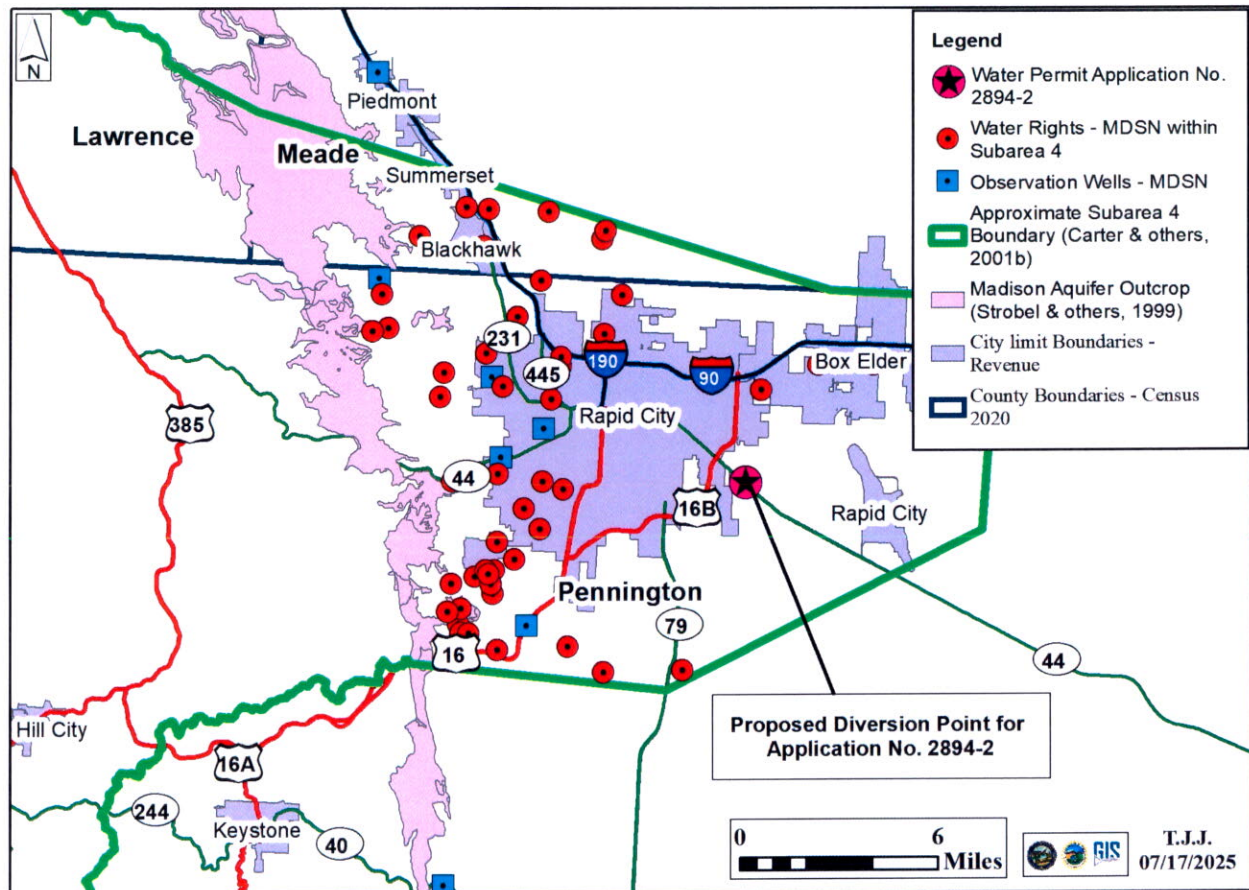


Figure 2. Subarea 4 used for the Madison and Minnelusa aquifers localized hydrologic budgets (modified from Carter et al., 2001b), Madison Limestone outcrop in South Dakota (Strobel et al., 1999), the location of the proposed diversion point for Water Permit Application No. 2894-2, other Madison aquifer water rights/permits, and observation wells within Subarea 4 (Water Rights, 2025b and 2025c)

Table 5. Estimated average annual hydrologic budget for Subarea 4 for the Madison and Minnelusa aquifers in the Black Hills for the water years 1987 to 1996 (modified from Carter, et al. 2001b)

Subarea 4	Inflow			Outflow		
	Streamflow Recharge	Precipitation Recharge	Net Groundwater Inflow	Artesian Springflow	Wells	Net Groundwater Outflow
cfs	33.7	5.7	0	26.2	7.2	5.9
acre-feet/year	24,398.8	4,126.8	0.0	18,968.8	5,212.8	4,271.6

As shown in Table 5, Carter and others (2001b) estimated the average annual recharge rate to Subarea 4 for the Madison and Minnelusa aquifers due to streamflow, precipitation, and groundwater inflow recharge to be approximately 28,525.6 acre-feet per year. Carter and others (2001a) determined that of the combined average annual recharge rate, approximately 55% of the total recharge goes to the entire Madison aquifer. Although 55% of the total recharge going to the Madison aquifer is for the entirety of the Madison Group outcrop area in the Black Hills, this percentage can still be used to roughly approximate the average annual recharge rate to the

Madison aquifer in Subarea 4, which equates to approximately 15,689 acre-feet per year. Groundwater models rely on several assumptions and the hydrologic budget for the subarea determined by Carter and others (2001b) does not account for other factors contributing to recharge. Additional recharge is likely available through upward leakage from underlying aquifers and through well withdrawals inducing groundwater inflow from outside the subarea.

Currently in Subarea 4, there are 49 water rights/permits authorized to withdraw from the Madison aquifer, and one future use permit reserving water (Water Rights, 2025c). For the water rights/permits authorized for irrigation use, an application rate of two feet per authorized acre per year was utilized for the purpose of estimating the average annual withdrawal rate from the Madison aquifer. The average annual withdrawal rate from the Madison aquifer for the non-irrigation water rights/permits was estimated utilizing the same methods used for the non-irrigation water rights/permits in Table 2. Including Water Permit Application No. 2894-2 (if approved, assuming full volume), the estimated average annual withdrawal rate from the Madison aquifer is approximately 18,333 acre-feet per year from Subarea 4. It is likely that the water use estimated for permits limited only by their diversion rate limit is higher than the actual withdrawals by those permits. The hydraulic head in the aquifer could also have changed after the Carter, et al. (2001b) report was finished, and it is possible unaccounted groundwater is flowing into the Subarea 4 boundaries from other subareas. In short, there may be more recharge to Subarea 4 than the current estimate and it is likely the methods used to estimate average annual withdrawals overestimates withdrawals.

Long & Putnam (2002) analyzed groundwater flow of the Madison and Minnelusa aquifers in the area near Rapid City, including the area for this application (Figure 3). Long & Putnam (2002) estimated the hydrologic budget (for years 1988 through 1997) in their study area, streamflow recharge was 38.8 cfs, precipitation recharge as 16.1 cfs, and groundwater inflow from the Deadwood aquifer was 6.3 cfs, for a total of 61.2 cfs flowing into the Madison and Minnelusa aquifers. Assuming 55% of that value goes to the Madison aquifer, recharge to the Madison aquifer in the area of the Long & Putnam study is 33.7 cfs, equivalent to approximately 24,370 ac-ft/yr.

The estimated withdrawal from the Madison aquifer in the Long & Putnam study area, including appropriations reserved for future use, is 44,049 ac-ft/yr. This application seeks to appropriate up to 197 ac-ft/yr. Observation well data (Figure 4) suggests that hydraulic head in the Madison aquifer remains relatively stable in nearby observation wells, so it is possible the potentiometric surface of the aquifer changed after the Long & Putnam (2002) study was completed. Based on Water Rights Staff experience, it is also likely that annual withdrawals estimated by assuming the permit holder withdraws at 60% of their maximum licensed/permitted rate is higher than the true value.

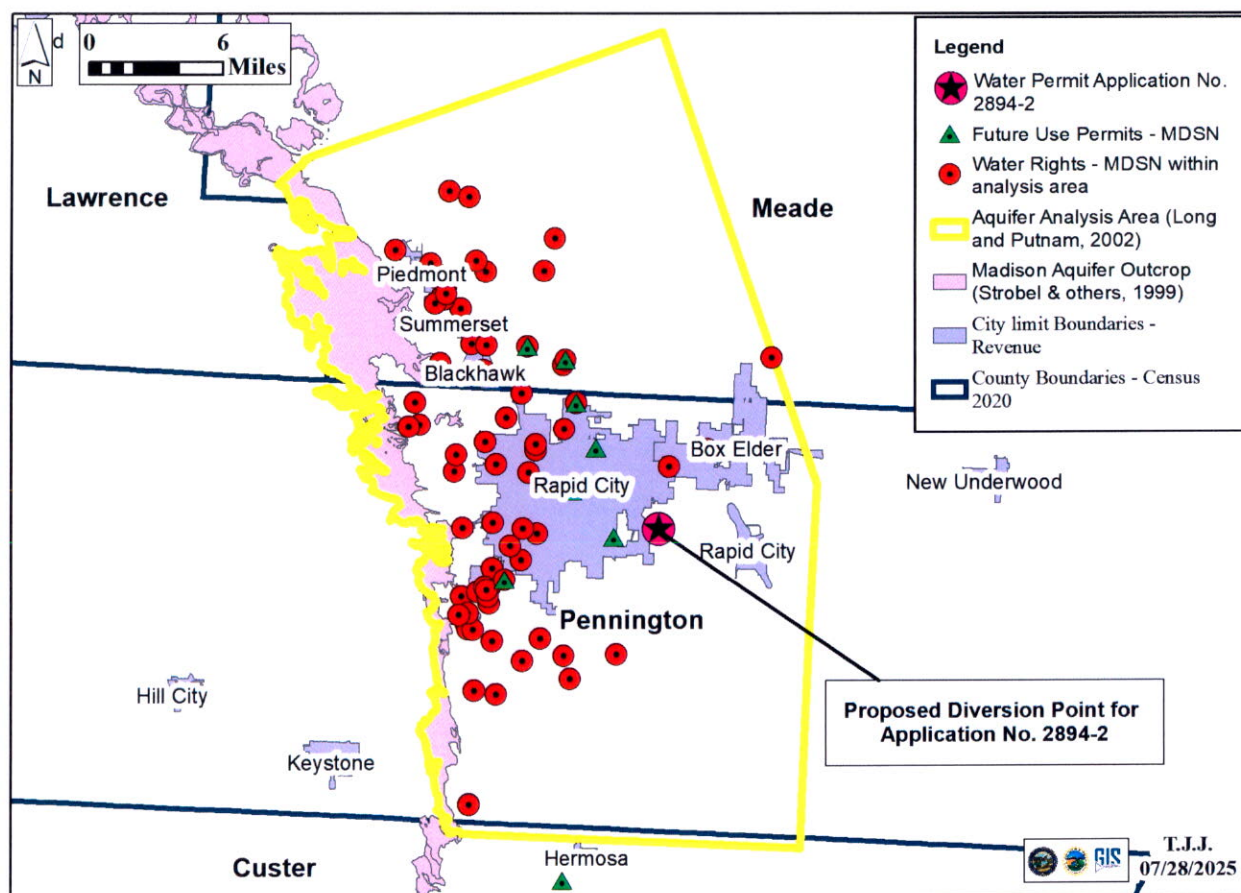


Figure 3. Analysis area used for the Madison and Minnelusa aquifers localized hydrologic budgets (Long & Putnam, 2002), Madison Limestone outcrop in South Dakota (Strobel et al., 1999), the location of the proposed diversion point for Water Permit Application No. 2894-2, other Madison aquifer water rights/permits, and future use permits within the analysis area (Water Rights, 2025b and 2025c)

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 to the aquifer.

The DANR-Water Rights Program monitors 25 observation wells completed into the Madison aquifer. The observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The three closest observation wells to the proposed diversion point are PE-65A (approximately 6.4 miles west), PE-89A (approximately 7.5 miles west), and PE-86A (approximately 7.9 miles southwest) (Water Rights, 2025b). The water level elevations for these observation wells are displayed in Figure 4 (Water Rights, 2025b). The majority of observation wells in the Madison aquifer have a stable water level, with several observation wells that are under the influence of heavy pumping showing a history of slightly declining water levels that eventually stabilize and a couple that have stable water levels over their period of

record. Some observation wells, such as PE-86A, have a very large natural variability to their water levels. The data shown on Figure 4 share a similar stable trend with most of the South Dakota observation wells within subarea 4 of the Madison aquifer.

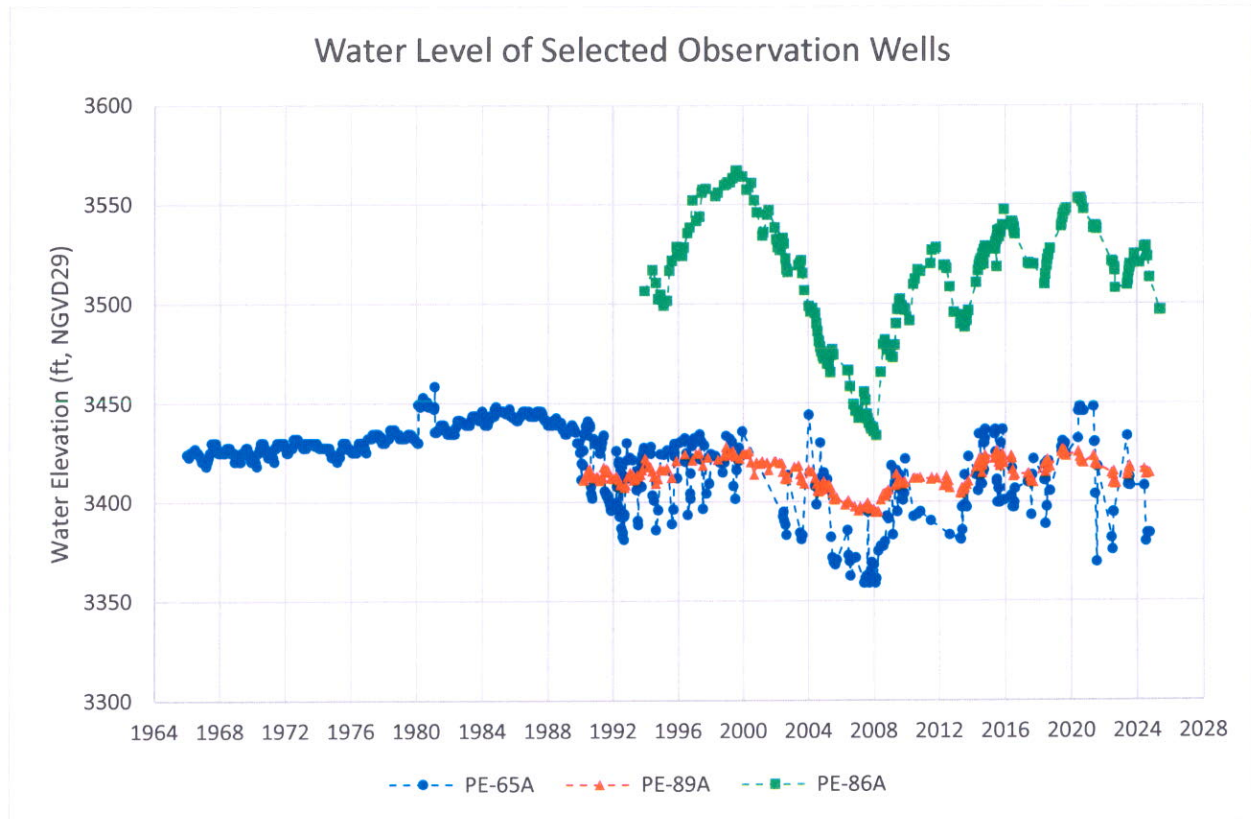


Figure 4. A hydrograph showing the elevation of water levels of observation wells PE-65A, PE-89A, and PE-86A (Water Rights, 2025b)

The hydrographs in Figure 4 display the stable water levels that the majority of observation wells in the Madison aquifer have. The observation wells under influence of heavy and continuous pumping quickly stabilize after the pumping starts. In confined aquifers, a decline in observation well water levels do not necessarily indicate a significant decrease in water stored in the confined aquifer, since measured water levels are reflecting artesian head pressure. 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 greatly exceeds pumping with the aquifer returning to pre-pumping conditions annually. 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:

Water rights/permits within approximately eight miles of the existing well site for this application are shown in Figure 5 and summarized in Table 6 (Water Rights, 2025c). The closest water right/permit (not held by the applicant) to the proposed diversion point is Water Right No. 2763-2 which is held by the City of Box Elder. The diversion point for Water Right No. 2763-2 is located approximately 2.8 miles north from this application (Water Rights, 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) approximately 2.8 miles north of the proposed diversion point based on the location identified by the well driller on the well completion report submitted by the driller (Water Rights, 2025d). There could potentially be other domestic wells completed into the Madison aquifer near the diversion point that are not on file with the DANR-Water Rights Program.

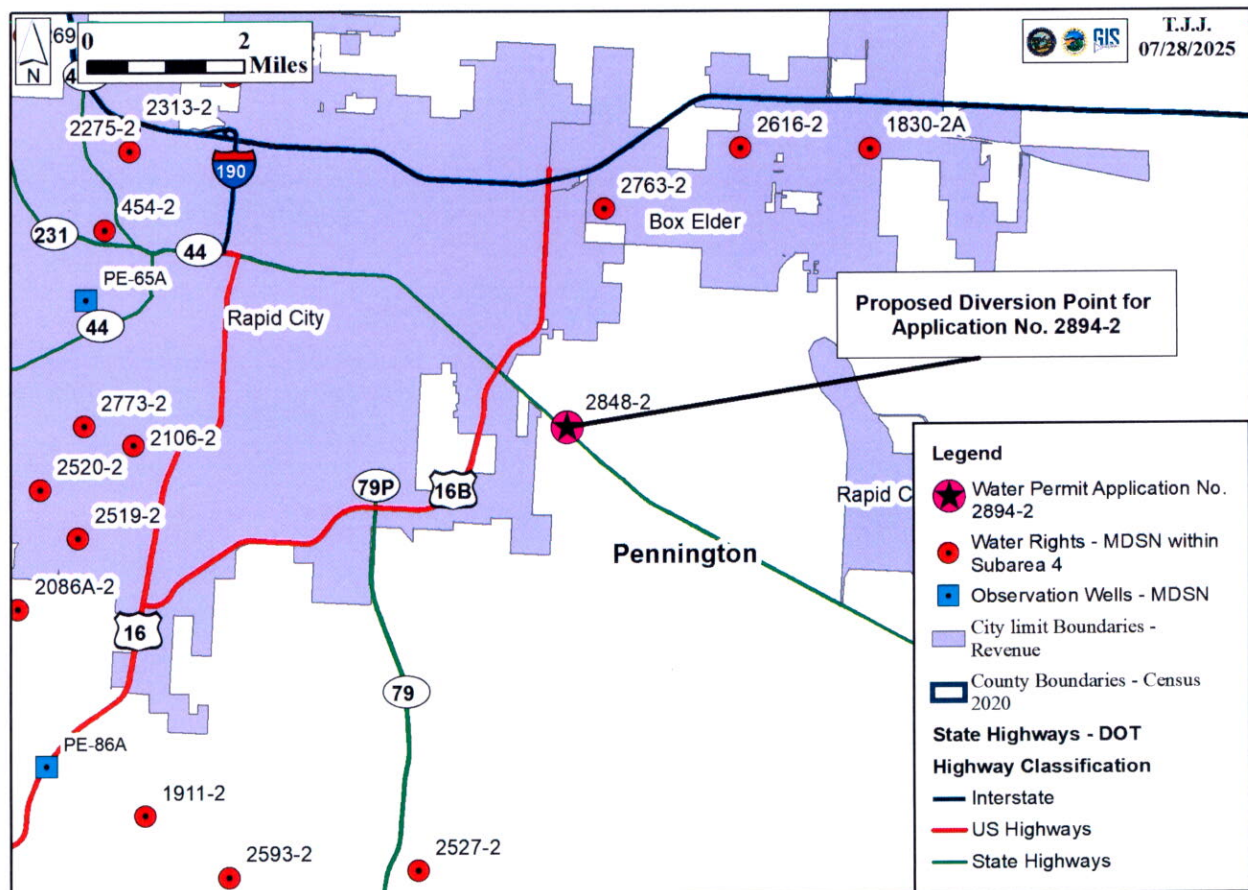


Figure 5. Map of the Water Permit Application No. 2894-2 proposed diversion point and the Madison aquifer observation wells and water rights/permits within eight miles in Pennington and Meade Counties (Water Rights, 2025b and 2025c).

Table 6. List of water rights/permits within eight miles of the proposed diversion point (Water Rights, 2025c).

Permit	Name/Business	Priority	Status	Use Type	CFS	Acres
454-2	Black Hills Corporation	04/09/1957	License	Industrial	1.00	0
1830-2A	City of Box Elder	02/28/1982	License	Municipal	1.11	0
1911-2	Hart Ranch Development Co.	09/27/1984	License	Irrigation, Suburban Housing Development, Recreation	0.88	124
2086A-2	City of Rapid City	05/18/1989	Future Use	Municipal	0	0
2106-2	Stuart Rice	06/06/1990	License	Irrigation, Domestic	0.08	2.8
2275-2	City of Rapid City	05/18/1989	License	Municipal	3.80	0
2313-2	Coca-Cola Bottling	04/08/1994	License	Irrigation, Commercial	0.33	3
2519-2	City of Rapid City	05/18/1989	License	Municipal	4.12	0
2520-2	City of Rapid City	05/18/1989	License	Municipal	1.78	0
2527-2	Signature Development Company	04/29/2004	License	Suburban Housing Development	0.67	0
2593-2	Hart Ranch Development	06/15/2006	License	Irrigation, Suburban Housing Development	0.49	72.5
2616-2	City of Box Elder	02/03/2006	License	Municipal	1.00	0
2763-2	City of Box Elder	10/15/2012	License	Municipal	0.91	0
2773-2	Arrowhead Country Club	07/27/2017	Permit	Irrigation	1.11	100
2848-2	Rapid Valley Sanitary District Water Service	05/10/2022	Permit	Rural Water System	1.56	0

The Madison aquifer is primarily under confined conditions. In a confined aquifer, drawdown from a pumping well can extend some distance from the well. 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 Management Board, 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 Management Board, 1995). There is a history of well interference complaints in Pennington County, however all of the well interference complaints are older or for separate aquifers and are not relevant to the Madison aquifer (Water Rights, 2025e). When considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20 (6) and (7)), the artesian head pressure of the Madison aquifer in the area of this application, the lack of recent well interference complaints for adequate wells completed into the Madison aquifer in Pennington County (Water Rights, 2025e), any drawdown created from the 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.

Springs

There have been concerns that development of the Madison aquifer will affect spring discharge. The nearest springs to the existing well and proposed diversion points are City Springs (approximately 7.3 miles northwest) and Cleghorn Springs (approximately 8.5 miles west). Recharge to City Springs and Cleghorn Springs are more than likely from the Madison and Minnelusa aquifer systems but discharges of these springs (located in subarea 4) are highly variable, and are likely influenced primarily by variability in streamflow recharge, which dominates recharge in this subarea (Driscoll et al., 2002). Dye testing was also conducted at City Springs confirming hydraulic connectivity for the Madison and Minnelusa aquifer in the area (Driscoll et al., 2002).

When considering the deferral of Water Permit Application No. 2585-2 for the Southern Black Hills Water System, the Water Management 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” (Water Management Board, 1997).

Given the distance between the existing springs and proposed diversion point, there is a reasonable probability Water Permit Application No. 2894-2 can be developed without making an impact that would be measurable above the natural fluctuations in the nearest spring(s) that likely are or could be influenced by water coming from the Minnelusa or Madison aquifers.

CONCLUSIONS:

1. Water Permit Application No. 2894-2 proposes to appropriate an additional 0.67 cfs and an additional 197 acre-feet of water annually from the Madison aquifer to what is currently authorized by Water Permit No. 2848-2. This application, if approved, and

Water Permit No. 2848-2 combined, will authorize a total of 917 acre-feet annually at a maximum pump rate of 2.23 cfs. This site is located on the east side of Rapid City, SD along Highway 44 in Pennington County.

2. Water Permit No. 2848-2 appropriates 720 acre-feet of water annually at a maximum pump rate of 1.56 cfs from one well completed into the Madison aquifer located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 10-T1N-R8E. Water is used for rural water system use in the Rapid Valley Sanitary District water distribution system.
3. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Madison aquifer to supply the proposed appropriation.
4. There is a reasonable probability that the diversion by Water Permit Application No. 2894-2 will not unlawfully impair adequate wells for existing water rights/permits and domestic uses.
5. Water Permit Application No. 2894-2 is subject to a twenty-year term limitation.


Tyler Jensen
Natural Resources Engineer I
SD DANR - Water Rights Program

Reviewed by:


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

References

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Rodriguez, Rachel

From: rschmidt@rvsd.com
Sent: Friday, June 6, 2025 11:26 AM
To: Rodriguez, Rachel
Subject: RE: [EXT] Water Permit Application
Attachments: rapid valley well completion report.pdf

Rachel, the finished well depth was 4124'. Attached is the finished well report

Thanks

Rusty

From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Sent: Friday, June 6, 2025 10:08 AM
To: rschmidt@rvsd.com
Subject: RE: Water Permit Application

Another quick question,

For 2848-2, is the depth of the well 4,005 ft? please confirm.

Thank you,

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



From: rschmidt@rvsd.com <rschmidt@rvsd.com>
Sent: Tuesday, June 3, 2025 2:56 PM
To: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: RE: [EXT] Water Permit Application

Rachel, that is the correct location, and the \$750.00 was mailed today.

Thanks

Rusty Schmidt/General Manager
Rapid Valley Sanitary District-Water service
P-605-393-1050/F-605-393-1051
Rschmidt@rvsd.com



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From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Sent: Tuesday, June 3, 2025 9:56 AM
To: rusty schmidt <rschmidt@rvsd.com>
Subject: Water Permit Application

Good Morning Rusty,

In looking over your application, there are two issues:

- Was the well for 2848-2 in the SE 1/4 SW 1/4 Section 10-T1N-R8E? Please confirm. If not, please mark the location of the well on the attached map.
- Based on the annual acre feet of 197, the fee for this application is \$750.00.

Once I received the items above, I can begin processing your application.

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

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

August 7, 2025

Rapid Valley Sanitary District – Water Service
c/o Rusty Schmidt
4611 Teak Drive
Rapid City SD 57703

Dear Mr. Schmidt:

Water Permit Application No. 2894-2 for water distribution system use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Rapid City Journal printed in Rapid City SD (see attachment for contact number). 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. 2894-2 to Appropriate Water

Notice is given that Rapid Valley Sanitary District – Water Service, 4611 Teak Drive, Rapid City SD 57703, has filed an application for a water permit to appropriate an additional 0.67 cubic feet of water per second (cfs) and an additional 197 acre-feet of water annually from the Madison Aquifer to what is currently authorized by Water Permit No. 2848-2. Water Permit No. 2848-2 appropriates 720 acre-feet of water annually at a maximum pump rate of 1.56 cfs from one well completed into the Madison Aquifer located in the SE 1/4 SW 1/4 Section 10-T1N-R8E. Water is used for rural water system use in the Rapid Valley Sanitary District water distribution system. This application, if approved, and Water Permit No. 2848-2 combined, will authorize a total of 917 acre-feet annually at a maximum pump rate of 2.23 cfs. This site is located on the east side of Rapid City, SD along Highway 44.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 2894-2 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 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. 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 August 25, 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 August 25, 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.

Rodriguez, Rachel

From: Karlee Sams <leelegals@column.us>
Sent: Wednesday, August 6, 2025 10:21 AM
To: Rodriguez, Rachel
Cc: rschmidt@rvsd.com
Subject: Re: [EXT] 2894-2 Rapid Valley Sanitary District - Public Notice

Good Morning!

Your notice is scheduled to be published in the The Rapid City Journal on August 14, 2025. Your Notice ID is: [VAvnY6TVq5smuap4CDSy](#)

You will be receiving a notification from Column Support with your proof. If you don't see it, check your spam folder and any email restrictions you may have.

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If you have any questions or concerns, please don't hesitate to let us know so we can look into it!

—
Karlee Sams

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How did I do?



On August 6, 2025 at 10:30 AM EDT [rachel.rodriguez@state.sd.us](#) wrote:

Attached is a notice to be published on August 14, 2025.

Rapid Valley Sanitary District – Water Service, c/o Rusty Schmidt, 4611 Teak Drive, Rapid City SD 57703, 605-393-1050, [rschmidt@rvsd.com](#) 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](#)

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, August 6, 2025 9:30 AM
To: RCY Legals
Subject: 2894-2 Rapid Valley Sanitary District - Public Notice
Attachments: 2894-2 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on August 14, 2025.

Rapid Valley Sanitary District – Water Service, c/o Rusty Schmidt, 4611 Teak Drive, Rapid City SD 57703, 605-393-1050, rschmidt@rvsd.com 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



AUG 22 2025

AFFIDAVIT OF PUBLICATION

**OFFICE OF
WATER**

Rapid Valley Sanitary District

State of Florida, County of Broward, ss:

I, Anjana Bhadoriya, of lawful age, being duly sworn upon oath depose and say that I am an agent of Column Software, PBC, duly appointed and authorized agent of the Publisher of The Rapid City Journal, a corporation of Rapid City, South Dakota, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published for at least one year prior to the first date of the published notice. This affidavit is a true and corrected copy of notice which appeared in said newspaper on the following dates.

Publication Dates:

- Aug 14, 2025

NOTICE ID: VAvnY6TVq5smuap4CDSy

NOTICE NAME: 2894-2 Rapid Valley Sanitary District

TOTAL AD COST: \$89.68

Anjana Bhadoriya

Agent

VERIFICATION

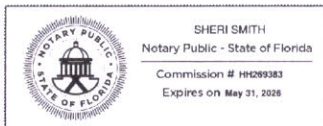
State of Florida
County of Broward

Signed or attested before me on this: 08/14/2025

S. Smith

Notary Public

Notarized remotely online using communication technology via Proof.



**NOTICE OF APPLICATION NO.
2894-2 to Appropriate Water**

Notice is given that Rapid Valley Sanitary District - Water Service, 4611 Teak Drive, Rapid City SD 57703, has filed an application for a water permit to appropriate an additional 0.67 cubic feet of water per second (cfs) and an additional 197 acre-feet of water annually from the Madison Aquifer to what is currently authorized by Water Permit No. 2848-2. Water Permit No. 2848-2 appropriates 720 acre-feet of water annually at a maximum pump rate of 1.56 cfs from one well completed into the Madison Aquifer located in the SE 1/4 SW 1/4 Section 10-T1N-R8E. Water is used for rural water system use in the Rapid Valley Sanitary District water distribution system. This application, if approved, and Water Permit No. 2848-2 combined, will authorize a total of 917 acre-feet annually at a maximum pump rate of 2.23 cfs. This site is located on the east side of Rapid City, SD along Highway 44.

Pursuant to SDCL 46-2A-2, the Acting Chief Engineer recommends APPROVAL of Application No. 2894-2 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 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. 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

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AUG 22 2025

OFFICE OF
WATER

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 August 25, 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 August 25, 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 August 14, 2025 for a total approximate cost of \$89.68 and may be viewed for free at www.sdpublicnotices.com)
Legal No: COL-SD-3052



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, August 7, 2025 8:40 AM
To: rusty schmidt
Subject: 2894-2 Rapid Valley Sanitary District - Public Notice
Attachments: 2894-2 Rec.pdf; 2894-2 Ltr.pdf; 2894-2 PubNotice.pdf; RapidCityJournal info.pdf

Good morning,

Attached is a copy of the report, acting chief engineer's recommendation, and information regarding the public notice for your water permit application. I believe the Rapid City Journal has sent you the email directly with the link to view and pay for the notice. 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

October 27, 2025

Rapid Valley Sanitary District – Water Service
c/o Rusty Schmidt
4611 Teak Drive
Rapid City SD 57703

Dear Mr. Schmidt:

Enclosed is Water Permit No. 2894-2 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.: 2894-2

Name of Applicant: Rapid Valley Sanitary District-Water Service, Rusty Schmidt

Date of Posting: 8/11/2025

Date of Removal: 10/27/2025



Ron Duvall, Engineer III

10/27/2025

Date

Subscribed and sworn to before me, a notary public, this 27th day of OCT, 2025.



Notary Public - South Dakota
My commission expires May 16, 2029



(SEAL)