

WATER PERMIT NO. 2848-2

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

Address: **4611 Teak Dr, Rapid City SD 57003** Phone: **605 381-2904**

Amount of Water Claimed: **1.56 cfs** Total Acres: **NA**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **rural water system** County: **Pennington**

Type of Waste Disposal System:

Location: **east side of Rapid City**

PRIORITY Date Received: **5-10-22** Application/License Fee: **\$ 1,350**

Corrected Application Received: Period of Annual Use: **January 1 – December 31**

Remarks:

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

Land to be Irrigated: **NA**

Depth of Well: **4,005 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **5-10-22**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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		⊗			

**SOUTH DAKOTA
WATER PERMIT NO. 2848-2**

Date of first receipt of application May 10, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2848-2 to Rapid Valley Sanitary District – Water Service, Rusty Schmidt, Manager, 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. 2848-2 appropriates 720 acre-feet of water annually at a maximum pump rate of 1.56 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 4,005 feet deep) located in the SE 1/4 SW 1/4 Section 10-T1N-R8E for rural water system use. 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 rural water system use 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. 2848-2 is July 25, 2022.
5. The date from which applicant may claim right is May 10, 2022.
6. One-fifth of the construction is to be completed on or before January 25, 2025.
7. All construction is to be completed on or before July 25, 2027.
8. Water is to be put to beneficial use on or before July 25, 2031.
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. 2848-2 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. 2848-2 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 well authorized by Permit No. 2848-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

(continued)

4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Madison aquifer.
5. Water Permit No. 2848-2 appropriates up to 720 acre-feet of water annually.

WATER MANAGEMENT BOARD

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

AUG 04 2022
date



MAY 10 2022

PAID

WATER RIGHTS
PROGRAM

MAY 10 2022

Ck#

Rec't#

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2848-2</u> (office use only) Hydrologic Unit <u>10120110</u> Basin <u>Upper Cheyenne</u> Newspaper <u>Rapid City Journal</u>
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Application For Permit To Appropriate Water Within The State Of 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.)

1. Name to Appear on Water Permit Rapid Valley Sanitary District - Water Service

Mailing Address 4611 Teak Drive Rapid City SD 57703
(Address) (City) (State) (Zip Code)
Phone (605) 393-1050 Mobile (605) 381-2904 Email rschmidt@rvsd.com

2. Amount of water claimed 1.56 *CFS or 700 **GPM and 720 ***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)

3. Source of water supply A well to be completed into the Madison Aquifer

4. Location of point of diversion SE1/4 of the SW1/4, Section 10, T1N, R8E 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)

5. County or counties where water will be used Pennington

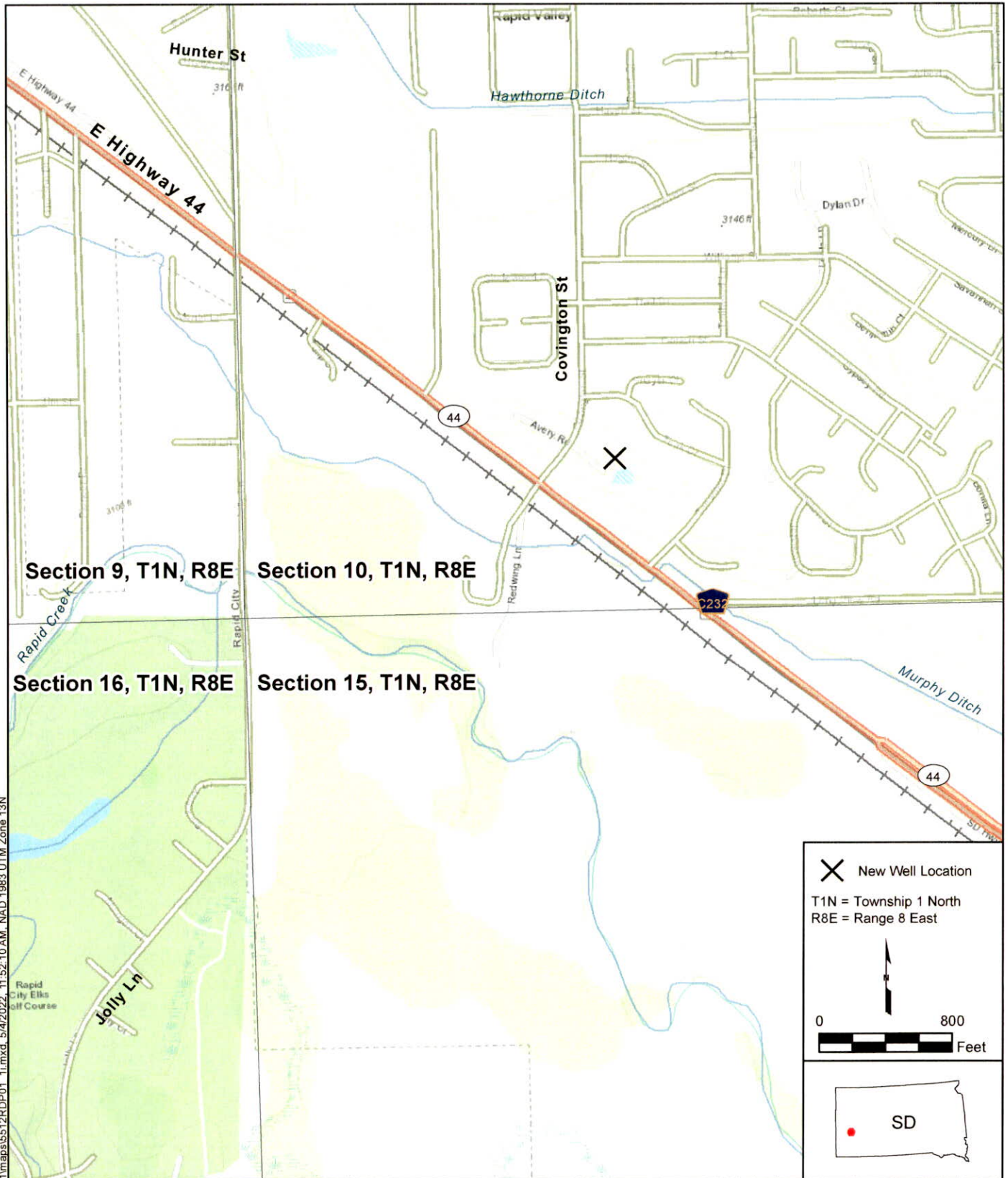
6. Annual period during which water is to be used January 1 through December 31

7. 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 purpose of this application is to increase the RVSD raw water supply to support the continued growth of the system.

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.



C:\GIS\GIS\RVSD_5512RDP01\mapgs5512RDP01_11.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_11.MXD	DATE:5/4/2022	FIGURE: 1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

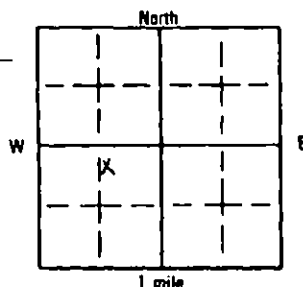
10-85

Location NE 1/4 SW 1/4 Sec 9 Twp 1N Rg 8E

County

Pennington

Please mark well location with an "X"

Well # 4Well Completion Date Sept. 1990

PROPOSED USE:

☐ Domestic ☒ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Stock

Method of Drilling:

Mud Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	MOLE DIAMETER
<u>14</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>20</u> FT	<u>25</u> IN
<u>42</u> LB/FT	<u>10 3/4</u> IN	<u>0</u> FT	<u>1500</u> FT	<u>13 1/2</u> IN
<u>23</u> LB/FT	<u>7</u> IN	<u>915</u> FT	<u>3267</u> FT	<u>9 3/4</u> IN
<u>15</u> LB/FT	<u>5</u> IN	<u>3232</u> FT	<u>3568</u> FT	<u>6 1/4</u> IN

GROUT:

Was the well grouted? ☒ YES ☐ NOTo what depth? 3267 FEETWhat is grouting material? CementIf cement, number of sacks? 1330Describe grouting procedure the 16", 10 3/4" & 7" casing strings were each groutedWhat was grout weight? 15 LB/GALSCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Other information _____

Was a packer or seal used? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

Was well disinfected upon completion? ☒ YES ☐ NOExplain Circulated chlorine solutionBacteriological analysis ☐ YES ☒ NOLaboratory sent to pump has not been installed yet

Well Owner:

Name Rapid Valley Water Co.Address 3201 School Drive R.C. 52201

Well Log:

Depth

Formation	From	To
Clay & gravel	0	60
Greenhorn	60	185
Belle Fourche / Memory	185	825
Newcastle	825	870
Skull Creek	870	1096
Fall River	1096	1278
Fossil shale	1278	1342
Lakota	1342	1488
Nebraska	1488	1782
Link page	1782	1834
Spearsfish Sandstone	1834	2184
Spearsfish	2184	2572
Minnehaha	2572	2583
Opesha	2583	2640

STATIC WATER LEVEL 406 Feet

If flowing, closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other, specify _____

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped☐ Bailed

Describe: _____

☐ Other

Pumping Level Below Land Surface

715 ft. After 24 Hrs. pumped 275 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

REMARKS: Well Log cont.Minnelusa 2640 - 3450Madison 3450 - 3805Minnelusa flowed at 2000+ gpm at approx. 2680'This well was drilled under license # 331

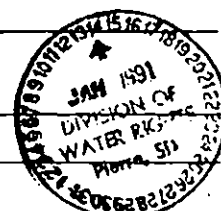
And this report is true and accurate.

Drilling firm Taylor Drilling Co.

Signature of License Representative:

Ralph Taylor

Signature of Well Owner:

Date 1-8-91

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date May 10, 2022

RECEIVED OF Rapid Valley Sanitary District/Water Service #4611 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>2848-2</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>1150.00</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>2848-2</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>1350.00</u>

By Eric Gronlund
Chief Engineer

me



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2848-2, Rapid Valley Sanitary District**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 2848-2, Rapid Valley Sanitary District, 4611 Teak Drive, Rapid City SD 57703.

The Chief Engineer is recommending APPROVAL of Application No. 2848-2 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 with the following qualifications:

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2848-2 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. 2848-2 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 well authorized by Permit No. 2848-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Madison aquifer.
5. Water Permit No. 2848-2 appropriates up to 720 acre-feet of water annually.

See report on application for additional information.

Eric Gronlund, Chief Engineer
July 1, 2022

**Report to the Chief Engineer on
Water Permit Application No. 2848-2**

Rapid Valley Sanitary District
8 June 2022

Water Permit Application No. 2848-2 seeks to appropriate up to 720 acre-feet of water annually (ac-ft/yr) at a maximum instantaneous diversion rate of 1.56 cubic feet of water per second (cfs) from one well to be completed into the Madison aquifer (approximately 4,000 feet deep) located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 10-T1N-R8E, Black Hills Meridian for rural water system use. This site is located on the east side of Rapid City, South Dakota along Highway 44.

Aquifer: Madison (MDSN)

Hydrogeologic Characteristics

The Madison Group in South Dakota is a Lower Mississippian and Upper Devonian group of formations that in the Black Hills consists of the Englewood and Pahasapa Limestone formations [1]. The Pahasapa Limestone is a “white, light-gray to tan, fine- to medium-grained limestone and dolomite containing brown to gray chert [2].” The Englewood Limestone is a “pink to lavender to light-gray, thin- to medium-bedded, fine- to medium-grained, argillaceous, dolomitic limestone [2].” 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 [3], although it may not be suitable as a source of water in all of those areas due to extreme depth to the aquifer and low water quality far from the outcrops [4]. It crops out in the Black Hills and is buried elsewhere in South Dakota [3]. The Madison aquifer may be hydrologically connected to the Deadwood aquifer underlying it in some locations [5]. It is also connected to the Minnelusa aquifer above it in some areas of the aquifer [5]. There are other bedrock aquifers that receive natural discharge from the Madison aquifer further away from the Black Hills where confining layers between the Madison aquifer and those aquifers are absent. The hydraulic head of the Madison aquifer is higher than land surface in many places around the Black Hills, causing some wells completed into the aquifer to flow without a pump [6]. Numerous springs and seeps in the Black Hills flow with water that has been determined to come from the Madison aquifer [7].

The applicant submitted a well completion report for a well completed for the applicant in September of 1990 located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 9 T1N-R8E, located approximately 1 mile west of this application. The driller reported encountering the Lakota formation from 1,342 feet below grade to 1,488 feet, the Morrison formation from 1,488 to 1,782 feet, the Unkpapa formation from 1,782 to 1,834 feet, the Sundance formation from 1,834 to 2,184 feet, the Spearfish formation from 2,184 feet to 2,572 feet, the Minnekahta formation from 2,572 feet to 2,583 feet, the Opeche formation from 2,583 feet to 2,640 feet, the Minnelusa formation from 2,640 to 3,450 feet and the Madison formation from 3,450 to 3,805 feet below grade. The well was cased down to 3,560 feet below grade and left as an open hole below that depth. The static water level in the well was 406 feet below grade at the time the well was completed. Static water level is an indication of hydraulic head in the aquifer. The water level and formations encountered are consistent with other information known about the Madison aquifer. The Well

Completion Report database contains a plugging report on file that indicates this well was plugged with cement up to 1,665 feet below grade and perforated in the Lakota formation on October 20, 1994.

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing 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. This report will only assess the availability of water and possibility of developing this application without unlawful impairment of existing domestic water uses and water rights.

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 the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. 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 or not 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-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.*

This application proposes to withdraw water from the Madison aquifer in one of the counties listed above. Therefore, in addition to the other requirements, the Water Management Board must consider the effect this application may have on nearby Madison aquifer wells and springs and this application is subject to a 20-year term limit.

Availability of Water

Statewide Hydrologic Budget

Statewide Recharge

The Madison aquifer receives recharge from infiltration of precipitation and streamflow on the outcrop area and may also receive inflow from the underlying Deadwood aquifer [8]. There are several reports available estimating recharge to the Madison aquifer.

Woodward-Clyde Consultants [9] estimated recharge to the outcrop of the Madison aquifer in the Black Hills as part of an environmental impact statement for the ETSI Coal Slurry Pipeline Project. The upper-bound estimate of recharge in the Woodward-Clyde Consultants report is approximately 400,000 ac-ft/yr, assuming almost all of the precipitation that falls on the outcrop infiltrates into the aquifer [9]. Woodward-Clyde Consultants produced a lower-bound recharge estimate of 140,000 ac-ft/yr based on the Rahn and Gries [7] report [9]. However, the Rahn and Gries report estimated recharge for all Paleozoic limestone in the Black Hills, which includes the Madison Group, the Minnelusa Formation, and the Minnekahta Formation [7]. Rahn and Gries [7, p. 15] reported that 146.14 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 did not acknowledge the fact that the Rahn and Gries [7] report estimated minimum recharge for a larger group of formations than the Woodward-Clyde Consultants report covers, and therefore is likely to overestimate recharge to the Madison aquifer [9].

Carter, Driscoll, and Hamade [8] 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 [8]. Carter, Driscoll, and Hamade [8] estimate that approximately 55% of the recharge goes to the Madison aquifer, so the total estimated average recharge to the Madison aquifer from the outcrop in the Black Hills is 137,000 ac-ft/yr, not including possible inflow from adjacent aquifers. The Carter, Driscoll, and Hamade [8] report uses more years of data, more recent data, and better assumptions than the Woodward-Clyde Consultants [9] and Rahn and Gries [7] reports. Therefore, the best estimate of recharge to the Madison aquifer is based on the Carter, Driscoll, and Hamade [8] 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 those aquifers, outflow to springs and seeps, and by withdrawals by domestic and appropriative wells [10]. 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 159 water rights/permits currently authorized to withdraw from the Madison aquifer and 10 future use water rights/permits reserving water from the Madison aquifer. Table 1 shows the future use permits reserving water from the Madison aquifer [11].

Of the 159 active water rights/permits, 94 are primarily for some type of water distribution system (rural water system, municipal, etc), 31 primarily for irrigation, 14 for commercial use,

11 for industrial use, 4 for domestic use, 2 for geothermal use, 2 for institutional use, and one for recreation [11]. Estimated withdrawals for irrigation use are shown in Table 2. When there were more than 10 years of irrigation reports available, the average reported irrigation was used to estimate irrigation withdrawals. When there were less than 10 years of irrigation reports available, withdrawals are assumed to equal 2 acre-feet per acre although actual usage is likely less for non-turf irrigation. Non-irrigation withdrawals from permit holders with irrigation as a permitted use are assumed to withdraw at their maximum instantaneous diversion rate 60% of the time. In the case of Water Right No. 1885-1, that would have caused the total estimated withdrawal to exceed the rate they were physically capable of withdrawing, so their total estimated withdrawal is 100% of their maximum instantaneous diversion rate. Water Right Nos. 858-2 and 2286-2 indicated “use abandoned” in their 2021 irrigation questionnaire and may be subject to cancellation but will be included in the hydrologic budget until they are cancelled.

Table 1: Future Use Permits from the Madison aquifer [11]

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
2086-2	City of Rapid City	PE	MUN	05/18/1989	4,075
439-2	City of Rapid City	PE	MUN	09/22/1956	3,367
1872-1	City of Spearfish	LA	MUN	11/13/2006	2,704
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	0
2560B-2	Fall River Water Users District	FR	RWS	05/16/2005	0
2580-2	Southern Black Hills Water System	FR	RWS	03/02/2006	1,474
1833-2	Weston Heights Home Owners	MD	RWS	02/18/1983	211
1995-1	Black Hawk Water User District	MD	RWS	04/15/2020	1,300
Total					14,109
FR – Fall River, LA – Lawrence, MD – Meade, PE – Pennington					
MUN – Municipal, RWS – Rural Water System					

Water Right/Permit Nos. 1096-1, 1096A-1, 1496-1, and 1670-1 are all authorized to withdraw from the same well and one dam. Water Right Nos. 1096-1, 1096A-1, 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, 1998 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 system withdrawals. It is likely the well continues to flow uncontrolled; thus, at the flow rate listed in Water Right No. 1096A-1 of 1.33 cfs, that well withdraws approximately 964 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

Report on Water Permit App. No. 2848-2

Water Right No. 1231-1. Kilts estimated that Water Right No. 1650-1 withdraws 55.9 ac-ft/yr [12].

There are 36 water rights/permits that have a volume limit listed in their permit or have had their total withdrawal limited by a subsequent water right/permit held by the same person/entity. While many of those water rights/permits are required to report their withdrawals, they may develop their permits further to withdraw up to the limit on their permit, so the volume limit listed on their permits is assumed to be their total appropriation. The total volume limit listed by such permits is 20,892 ac-ft/yr.

Table 2: Permits with irrigation listed as one beneficial use, or are connected to an irrigation permit [11] [13]

Permit No.	Name/Business	Diversion rate (cfs)	Acres Licensed/ Permitted	Average Report (ac-ft/yr)	Years of Irrigation Reports	Estimated average irrigation (ac-ft/yr)	Est. Non-irr. Use (ac-ft/yr)	Total Est. Withdrawal (ac-ft/yr)
2773-2	Arrowhead Country Club	1.110	100.00	0.0	4	200.0	0.0	200.0
1096-1	Bar Bar V Livestock LLC	1.880	216.00	65.3	29	*	*	963.5
1670-1		3.610	253.00	47.5	24	*	*	*
1635-1	Black Hills National Cemetery	0.820	54.50	94.8	26	94.8	356.4	451.2
1452-1	Black Hills State College	3.330	25.44	20.3	33	20.3	1,447.5	1,467.8
1096A-1	Butte Meade Sanitary Dist	1.330	0.00	N/A	0	*	*	*
2458-2	City of Rapid City	0.800	107.00	104.4	21	104.4	0.0	104.4
2002-1	City of Spearfish	1.330	40.00	0.0	1	80.0	0.0	80.0
2313-2	Coca-Cola Bottling	0.330	3.00	7.3	27	7.3	143.4	150.7
1899-1	Davis Ranches Inc	1.430	100.00	0.0	13	0.0	0.0	0.0
2673-2	Diocese of Rapid City	0.120	7.00	8.0	9	14.0	0.0	14.0
1009-1	Donald F/Ann J Brady	0.780	53.73	30.4	40	30.4	0.0	30.4
1185-1		0.380	22.52	110.3	40	110.3	***	110.3
2286-2	Donald Konechne	0.100	38.50	10.2	28	10.2	0.0	10.2
1707A-1	Elkhorn Ridge @ Frawley Ranches LLC	3.705	100.00	0.0	4	200.0	1,610.5	1,810.5
1707E-1		0.000	0.00	9.1	15	**	**	
1931-1		0.170	3.30	3.2	9	6.6	73.9	80.5
1650-1	Foothill Land & Cattle LLC	0.890	0.00	N/A	0	*	*	55.9
1945-1	Frawley Ranches LLC	1.110	265.00	50.7	8	530.0	0.0	530.0
1858-1	Glencoe Camp Resort II LLC	0.860	34.00	0.0	16	0.0	373.8	373.8
2593-2	Hart Ranch Development	0.490	72.50	19.9	15	19.9	213.0	232.9
1911-2	Hart Ranch Development Co	0.880	124.00	120.1	28	120.1	382.5	502.6
1725-2	Janice R Crowser	1.070	75.10	1.0	23	1.0	0.0	1.0
2012-1	Jesse Horstmann	0.500	43.50	N/A	0	87.0	0.0	87.0
1923-1	Jim Montieth	0.110	3.00	1.0	10	6.0	47.8	53.8
858-2	John & Heidi McBride	9.360	655.75	6.7	38	6.7	0.0	6.7
1885-1	John T & Veronica Widdoss	0.110	22.00	16.8	5	44.0	35.7	79.7
1223-1	Montana Dakota Land LLC	0.670	263.00	195.4	40	195.4	0.0	195.4
1960-1	One Diamond Inc	1.280	150.00	148.9	6	300.0	556.4	856.4
1363-1	Spearfish Canyon Cntry Cl	0.900	80.10	63.3	35	63.3	0.0	63.3
2106-2	Stuart Rice	0.080	2.80	0.8	30	0.8	34.8	35.6
1842-1	Tom C Davis	0.440	330.00	0.0	17	0.0	0.0	0.0
2741-2	Tubbs Land & Cattle LLC	3.340	567.00	149.5	3	1,134.0	0.0	1,134.0
419-2	Wind Cave National Park	0.150	6.00	N/A	0	12.0	65.2	77.2
Total		43.465	3817.74			3,398.7	5,340.8	9,758.9

* Discussed in text. ** gives additional time to develop 1707A-1. *** Reports all use types in irrigation report

There are 89 non-irrigation water rights/permits that do not have a volume limit listed in their permit and are not discussed above [11]. They are estimated to withdraw up to their maximum instantaneous diversion rate 60% of the time, for a total estimated withdrawal of 16,897 ac-ft/yr. Based on Water Rights Staff experience, this estimate is likely to be higher than the actual withdrawals by those water rights/permits.

In addition to the potential withdrawals by future use permits described above, five other applications are deferred, held in abeyance, or pending review by the Water Management Board. Water Permit Application No. 2585-2 for Southern Black Hills Water System seeks 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 seeks to appropriate 889 ac-ft/yr. Pending Water Permit Application No. 2013-1 for Santa Maria Land and Cattle Company seeks to appropriate 2.22 cfs to irrigate 460 acres, for a maximum possible withdrawal of 920 ac-ft/yr. Pending Water Permit Application No. 2016-1 for Ellsworth Development Authority seeks to appropriate 1,600 ac-ft/yr at a maximum diversion rate of 2.67 cfs for a water distribution system. Pending Water Permit Application No. 2018-1 for Monarch Ridge Development seeks to appropriate 118.5 ac-ft/yr at a maximum diversion rate of 1.11 cfs.

Summary of Statewide Hydrologic Budget

The best available estimate of recharge to the Madison aquifer in South Dakota is approximately 137,000 ac-ft/yr. The estimated withdrawals as described in the Statewide Discharge section are summarized in Table 3. The total estimated withdrawal, including withdrawals reserved for future use and held, or deferred applications is approximately 66,784 ac-ft/yr. This application may withdraw up to 720 ac-ft/yr, if approved. Therefore, based on the statewide hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Table 3: Summary of withdrawals from Madison aquifer rounded to the nearest 1 acre-foot.

Type	Count	Est. Rate (ac-ft/yr)
Irrigation (Table 2)	34	9,759
Volume limit	36	20,892
Diversion Rate limit	89	16,897
<i>Subtotal (authorized to withdraw)</i>	<i>159</i>	<i>47,548</i>
Future use (Table 1)	10	14,109
Deferred/held/pending	5	5,128
Grand total	174	66,784

Local Hydrologic Budgets

Two studies were conducted that performed local hydrologic budgets on the Madison and Minnelusa aquifers in the area of this application. Carter, et al. [10] divided the whole Black Hills into nine subareas which were delineated to minimize flow across subarea boundaries. Long and Putnam [5] studied the area around Rapid City. The hydrologic budget areas for those two studies are shown in Figure 1 [10] [5].

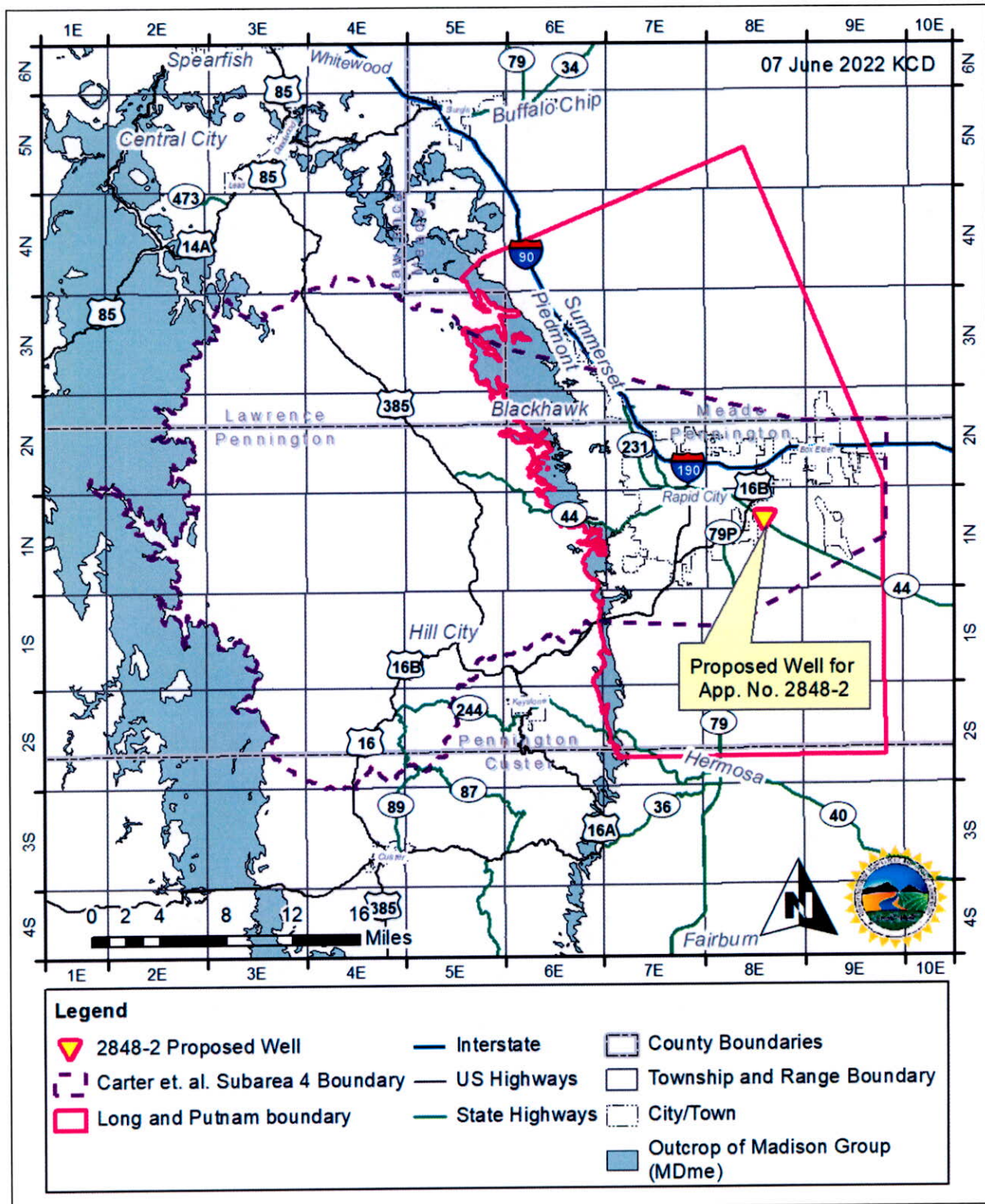


Figure 1: Local hydrologic budget boundaries [10] [5] [4]

Carter, et al. [10]

Carter, et al. [10] divided the area around the Black Hills into nine subareas and used streamflow, precipitation, spring flow, estimated ground water flow, and well withdrawal data from 1987 to 1996 for the hydrologic budgets. This application is in Subarea 4 of their report. The boundaries of the Carter et al. [10] subareas were designed to minimize flow across subarea boundaries. Carter et al. [10] estimated the total recharge to the Madison and Minnelusa aquifers in Subarea 4 was 39.3 cfs. Assuming 55% of the recharge goes to the Madison aquifer, the estimated recharge in Subarea 4 is 21.6 cfs, or approximately 15,648 ac-ft/yr [8] [10]. Carter, et al. [10] 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. Following the same methods as the Statewide Discharge section, withdrawals from Carter et al. [10] Subarea 4 are shown in Table 4. The total estimated appropriation including water reserved for future use is approximately 27,618 ac-ft/yr [11] [13]. This application seeks to withdraw up to 720 ac-ft/yr, if approved. 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. report was finished, and it is possible unaccounted groundwater is flowing into the Subarea 4 boundaries from other subareas. Therefore, based on the local hydrologic budget in combination with other information available, there is reasonable probability unappropriated water is available for this application.

Table 4: Madison withdrawals estimated within Carter et al. [10] Subarea 3 [11] [13] rounded to the nearest 1 acre-foot.

Type	Count	Est. Rate (ac-ft/yr)
Irrigation	8	1,250
Volume limit	9	10,345
Diversion rate limit	26	5,469
<i>Subtotal (authorized to withdraw)</i>	43	17,065
Future use	4	8,953
Pending/deferred/held	1	1,600
Grand total	48	27,618

Long and Putnam [5]

Long and Putnam [5] analyzed groundwater flow of the Madison and Minnelusa aquifers in the area near Rapid City, including the area for this application. One product of that analysis was a hydrologic budget for water years 1988 through 1997. Long and Putnam estimated that 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 and Putnam study is 33.7 cfs, equivalent to approximately 24,400 ac-ft/yr. There are 59 water rights/permits currently authorized to withdraw, 4 future use permits reserving water, and two pending applications within the Long and Putnam study area. Using the same methods as the Statewide Discharge section, the estimated appropriation from the Madison aquifer in the area of the Long and Putnam study is 30,083 ac-ft/yr (

Table 5). Based on Water Rights Staff experience, the water rights/permits that are limited only by diversion rate are likely to actually withdraw less than 60% of their maximum possible limit. Additionally, the hydraulic head in the aquifer may have changed after the Long and Putnam study was completed, meaning groundwater may be flowing into the study area boundaries as a source of recharge. This application seeks to appropriate up to 720 ac-ft/yr. Therefore, based on the local hydrologic budget, in addition to other information, there is reasonable probability unappropriated water is available for this application.

Table 5: Madison withdrawals estimated within Long and Putnam study area rounded to the nearest 1 acre-foot.

Type	Count	Est. Rate (ac-ft/yr)
Irrigation	8	1,250
Volume Limit	14	11,695
Diversion rate limit	37	6,466
<i>Subtotal (authorized to withdraw)</i>	59	19,411
Future Use	4	8,953
Pending/Deferred/held	2	1,719
Grand total	65	30,083

Observation Wells

Administrative Rule of South Dakota 74:02:05:07 requires that the Water Management Board rely upon the record of observation wells, in addition to other information, to determine that recharge exceeds withdrawals to approve an application. The Water Rights Program maintains 25 observation wells completed into the Madison aquifer [14]. The nearest observation well to this application is PE-65A, located approximately 6.5 miles west of this application [14]. Observation Well PE-65A is located approximately 1,100 feet south of one well for Water Right No. 2273-2 and approximately 4,300 feet north of another well for Water Right No. 2273-2. The well for Water Right No. 2273-2 which is north of Observation Well PE-65A pumps up to 3.65 cfs and the well for Water Right No. 2273-2 which is south of Observation Well PE-65A pumps up to 5.79 cfs. The third well for Water Right No. 2273-2 is located approximately 1.8 miles northwest of Observation Well PE-65A and may pump up to 1.62 cfs. There are numerous other water rights near the observation wells completed into the Madison aquifer on the west edge of Rapid City, but Water Right No. 2273-2 has the greatest individual diversion rate authority of the Madison aquifer water rights/permits in that area. Therefore, due to the influence of drawdown from Water Right No. 2273-2, water levels in Observation Well PE-65A may not be representative of the static conditions of the aquifer near the applicant's proposed well. The next-nearest observation well completed into the Madison aquifer is PE-89A, located approximately 7.5 miles west of this application. Figure 2 shows water level elevations for Madison aquifer observation wells near this application. Figure 3 shows the location of those observation wells, nearby water rights/permits, and this application. Table 6 shows details of the water rights/permits shown in Figure 3, including the maximum withdrawal rate of each diversion point. In general, water levels rise during periods of higher-than-average rainfall and decline during periods of lower-than-average rainfall. This means that recharge and natural discharge are the dominant effects in the aquifer and natural discharge is available for capture. Therefore, based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

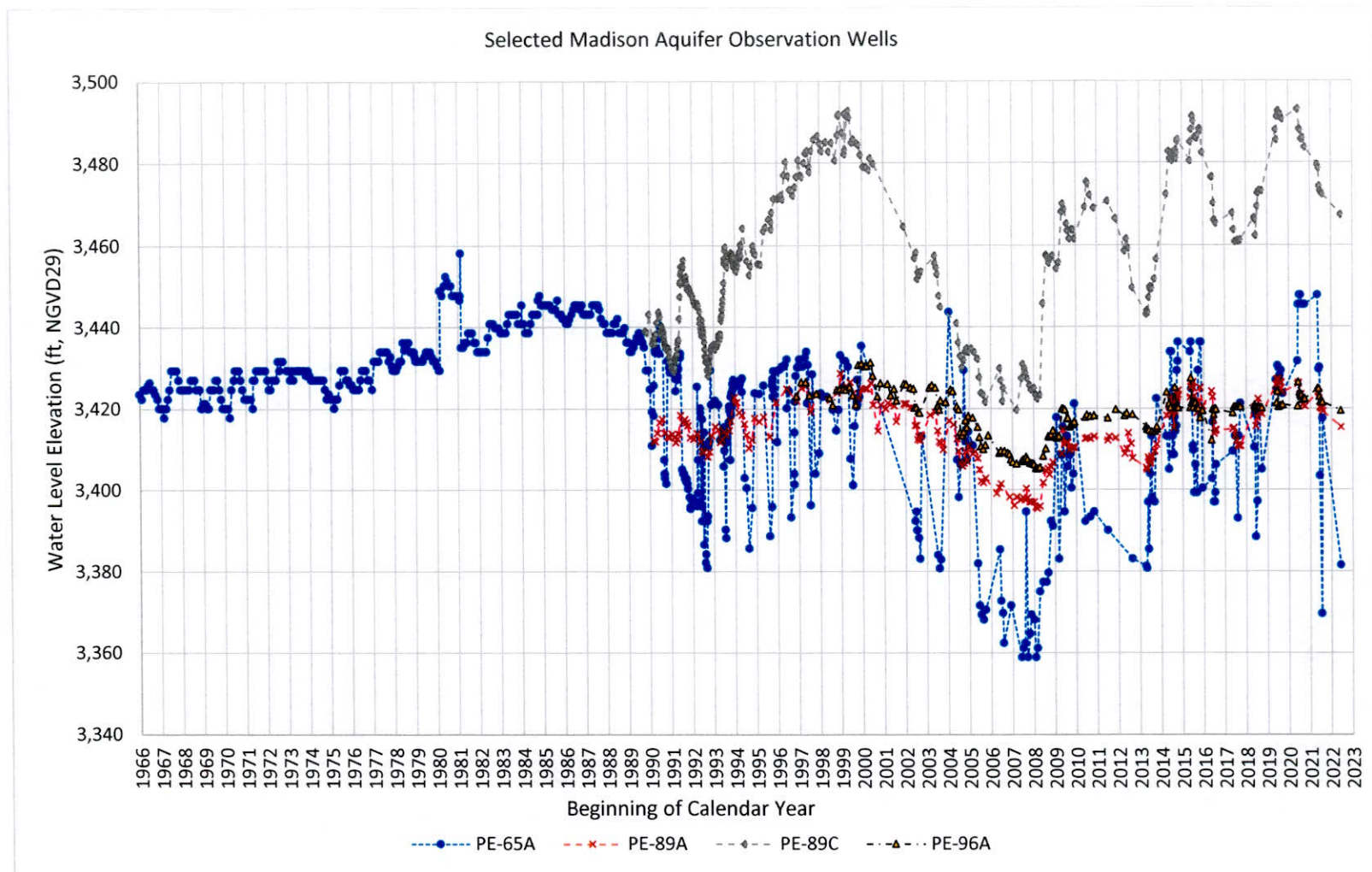


Figure 2: Madison aquifer observation well water elevations near this application

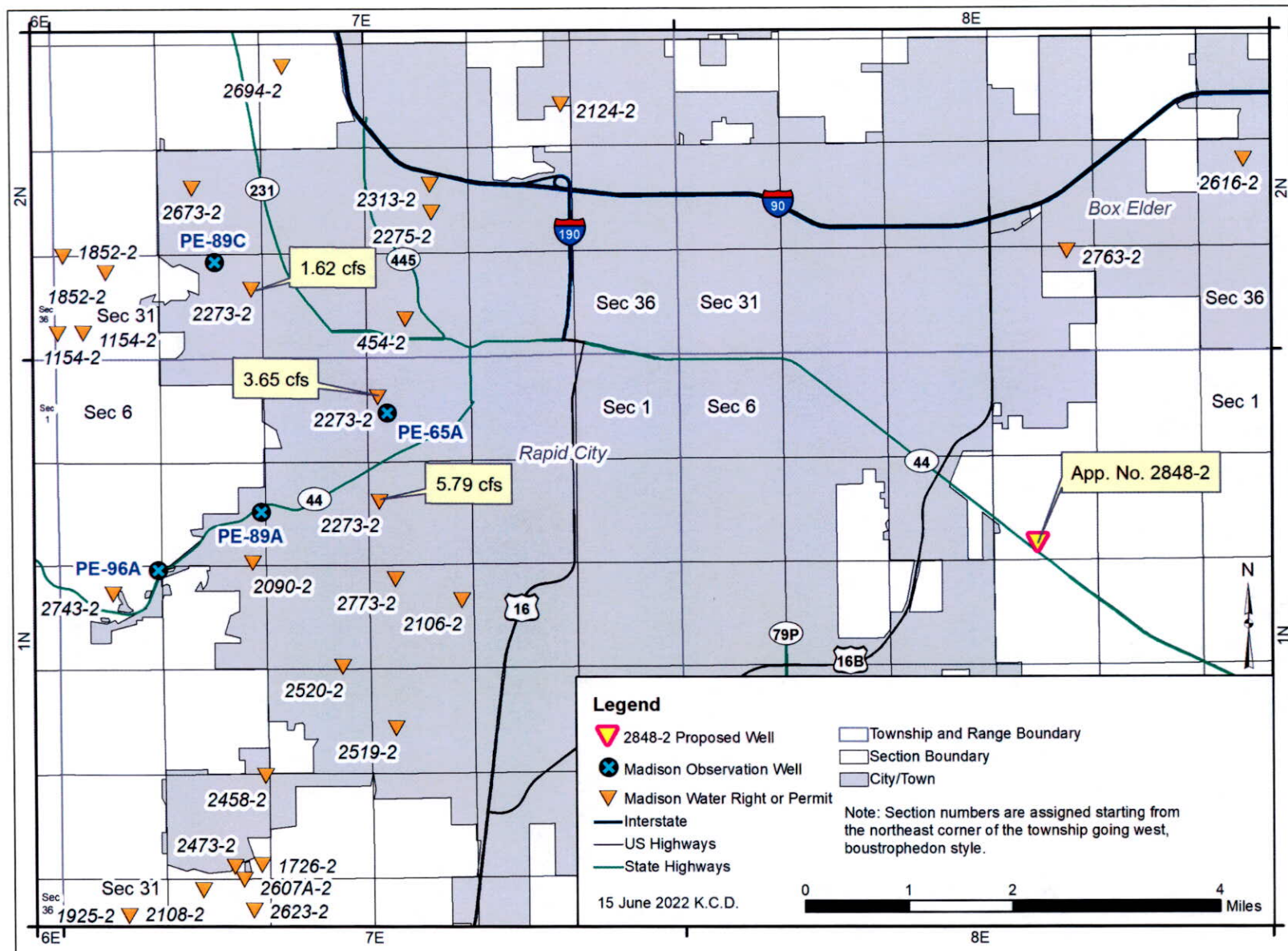


Figure 3: Madison aquifer observation wells [14] and water rights/permits [11] near this application

Report on Water Permit App. No. 2848-2

Table 6: Madison water rights/permits shown in Figure 3 and the diversion rate for each well [11]

Permit No.	Township	Range	Section	Description	Name/Business	Priority	STATUS	Use Types	Well CFS	Acres
454-2	002N	07E	34		Black Hills Corporation	04/09/1957	License	IND	1.00	N/A
1154-2	002N	07E	31	West Well	Westberry Trails Water	09/05/1973	License	SHD	0.06	N/A
1154-2	002N	07E	31	East Well	Westberry Trails Water	09/05/1973	License	SHD	0.20	N/A
1726-2	001N	07E	29		Colonial Pine Hills Sanitary District	08/27/1980	License	SHD	0.38	N/A
1852-2	002N	07E	31	West Well*	Ponderosa Water & Homeowners Assn	08/03/1983	License	SHD	0.02	N/A
1852-2	002N	07E	31	East Well	Ponderosa Water & Homeowners Assn	08/03/1983	License	SHD	0.11	N/A
1925-2	001N	07E	31		Ponderosa Park Dev Assoc	04/23/1985	License	SHD	0.03	N/A
2090-2	001N	07E	08		Chapel Lane Water Co	06/15/1989	License	SHD	0.67	N/A
2106-2	001N	07E	15		Stuart Rice	06/06/1990	License	IRR, DOM	0.08	2.8
2108-2	001N	07E	32		Colonial Pine Hills Sanitary District	10/02/1989	License	SHD	0.04	N/A
2124-2	002N	07E	23		City of Rapid City	03/19/1990	License	MUN	1.79	N/A
2273-2	002N	07E	32	North Well	City of Rapid City	05/18/1989	License	MUN	1.62	N/A
2273-2	001N	07E	03	Middle Well	City of Rapid City	05/18/1989	License	MUN	3.65	N/A
2273-2	001N	07E	10	South Well	City of Rapid City	05/18/1989	License	MUN	5.79	N/A
2275-2	002N	07E	27		City of Rapid City	05/18/1989	License	MUN	3.80	N/A
2313-2	002N	07E	27		Coca-Cola Bottling	04/08/1994	License	IRR, COM	0.33	3.0
2458-2	001N	07E	29		City of Rapid City	03/30/2001	License	IRR	0.80	107.0
2473-2	001N	07E	29		Cregut Inc	11/15/2001	License	COM	0.04	N/A
2519-2	001N	07E	22		City of Rapid City	05/18/1989	License	MUN	4.12	N/A
2520-2	001N	07E	16		City of Rapid City	05/18/1989	License	MUN	1.78	N/A
2607A-2	001N	07E	32		Colonial Pine Hills Sanitary District	12/18/2006	License	SHD	0.51	N/A
2616-2	002N	08E	25		City of Box Elder	02/03/2006	License	MUN	1.00	N/A
2623-2	001N	07E	32		Colonial Pine Hills Sanitary District	05/03/2001	License	SHD	0.40	N/A
2673-2	002N	07E	29		Diocese of Rapid City	05/27/2011	License	IRR	0.12	7.0
2694-2	002N	07E	21		Pete Lien & Sons Inc	10/12/2012	License	IND, COM	1.56	N/A
2743-2	001N	07E	18		Rimrock Ridge Water Association	06/07/1993	License	SHD	0.09	N/A
2763-2	002N	08E	34		City of Box Elder	10/15/2012	License	MUN	0.91	N/A
2773-2	001N	07E	15		Arrowhead Country Club	07/27/2017	Permit	IRR	1.11	100.0

COM – Commercial, DOM – Domestic, IND – Industrial, IRR – Irrigation, MUN – Municipal, SHD – Suburban Housing Development

* Emergency use only

Possibility of Unlawful Impairment of Existing Water Rights/Permits

The nearest water right/permit to this application that is completed into the Madison aquifer is Water Right No. 2763-2, located approximately 2.9 miles north of the proposed well for this application. There are no domestic wells on file with the Water Rights Program completed into the Madison aquifer that are nearer to this application than the nearest appropriative withdrawal from the same aquifer [6]. The Water Rights Program has historically interpreted an unlawful impairment of existing water rights to occur if a junior water right/permit causes a nearby adequate well with a senior water right/permit to become unable to withdraw at the rate it is entitled to or, if a domestic well is impacted, a water right/permit causes an adequate domestic well to be unable to withdraw at the rate needed to supply reasonable domestic use of water. Administrative Rule of South Dakota 74:02:04:20(6) defines an adequate well as:

...a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet

In the hearing for Water Permit Application No. 2313-2 for Coca-Cola Bottling Company, the Water Management Board determined that to put the waters of the state to maximum beneficial use, hydraulic head would not be protected as a means of water delivery [15]. Some drawdown from this application is likely to occur and nearby well owners may need to lower their pumps or install pumps to access the water in the aquifer. Exact aquifer behavior cannot be known without an aquifer performance test. The applicant must control their withdrawals so that nearby water rights/permits and adequate domestic wells are able to withdraw necessary water. There is no record of well interference complaints from the Madison aquifer in Pennington County [16]. Observation wells completed into this aquifer near larger appropriative wells show limited drawdown when the large appropriative wells are in use [14]. Given the lack of well interference complaints in this aquifer in Pennington County, limited drawdown shown in observation wells completed near larger appropriations, and the abundance of hydraulic head in the aquifer in the area of this application, there is reasonable probability this application can be developed without unlawful impairment of existing water rights.

Springs

The nearest large springs to this application are Cleghorn and Jackson Springs, located approximately 8 miles west of the proposed well for this application [17]. Upon considering the deferral of Water Permit Application No. 2585-2 for 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" [18]. 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 springs.

Conclusions

1. Water Permit Application No. 2848-2 seeks to appropriate up to 720 ac-ft/yr at a maximum instantaneous diversion rate of 1.56 cfs from one well to be completed into the

Madison aquifer located in the SE ¼ SW ¼ Section 10-T1N-R8E, Black Hills Meridian for rural water system use. Based on the hydrologic budgets and observation well analysis, there is reasonable probability unappropriated water is available for this application.

2. There is reasonable probability this application can be developed without unlawful impairment of existing water rights/permits and domestic uses.
3. There is reasonable probability this application can be developed without noticeably impacting flow from springs in the Black Hills.
4. This application is subject to a 20-year term limit.



Kimberly. C. Drennon, E.I.

Natural Resources Engineer II – DANR Water Rights Program

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- [2] J. E. Martin, J. F. Sawyer, M. D. Fahrenbach, D. W. Tomhave and L. D. Schulz, "Geologic Map of South Dakota," SD DANR Geological Survey Program, Vermillion, South Dakota, 2004. General Map 10.
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Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, July 5, 2022 4:40 PM
To: rschmidt@rvsd.com
Subject: Water Permit Application No. 2848-2
Attachments: 3650.pdf

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

Karen Schlaak
DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>



*** Proof of Publication ***

STATE OF SOUTH DAKOTA)

County of Pennington)

SS:

S.D. DANR - GROUND WATER

523 E CAPITOL AVE
PIERRE SD 57501

ORDER NUMBER 48433

The undersigned, being duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, a clerk 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 once each day for 1
successive day, the first publication there of being on the
13 day of July, 20 22

Section: Legal

Category: 0072 Public Notices

PUBLISHED ON: 07/13/2022

TOTAL AD COST: 75.40

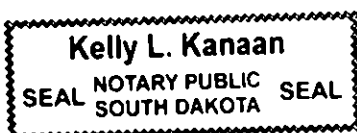
FILED ON: 7/13/2022

Subscribed and sworn to before me this

13th day of July, 20 22
Kelly L. Kanaan Notary Public

My Commission expires

Jan 17, 20 25



NOTICE OF APPLICATION
NO. 2848-2 to Appropriate Water
Notice is given that Rapid Valley Sanitary District - Water Service, Rusty Schmidt, Manager, 4611 Teak Drive, Rapid City SD 57703 has filed an application for a water permit to appropriate 720 acre-feet of water annually at a maximum pump rate of 1.56 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 4,005 feet deep) located in the SE 1/4 SW 1/4 Section 10-T1N-R8E for rural water system use. This site is located on the east side of Rapid City, SD along Highway 44.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2848-2 with qualifications 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) it is a beneficial

use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing 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 Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by July 25, 2022.

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 Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by July 25, 2022.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the 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 on July 14, 2022 for a total approximate cost of \$75.40 and may be viewed for free at www.sdpublicnotices.com. L48433

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, July 5, 2022 12:47 PM
To: RCY Legals (legals@rapidcityjournal.com)
Subject: 2848-2, Rapid Valley Sanitary District
Attachments: 2848-2public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on July 14, 2022.

Rapid Valley Sanitary District, Rusty Schmidt, Manager, 4611 Teak Drive, Rapid City SD 57703 (605 381-2904) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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

Karen Schlaak

DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>





**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.**

July 5, 2022

Rapid Valley Sanitary District – Water Service
Rusty Schmidt, Manager
4611 Teak Drive
Rapid City SD 57703

Dear Mr. Schmidt:

Water Permit Application No. 2848-2 for rural water 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 (Ph # 605 394-8336). 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 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,

Karen Schlaak

Karen Schlaak
Water Rights Program
(605) 773-3352

enclosures

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

NOTICE OF APPLICATION NO. 2848-2 to Appropriate Water

Notice is given that Rapid Valley Sanitary District – Water Service, Rusty Schmidt, Manager, 4611 Teak Drive, Rapid City SD 57703 has filed an application for a water permit to appropriate 720 acre-feet of water annually at a maximum pump rate of 1.56 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 4,005 feet deep) located in the SE 1/4 SW 1/4 Section 10-T1N-R8E for rural water system use. This site is located on the east side of Rapid City, SD along Highway 44.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2848-2 with qualifications 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) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing 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 Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by July 25, 2022.

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 Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by July 25, 2022.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the 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_



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PIERRE SD 57501-3182
danr.sd.gov

AUG 04 2022

Rapid Valley Sanitary District – Water Service
Rusty Schmidt, Manger
4611 Teak Drive
Rapid City SD 57703

Dear Mr. Schmidt:

Enclosed is Water Permit No. 2848-2 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,

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

enclosures