

WATER PERMIT NO. 1945-1

Name of Applicant: Elkhorn Ridge @ Frawley Ranch LLC

Address: 12600 W Colfax Ave, Lakewood CO 80226 Phone: 303 233-4000

Amount of Water Claimed: 1.11 cfs Total Acres: 265

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Lawrence

Type of Waste Disposal System:

Location: 6 miles east of Spearfish

PRIORITY Date Received: 2-10-14

Application/License Fee: \$ 1250

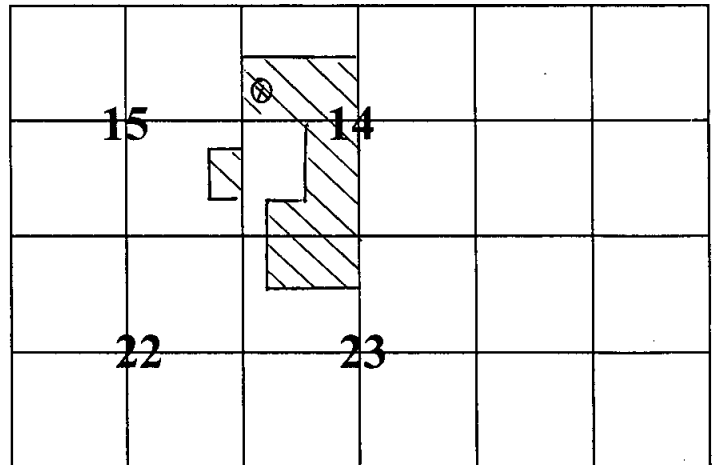
Corrected Application Received: 2-20-14

Period of Annual Use: March 1 – November 30

Remarks:

Diversion Point: SW 1/4 NW 1/4 Sec 14-T6N-R3E

Land to be Irrigated: E 1/2 SW 1/4, S 1/2 NW 1/4,
SW 1/4 SW 1/4 Sec 14, N 1/2 NW 1/4 Sec 23, E
1/2 SE 1/4 Sec 15; all in T6N-R3E



Depth of Well: 700 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 2-20-14

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SD EForm - 0499LD V4

FORM 2: Application for irrigation in South Dakota
(type or print)originally received
Feb 10, 2014

RECEIVED

FEB 20 2014

WATER RIGHTS
PROGRAM

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	(office use only) No. <u>1945-1</u> Hydrologic Unit <u>10120203</u>
	Basin <u>Belle Fourche River</u>
	Newspaper <u>Black Hills Pioneer P.O. Box 7</u>
	<u>Spanish 57783 - 604-642-2761</u>

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Elkhorn Ridge at Frawley Ranches, LLC(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 12600 West Colfax Avenue Lakewood CO 80226
(Address) (City) (State) (Zip Code)

Home Phone 303-233-4000 Cell _____ Email dpropp@propprealty.com

2. Amount of water claimed 1.11 *CFS or 500 **GPM ***AF Total Acreage 265
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Madison Formation4. Location of point of diversion 1 well in SW1/4 NW1/4, S14-T6N-R3E-BHM

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

County Lawrence5. County or counties where water will be used Lawrence6. Annual period during which water is to be used March-November 30

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
E1/2, SW1/4, S14, T6N, R3E, BHM	80	E3/4, NW1/4, NW 1/4, S23, T6N, R3E, BHM	30
S1/2, NW1/4, S14, T6N, R3E, BHM	80	SE1/4, NE1/4, SE1/4, and NE1/4, SE1/4, SE1/4	
E 3/4, S1/2, SW1/4, SW1/4, S14, T6N, R3E, BHM	15	S15, T6N, R3E, BHM <u>E 1/2 - SE 1/4</u>	20
NE1/4, NW 1/4, S23, T6N, R3E, BHM	40		

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

See attached sheet. Project is to irrigate approximately 265 acres of golf course and related landscape enhancements.

Dayll Propp

I, Dayll Propp, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

2012-09

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

**SOUTH DAKOTA
WATER PERMIT NO. 1945-1**

Date of first receipt of application February 10, 2014.

Date of return to applicant for corrections, amendments or changes February 11, 2014.

Date of receipt of corrected application February 20, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1945-1 to Elkhorn Ridge at Frawley Ranches LLC, 12600 West Colfax Ave, Lakewood CO 80226 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. 1945-1 appropriates 1.11 cubic feet of water per second from one well to be completed into the Madison Aquifer (700 feet deep) located in the SW 1/4 NW 1/4 Section 14 for irrigation of 265 acres located in the E 1/2 SW 1/4, S 1/2 NW 1/4, SW 1/4 SW 1/4 Section 14, N 1/2 NW 1/4 Section 23 and E 1/2 SE 1/4 Section 15; all in T6N-R3E.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: March 1 – November 30.
3. The date from which applicant may claim right is February 10, 2014.
4. The date of approval of Permit No. 1945-1 is May 12, 2014.
5. One-fifth of the construction is to be completed on or before November 12, 2016.
6. All construction is to be completed on or before May 12, 2019.
7. Water is to be put to beneficial use on or before May 12, 2023.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 1945-1 shall be constructed by a licensed well driller and construction 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)

3. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1945-1 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1945-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
4. The Water Permit holder under this permit shall control withdrawals from the well so there is not a significant adverse effect on the water flow from area springs or a significant adverse effect on the water quality and character in area springs.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Jeanne Goodman

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

MAY 22 2014

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☐ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many ____ Have test holes been drilled ☐ Yes ☒ No Drilled by ____
(if yes, please provide copies of logs)

b) If existing wells, how many ____ Provide copy of log(s), if available. Drilled by ____

c) Well Depth 700 ft. Depth to Top of Water Bearing Material ____ Depth to Water from Surface ____

d) Distance to nearest existing domestic well:

On applicant's property X On 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)

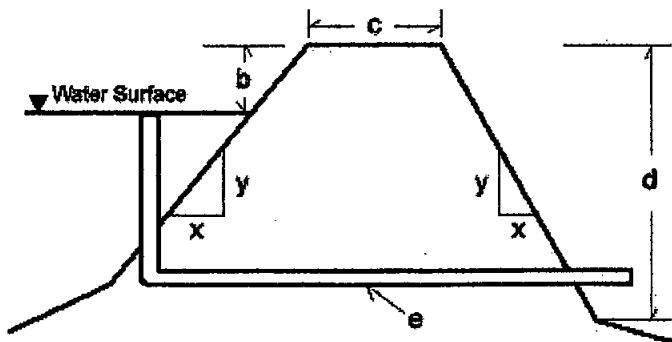
Upstream ____

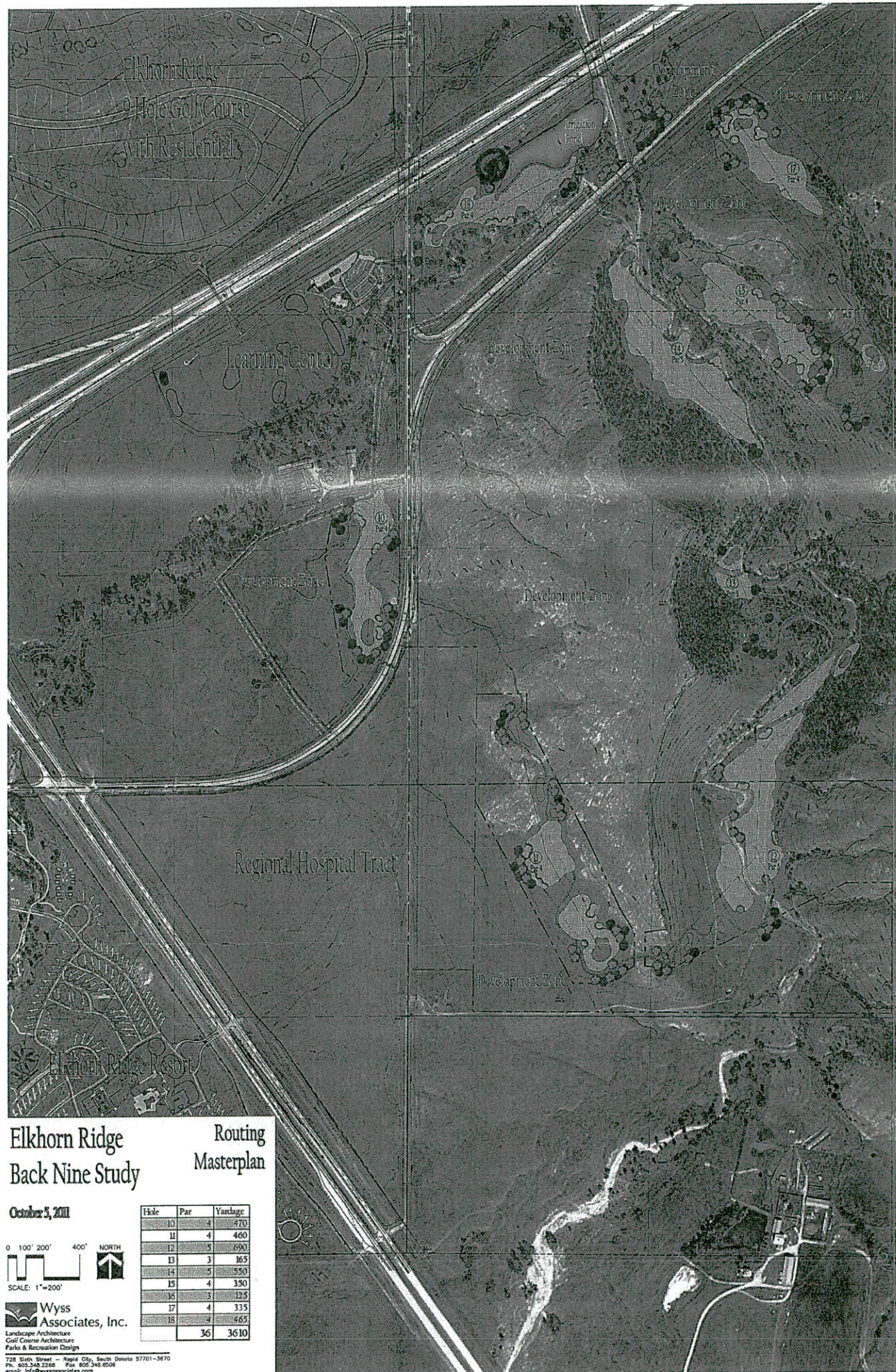
Downstream ____

h) Surface Area of Impoundment ____

i) Storage ____ Acre Feet

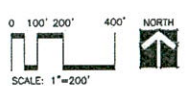
j) Drainage Area Above Dam ____ Acres





Elkhorn Ridge Back Nine Study Routing Masterplan

October 5, 2011



Wyss Associates, Inc.
Landscape Architecture
Golf Course Architecture
Parks & Recreation Design
728 Sixth Street - Rapid City, South Dakota 57701-3670
Ph. 605.346.2266 Fax 605.346.6506
email: info@wyssassociates.com

Hole	Par	Yardage
10	3	470
11	4	460
12	5	690
13	3	165
14	5	550
15	4	350
16	3	125
17	4	335
18	4	465
	36	3610

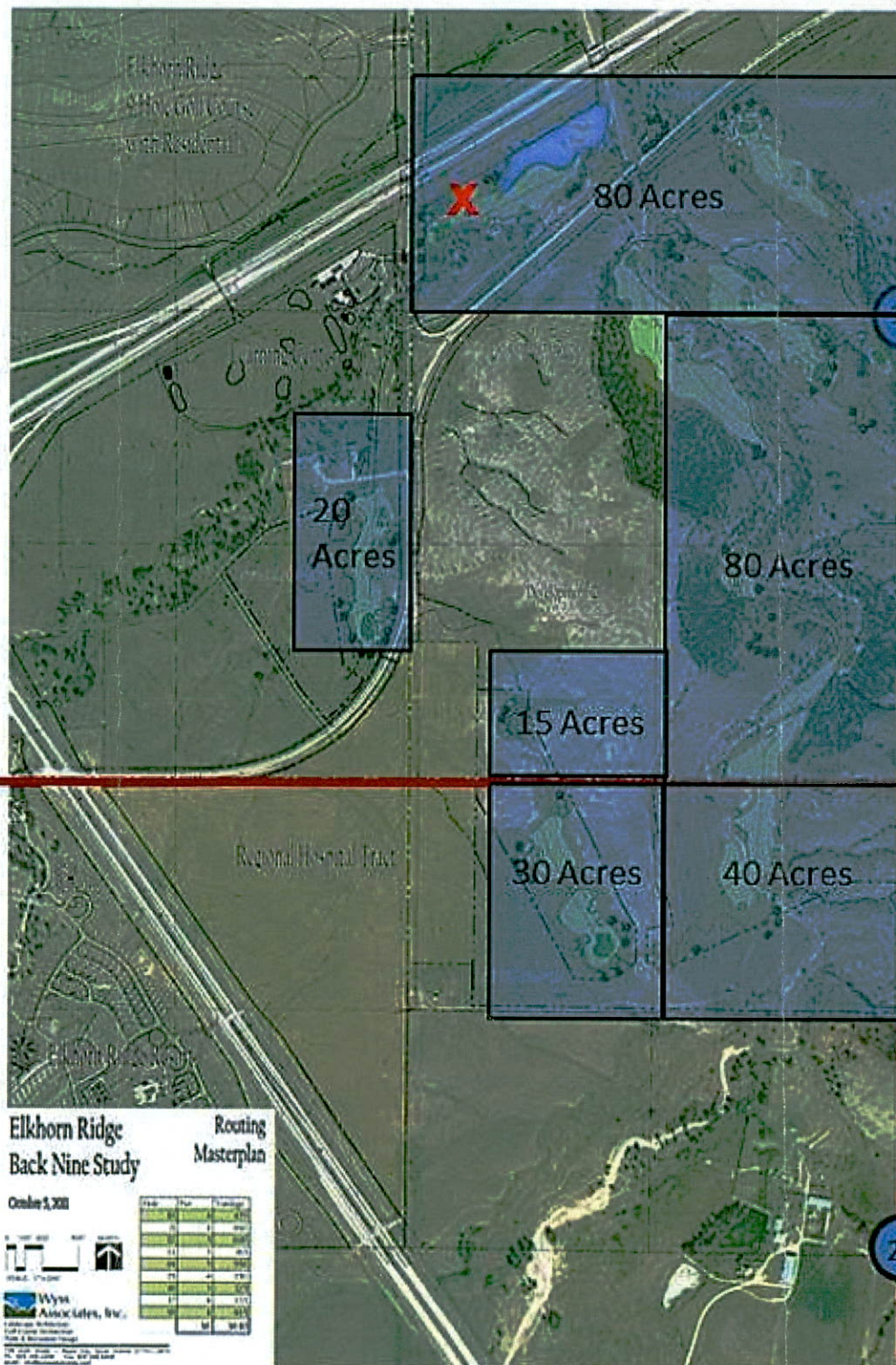
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15



14

23

Sec 3
T006N
R03E

Sec 2
T006N
R03E

Sec 1
T006N
R03E

Sec 10
T006N
R03E

Sec 11
T006N
R03E

Sec 12
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Sec 26
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Sec 25
T006N
R03E



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/10, 20 14

RECEIVED OF Wyss Associates Inc 728 6th St Rapid City SD 57701

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

Fee for Application for Permit No. <u>1945-1</u> to Appropriate Water, to construct and to put water to beneficial use	750	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>1945-1</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	950 00

No. **06740**

By Jeanne Goodman
Chief Engineer

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/20, 20 14

RECEIVED OF Wyss Associates Inc (Frawley Ranch) 728 6th St Rapid City SD 57701

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

Fee for Application for Permit No. <u>1945-1</u> to Appropriate Water, to construct and to put water to beneficial use	300	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	300 00

No. **06756**

By J. Carmel Linderman Jr.
Chief Engineer



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



February 11, 2014

Patrick H Wyss
Wyss Associates, Inc.
728 Sixth St
Rapid City SD 57701

RE: Application for Permit to Appropriate Water for Elkhorn Ridge at Frawley Ranches LLC.

Dear Mr. Wyss:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation of the Elkhorn Ridge golf course located in Lawrence County. In order to complete the application, the following is required.

- Enclosed is the aerial photo map submitted with the application. The map needs to reference a government section corner or quarter corner including section, township and range. Please outline the 120 acres to be irrigated and mark the proposed well location with an "X".
- Regarding item No. 7, please indicate the section location of the 10 acres located in the E 1/2, NW 1/4, T6N, R4E.

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosure



**Wyss
Associates, Inc.**

RECEIVED

FEB 20 2014

**WATER RIGHTS
PROGRAM**

728 Sixth St. ▪ Rapid City, SD 57701 ▪ Ph: 605.348.2268 ▪ Fx: 605.348.6506 ▪ Email: admin@wyssassociates.com ▪ www.wyssassociates.com

February 18, 2014

Karen Schlaak
Water Rights Program
523 E. Capital Ave
Pierre, SD 57701

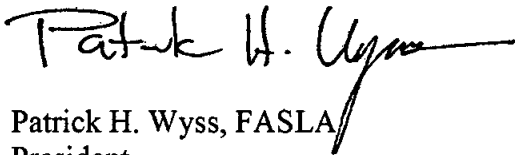
RE: Application for Permit to Appropriate Water for Elkhorn Ridge at Frawley Ranches LLC.

Dear Karen Schlaak:

We received your letter which states for clarification of some items with the well permit. Below are the updates we included in the permit:

- Updated map that references a government section corner or quarter corner including section, township and range. Also outlined the 265 acres to be irrigated and marked the well location with an "X".
- Updated section location on item No. 7.
- Also included is a check in the amount of \$300.00 for the additional acreage added.

Sincerely,


Patrick H. Wyss, FASLA
President

Attachment

Water Rights Program - File Documentation

NAME: Melissa – Wyss Associates

ADDRESS: Rapid City SD

DATE: 2-24-14 **COUNTY:** LA **TELEPHONE:** 605 348-2268

RE: Application for Elkhorn Ridge @ Frawley Ranches, LLC

COMMENTS:

Melissa with Wyss Associates agreed that the location of the diversion point and acres to be irrigated is Range 3E, not 4E as indicated on the application.



Karen Schlaak
Water Rights Program



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



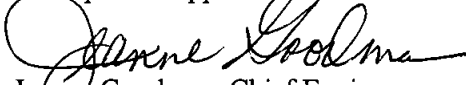
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1945-1, Elkhorn Ridge at Frawley Ranches LLC**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 1945-1, Elkhorn Ridge at Frawley Ranches LLC, c/o Daryl Propp, 12600 W Colfax Avenue, Lakewood CO 80226.

The Chief Engineer is recommending Approval of Application No. 1945-1 for a 20 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. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 1945-1 shall be constructed by a licensed well driller and construction 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.
3. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1945-1 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1945-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
4. The Water Permit holder under this permit shall control withdrawals from the well so there is not a significant adverse effect on the water flow from area springs or a significant adverse effect on the water quality and character in area springs.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.


Jeanne Goodman, Chief Engineer
April 22, 2014

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 1945-1
ELKHORN RIDGE
APRIL 16, 2014

Water Permit Application No. 1945-1 proposes to appropriate water at a maximum diversion rate of 1.11 cubic feet of water per second (cfs) from one well to be completed into the Madison aquifer. The well is expected to be approximately 700 feet deep and is to be located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14, T6N-R3E. Water is to be used to irrigate 265 acres located in the E $\frac{1}{2}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, and the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 14, T6N-R3E; the N $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 23, T6N-R3E; and the E $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 15, T6N-R3E

AQUIFER: Madison aquifer (MDSN)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Madison aquifer occurs within the Mississippian aged Madison Limestone which is locally known as the Pahasapa Limestone. The Madison aquifer is a major regional aquifer that underlies parts of Montana, North Dakota, South Dakota, Nebraska, Wyoming and Canada (Figure 1). The aquifer underlies most of western South Dakota and parts of Eastern South Dakota.

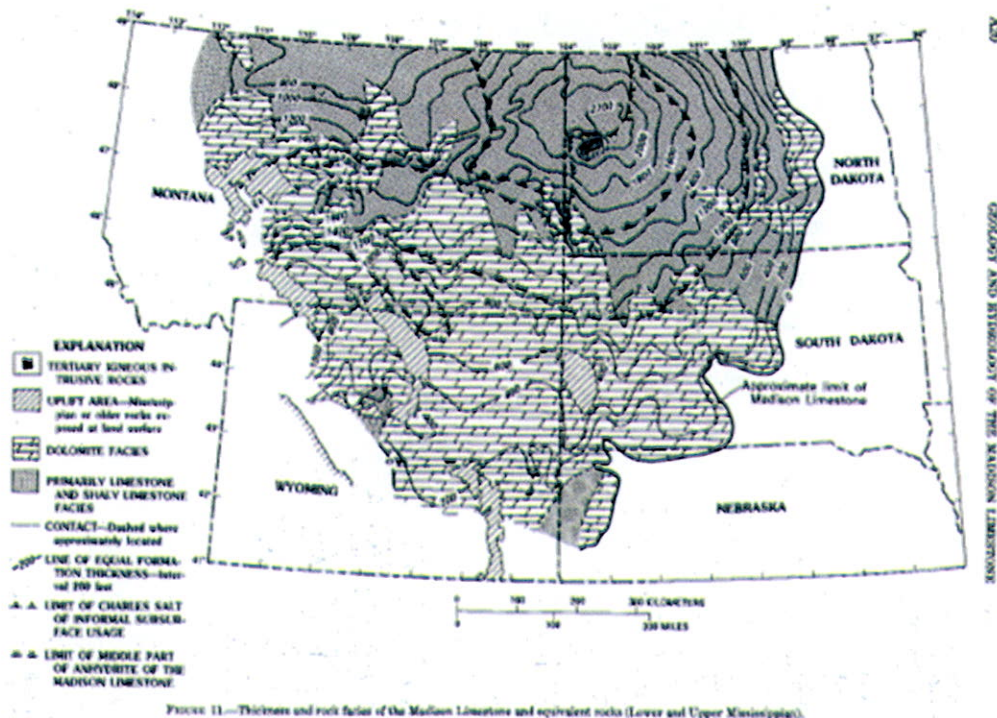


Figure 1. Areal extent of the Madison aquifer. Modified from Peterson (1984)

The Madison Limestone is a massive limestone and dolomite with relatively low primary permeability and porosity however, extensive secondary porosity and permeability does occur locally within the Madison. The average porosity of the Madison is estimated to be 11% and the effective porosity from which recoverable water can be obtained by wells is assumed to be 5% (Rahn, 1979). The upper portion of the Madison Limestone in particular is karstic with caves, solution collapse features and enlarged conduits. The Madison aquifer contains an estimated 644,827,200 acre-feet of recoverable water in storage in western South Dakota (Allen and others, 1985) and 51,512,300 acre-feet of recoverable water in storage in eastern South Dakota (Hedges and others, 1982).

In general, the Madison dips to the northeast in the area of this proposed well site at approximately 400 feet per mile (Carter and Redden, 1999a). However, due to the influence of the structural dome (Elkhorn Peak) centered approximately one and one-half miles southeast of the well site proposed by this application, the beds dip to the northwest in this immediate area. The top of the Madison is estimated to be approximately 750 feet below ground surface at the well site proposed by this application (Carter and Redden, 1999a), and the Madison Limestone is expected to be approximately 400 feet thick in this area (Carter and Redden, 1999a; and Carter and Redden 1999b). The potentiometric surface of the Madison aquifer is expected to be approximately 3,550 feet above mean sea level (fmsl) (230 feet below ground surface) (Water Rights, 2014a).

The Madison is generally considered an excellent aquifer in terms of its potential to supply good quality water to relatively productive wells, especially near the outcrop (recharge area). The well site proposed by this application is located approximately three and one-half miles northeast of the Madison outcrop (Strobel and others, 1999). A number of high yield wells, some capable of producing up to 2,500 gal/min, have been developed in the Madison aquifer where enhanced porosity and permeability features are favorable (Putnam and Long, 2009). In addition to the structural dome noted above, the well site proposed by this application is located nearly midway between two major geologic structures. The site is approximately four and one-half miles west of the Whitewood Anticline and approximately four miles east of the Belle Fourche Anticline (DeWitt and others, 1989; Redden and others, 2008)).

The lower portion of the Madison Formation and the underlying Englewood Formation generally form a lower confining zone to the aquifer (Strobel and others, 1999). The Minnelusa Formation unconformably overlies the Madison aquifer and generally serves as an upper confining layer to the Madison. However, "The hydraulic connection between the Madison Limestone and Minnelusa Formation is spatially variable and may result from faults, fractures, and breccia pipes. Collapse features ... may be pathways for vertical movement of water between these two units." (Putnam and Long, 2007). The water levels of DENR-Water Rights' observation wells in the area indicate very distinct potentiometric surfaces in the Minnelusa and Madison and suggest the aquifers are hydraulically separated (see Figure 2).

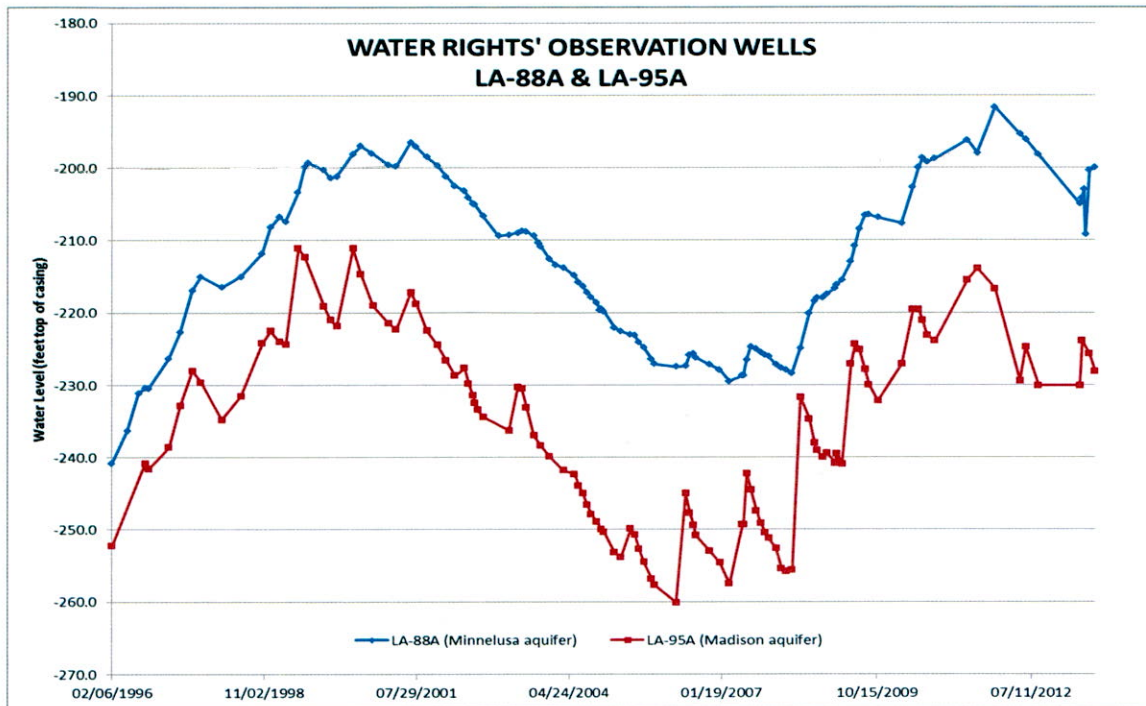


Figure 2. Hydrograph comparing potentiometric surfaces of the Madison aquifer with the Minnelusa aquifer

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest.

WATER AVAILABILITY:

The probability of unappropriated water available for appropriation can be evaluated by considering SDCL 46-6-3.1 which requires that:

"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."

Water Balance:

Recharge to the Madison aquifer occurs through streamflow losses and direct infiltration of precipitation at the outcrop area. "Precipitation recharge [in the Black Hills] is consistently larger than streamflow recharge; however, the relative proportion of streamflow recharge increases as combined recharge decreases" (Carter and others, 2001a). Recharge to the Madison aquifer in South Dakota has been estimated to range from 140,000 to 400,000 acre-feet per year (Woodward-Clyde, 1981). Woodward-Clyde however, essentially defined the Madison aquifer as everything between the Precambrian and the Cretaceous shales. As part of the Black Hills Hydrology Study, the average annual recharge to the Madison aquifer from 1931-1998 was estimated to be approximately 137,000 ac-ft/yr (Carter and others, 2001a).

The high cost of Madison wells, except very near the outcrop, and the availability of groundwater from shallower sources, has limited domestic development from the aquifer. Carter and others, (2001b) estimate “Self-supply Domestic” and “Livestock Watering” only account for approximately 2.25% of the water use from the Madison aquifer. In general, well withdrawals from the Madison are for uses which require water rights/permits. The majority of the water rights/permits from the aquifer in South Dakota are from Butte, Lawrence, Meade, Pennington and Fall River Counties. The Madison supplies water for irrigation, geothermal, industrial, and commercial uses. By far the major use of the aquifer in South Dakota is for water distribution systems (suburban housing development and municipal use). The cities of Spearfish, Belle Fourche, Sturgis, Rapid City, Box Elder, and Edgemont all depend on water from wells completed into the Madison aquifer.

There have been a total of 216 previous applications made for appropriations from the Madison; the statuses of these applications are shown in Table 1(Water Rights 2014b).

STATUS	NUMBER
Approved and licensed	97
Approved and not licensed	58
Future Use reservation	7
Incorporated into a license	30
Cancelled	20
Denied	1
Deferred	1
Withdrawn	2

Table 1. Water permit applications from the Madison aquifer in South Dakota

There are currently a total of 162 appropriations and one deferred application from the Madison aquifer in South Dakota. Assuming that: (1) future use permits will be fully developed; (2) appropriations with a specified annual volume limitation will divert to their maximum limit; and (3) appropriations limited by diversion rate only, will be used 60 percent of full time usage at their maximum diversion rate; the appropriations represent a potential maximum annual withdrawal from the Madison aquifer of approximately 55,000 ac-ft/yr. The assumptions used to estimate the potential maximum withdrawal from the aquifer are extremely conservative and represent a “worst case scenario.”

Almost all of the water use from the Madison aquifer in South Dakota is from the Black Hills area. The withdrawals from all wells completed into the Madison aquifer in the Black Hills of South Dakota and Wyoming, were estimated to average 12,310 acre-feet annually from 1987-1996 (Carter and others, 2001b). The “potential maximum annual withdrawal” from the aquifer for 1996, using the assumptions given above for the appropriations in 1996 is 35,831 ac-ft/yr. Applying the 1996 “potential maximum annual withdrawal” to the estimated average annual use ratio, the average annual withdrawal corresponding with a potential maximum annual withdrawal of 55,000 ac-ft/yr would be less than 20,000 ac-ft/yr.

The quantities of both the average annual recharge and the average annual use for the Madison aquifer are both small percentages of the amount of water stored in the Madison aquifer so the aquifer can actually withstand several years of drought conditions with only minimal impact to wells or springs. Comparison of average annual recharge and average annual withdrawal

estimates for the Madison aquifer indicate that unappropriated water is available from the Madison aquifer. The simple water budget comparing the estimated average annual recharge and the potential withdrawal by existing wells and current appropriations is not intended to suggest that all of the water that is in storage in the Madison or that all of the recharge to the aquifer is available for this appropriation, merely to demonstrate that in general the Madison aquifer is an immense resource that is relatively untapped.

Localized Hydrologic Budget:

Carter and others (2001b):

Carter and others (2001b) developed hydrologic budgets for the Madison and Minnelusa aquifers combined, using nine subareas to cover the Black Hills. The subareas were identified on the basis of hypothetical flowpaths and were selected with the intent of minimizing flow across the boundaries. The well that is to be used to supply this appropriation is located between Carter and others' (2001b) subarea 1 and subarea 2. The hydrologic budgets for these subareas balanced from 1987-1996, by estimating that water enters these subareas through streamflow recharge, precipitation recharge and groundwater inflow. Water is assumed to exit these subareas through groundwater outflow, artesian springflow and well withdrawals (see Table 2).

Stream-flow recharge	Precipitation recharge	Minnelusa ground-water inflow	Madison ground-water inflow	Minnelusa ground-water outflow	Madison ground-water outflow	Artesian spring-flow	Well withdrawals
36.7 cfs	131.9 cfs	15.4 cfs	0	35.6 cfs	43.7 cfs	90.3 cfs	14.5 cfs

Table 2. Hydrologic budget for the subareas that includes the area near the well site proposed by Application No. 1945-1 for Water Years 1987-1996. Modified from (Carter and others, 2001b).

There are currently 71 water rights/permits, including one future use permit, appropriating water from the Madison aquifer from the two subareas surrounding this proposed well site, although portions of Water Permit Nos. 1707A-1 and 1707E-1 for Frawley Ranches and Water Permit Nos. 1707B-1, 1707C-1 and 1707D-1 for the city of Spearfish may be subject to cancellation due to non-construction. The amount of water that can be expected to be withdrawn through appropriative uses from the Madison can be estimated by assuming: 1) water rights/permits limited by an annual volume will pump the entire volume appropriated, 2) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time, and 3) the future use permit can be fully developed. Under current appropriations, given the assumptions listed above, the well withdrawal from the two subareas is estimated to be less than 36 cfs. Other variables of a hydrologic budget for these subareas (i.e. springflow, groundwater inflow and groundwater outflow) are all dependent on the groundwater gradient at the subarea boundaries or near the springs.

The increase of well withdrawals compared with the estimates given in Table 2 has resulted in adjustments to the other interdependent variables of the hydrologic budget to achieve a new dynamic equilibrium (i.e. balanced water budget) for the area. It can be assumed that with a very subtle change in the hydraulic gradient at either the inflow zone or the outflow zone, a new dynamic equilibrium would be established in this area with virtually immeasurable impacts to

the amount of water in transient storage. Therefore, there is a reasonable probability that unappropriated water is available from this subarea for this proposed use.

Putnam and Long (2007):

On an even more localized scale, Putnam and Long (2007) evaluated an area consisting of approximately 416 square miles roughly centered in the vicinity of the well that is to be used to supply Permit No. 1945-1 (see Figure 3.)

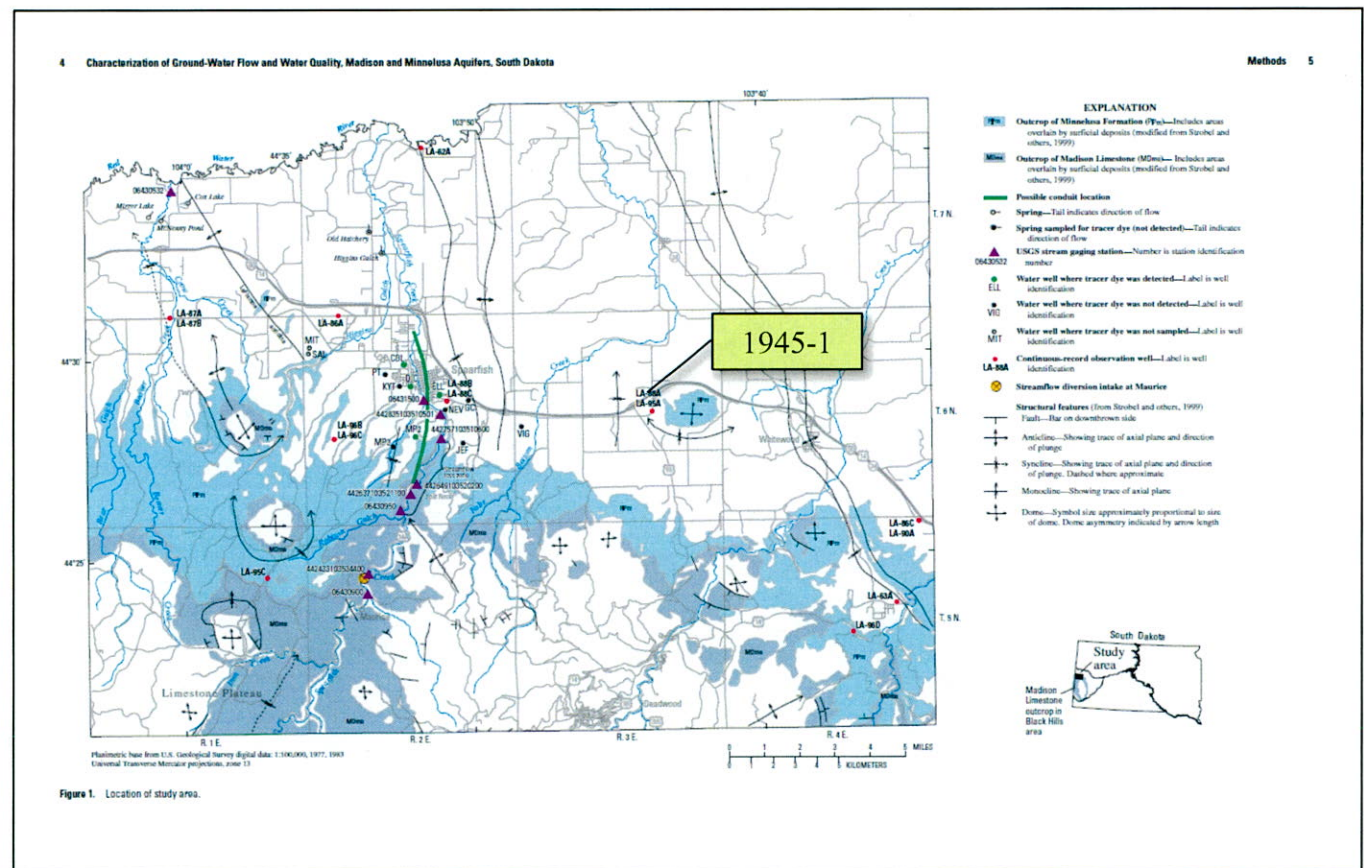


Figure 3. Location of Putnam and Long (2007) study area (modified from Putnam and Long, 2007)

An average annual recharge rate to the Madison aquifer for the area was estimated to be 16.5 cfs (11,945 ac-ft/yr). Sources of recharge in the area were identified as areal recharge (8.0 cfs), streamflow recharge from Spearfish Creek (6.5 cfs) and streamflow recharge from False Bottom Creek (2.0 cfs) (Putnam and Long, 2007). In addition, Putnam and Long (2007) estimated an average annual recharge rate of 2.0 cfs to the Madison and Minnelusa aquifers combined from Bear Gulch and an average annual recharge rate of 2.0 cfs to the Madison and Minnelusa aquifers combined from Beaver Creek. There have been 41 water permit applications filed for appropriations from the Madison aquifer from the Putnam/Long study area. The status of these applications is shown in Table 3.

STATUS	NUMBER
Approved and licensed	21
Approved and not licensed	13
Future Use reservation	1
Incorporated into a license	6

Table 3. Water permit applications from the Madison aquifer from the Putnam/Long study area.

The amount of water that can be expected to be withdrawn through appropriative uses from the Madison aquifer from the area shown in Figure 3 was estimated by assuming: 1) water rights/permits limited by an annual volume will pump the entire volume appropriated (4,887.72 ac-ft/yr), 2) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time (3,409 ac-ft/yr), and 3) future use permits can be fully developed (2,730 ac-ft/yr). The average annual withdrawal under current appropriations from the Madison aquifer from the Putnam/Long area is estimated to be 11,027.33 ac-ft/yr (15.23 cfs). As noted earlier, Water Permit Nos. 1707A-1 and 1707E-1 for Frawley Ranches and Water Permit Nos. 1707B-1, 1707C-1 and 1707D-1 for the City of Spearfish may be subject to cancellation due to non-construction, thus reducing the estimated average withdrawals by 736 ac-ft/yr (1.02 cfs).

It is likely that the average annual recharge rate to the Madison aquifer that originates in the area shown in Figure 3 exceeds the expected average annual withdrawal that will result from the current appropriations. It is important to note that in addition to the recharge that originates in the area, water enters the Madison aquifer in this area from groundwater inflow from outside the area. The regional aspect of the Madison aquifer in this area is demonstrated most clearly in the fact that Putnam and Long (2007) identified the discharge from artesian springs in the area exceeds the recharge that occurs within the area.

Observation Well Data:

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

The Water Rights Program monitors 26 observation wells completed into the Madison aquifer in the Black Hills area (Water Rights, 2014a). There are seven Madison aquifer observation wells in the area shown in Figure 3. Hydrographs for the wells show the aquifer's response to climatic conditions and clearly demonstrate the system is recharged (see Figures 4-10).

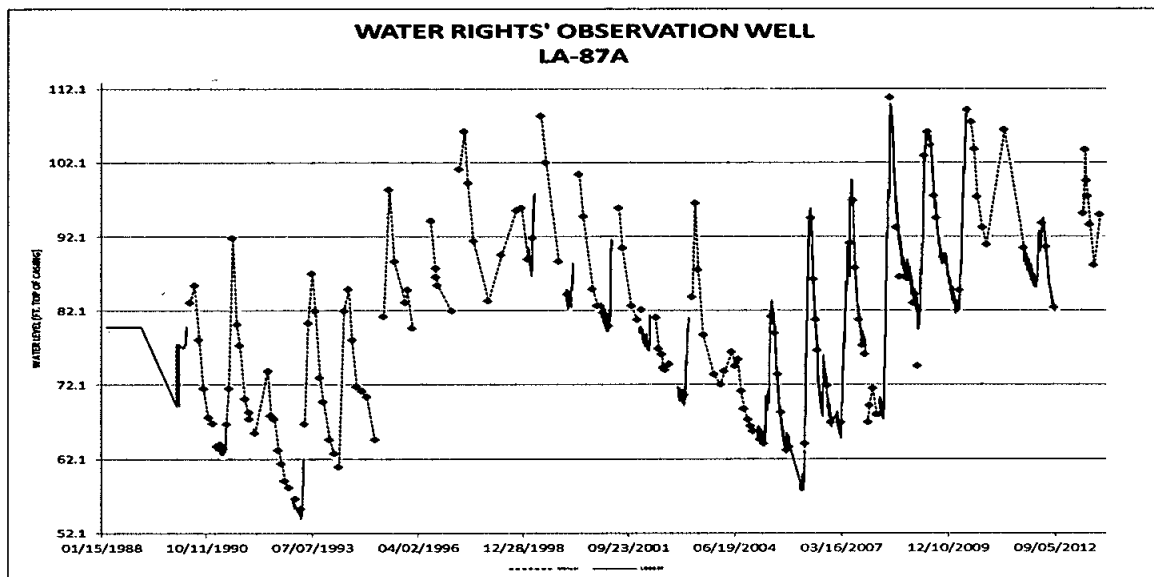


Figure 4. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 13.7 miles west-northwest of the well site proposed by Application No. 1945-1.

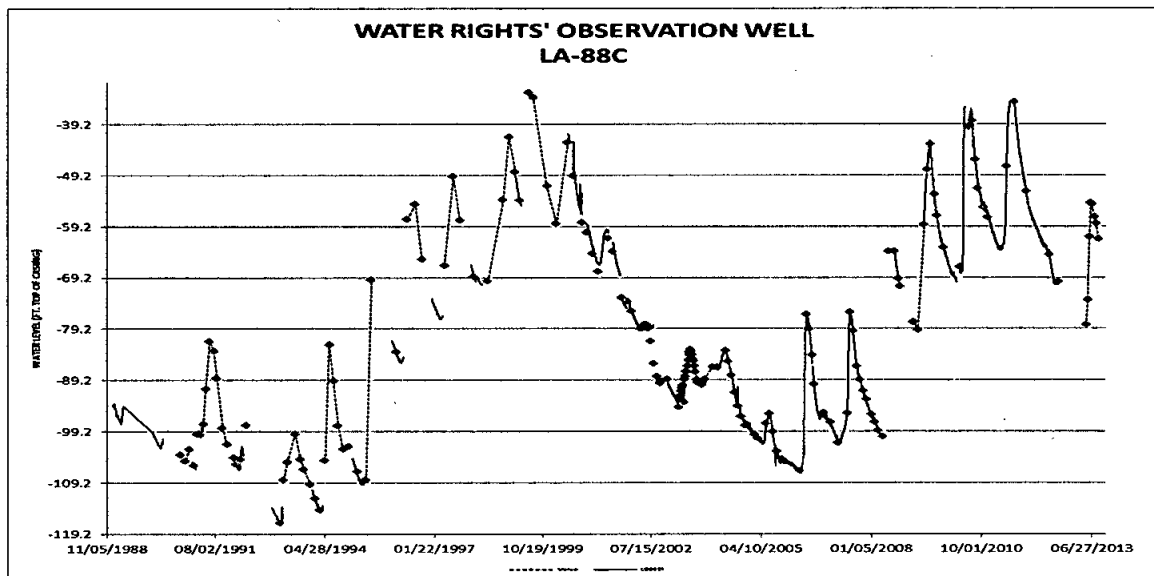


Figure 5. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 5.6 miles west-northwest of the well site proposed by Application No. 1945-1.

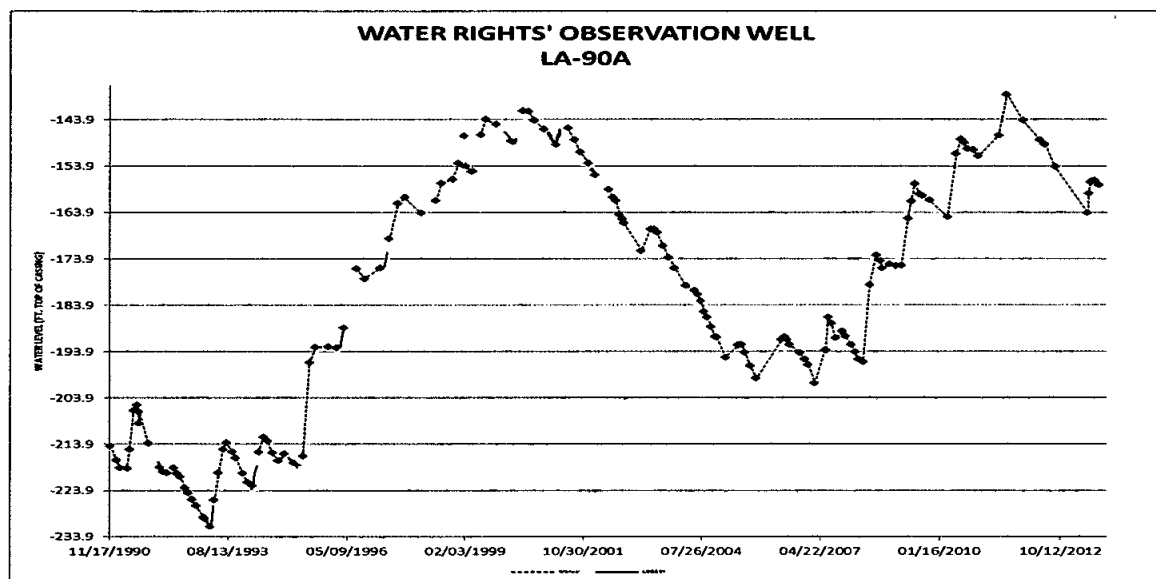


Figure 6. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 8.4 miles east southeast of the well site proposed by Application No. 1945-1.

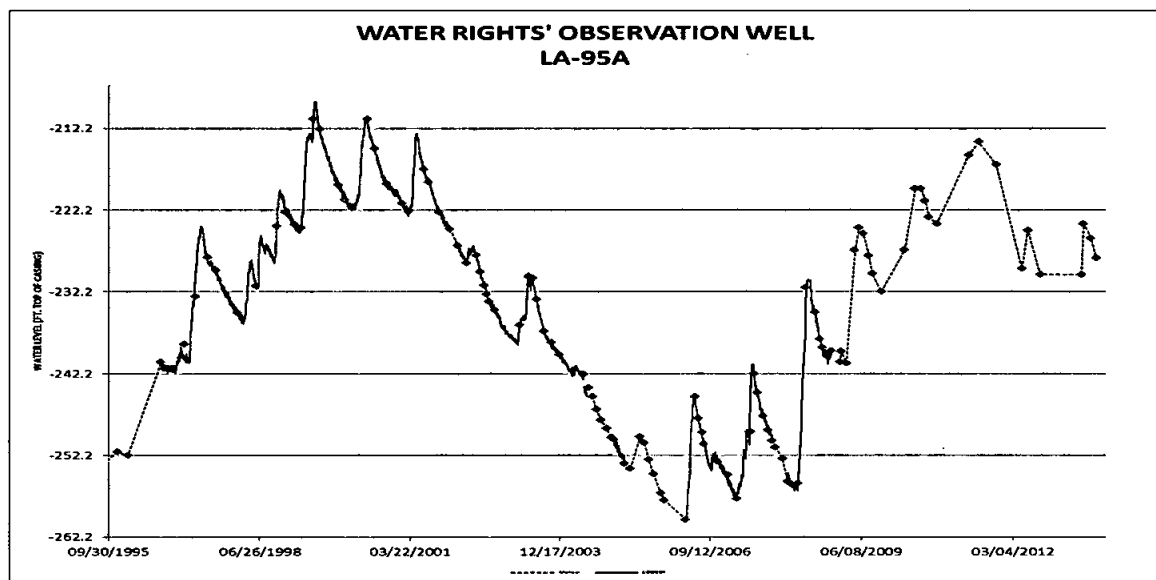


Figure 7. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 0.5 miles south of the well site proposed by Application No. 1945-1

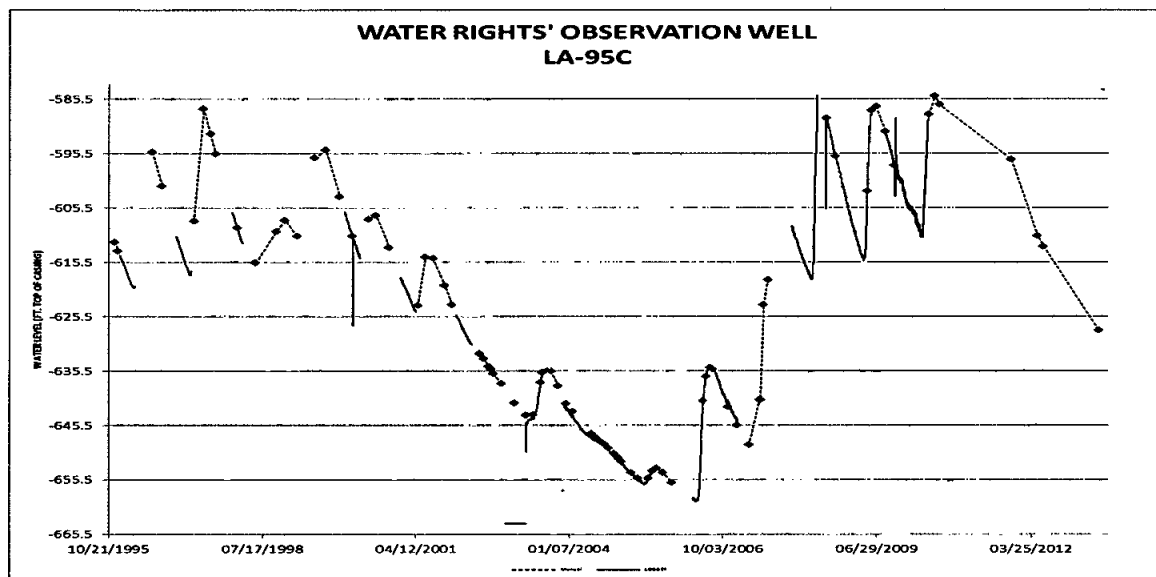


Figure 8. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 11.5 miles southwest of the well site proposed by Application No. 1945-1.

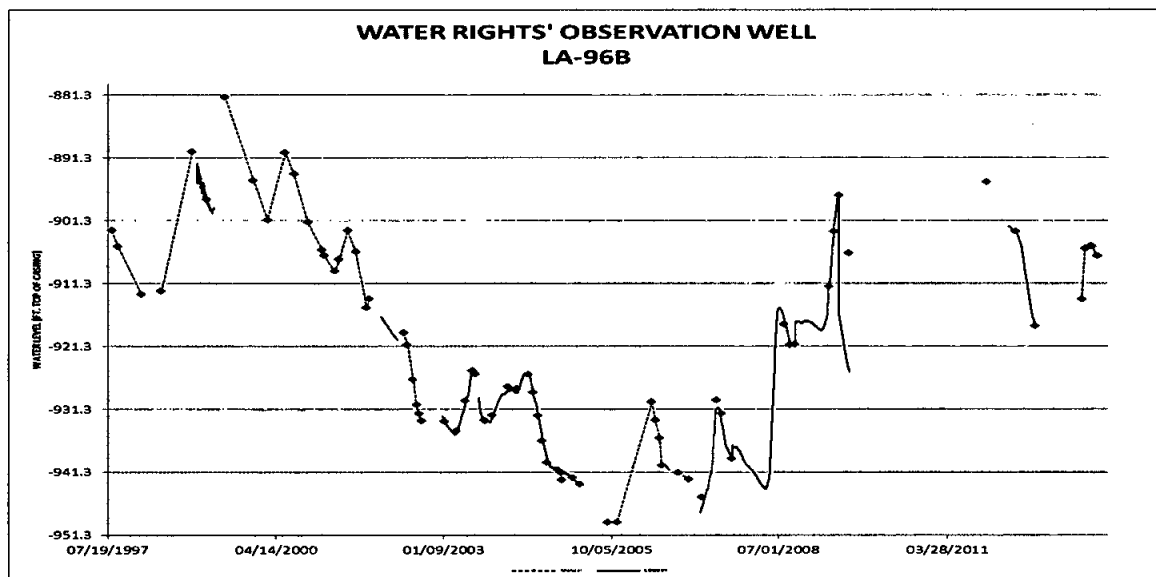


Figure 9. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 8.7 miles west of the well site proposed by Application No. 1945-1.

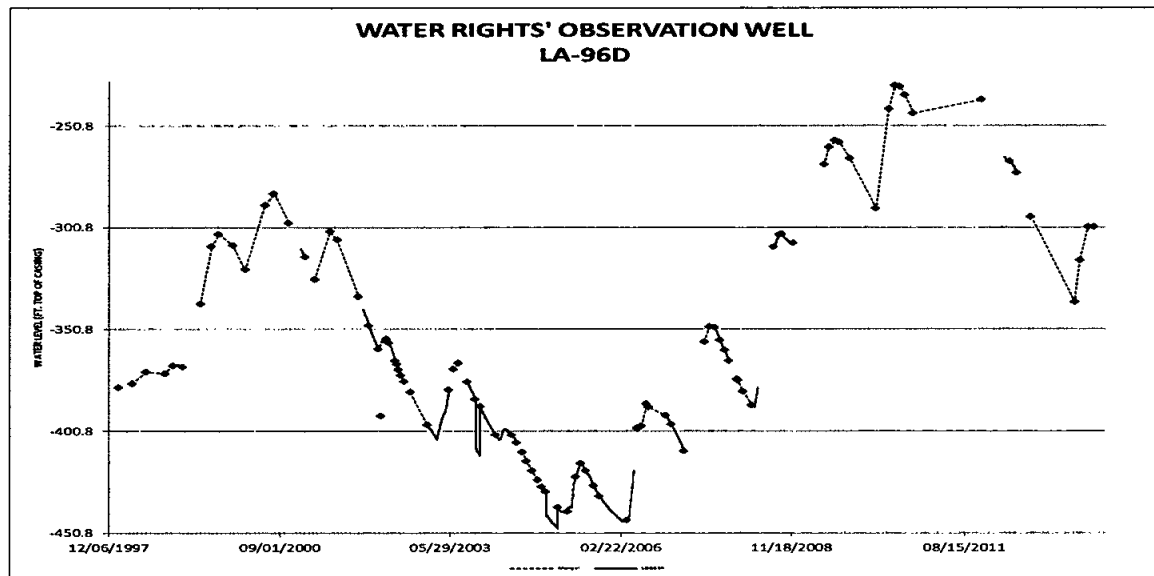


Figure 10. DENR-Water Rights' observation well completed into the Madison aquifer located approximately 8.4 miles southeast of the well site proposed by Application No. 1945-1.

The analysis of the DENR-Water Rights Program observation well data provides a qualitative means of assessing the aquifer and provides the best information reasonably available to evaluate the hydrologic budget for the Madison aquifer. Observation well data showing a steady, continual decline of the aquifer's water level or artesian pressure could indicate that withdrawals from the aquifer were exceeding recharge. In addition, water level fluctuations in an aquifer dominated by the influences of well withdrawals, or a change in the gradient of the potentiometric surface could indicate that well pumping is a significant component in the system relative to recharge and/or natural withdrawals.

Observation well data for the Madison aquifer documents: 1) upward trending water levels; 2) that at the current level of development, climatic conditions greatly mask any temporal effects of well withdrawals thus the combined recharge to and natural discharge from the Madison aquifer significantly exceeds long term well withdrawals; and 3) the potentiometric surface of the aquifer has been relatively unchanged over time. Therefore, the observation well data shows that unappropriated water is available from the Madison aquifer.

AFFECTS ON EXISTING RIGHTS:

Water Rights/Permits supplied by wells completed into aquifers that are stratigraphically above or below the Madison are not expected to be affected by Madison aquifer withdrawals since the lower Minnelusa Formation and the lower Madison Limestone generally serve as upper and lower confining units for the Madison aquifer.

There are 9 water rights/permits appropriating water from the Madison aquifer within approximately two and one-half miles of the well site proposed by this application. As noted earlier, portions of Water Permit Nos. 1707A-1 and 1707E-1 for Frawley Ranches and Water Permit Nos. 1707B-1, 1707C-1 and 1707D-1 for the City of Spearfish may be subject to cancellation

due to non-construction. Assuming the water permits listed are cancelled, the three Madison aquifer water permits in the area are shown in Table 4.

PERMIT NO	NAME	PRIORITY DATE	USE	CFS	ACRES
1888-1	FRAWLEY RANCHES EAST	06/27/2007	SHD	0.19	
1923-1	JIM MONTIETH	02/15/2011	IRR/DOM	0.11	21.25
1931-1	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	08/17/2012	IRR/COM	0.44	85.22

Table 4. Water permits within two and one-half miles of the well site proposed by Application No. 1945-1 assuming cancellation of Water Permit Nos. 1707A-1, 1707B-1, 1707C-1, 1707E-1 and 1707D-1

It is difficult to precisely estimate the amount and extent of drawdown that will result from pumping a well completed into the Madison aquifer since the well conditions are site specific. The transmissivity of the aquifer is very heterogenous with values that range over several orders of magnitude (Putnam and Long, 2007). In addition the aquifer characteristics of the Madison can vary considerably within a short distance (Greene, 1993). The transmissivity of the Madison at flow zone between subarea 1 and subarea 2 was estimated at 5,589 feet squared per day (ft^2/d) (Carter and others, 2001b). Applying the estimated transmissivity and assuming a storage coefficient of $S = 2 \times 10^{-4}$, the drawdown 1,000 feet from a well pumping 1.11 cfs would be less than 13 feet after 185 days of continuous pumping (one irrigation season) based on the Theis Equation (see Figure 11) ("Theis Equation Calculator"). The Theis equation requires a number of simplifying assumptions, some of which may not apply in this case; however, the solution is still useful to show that drawdown should not be significant.

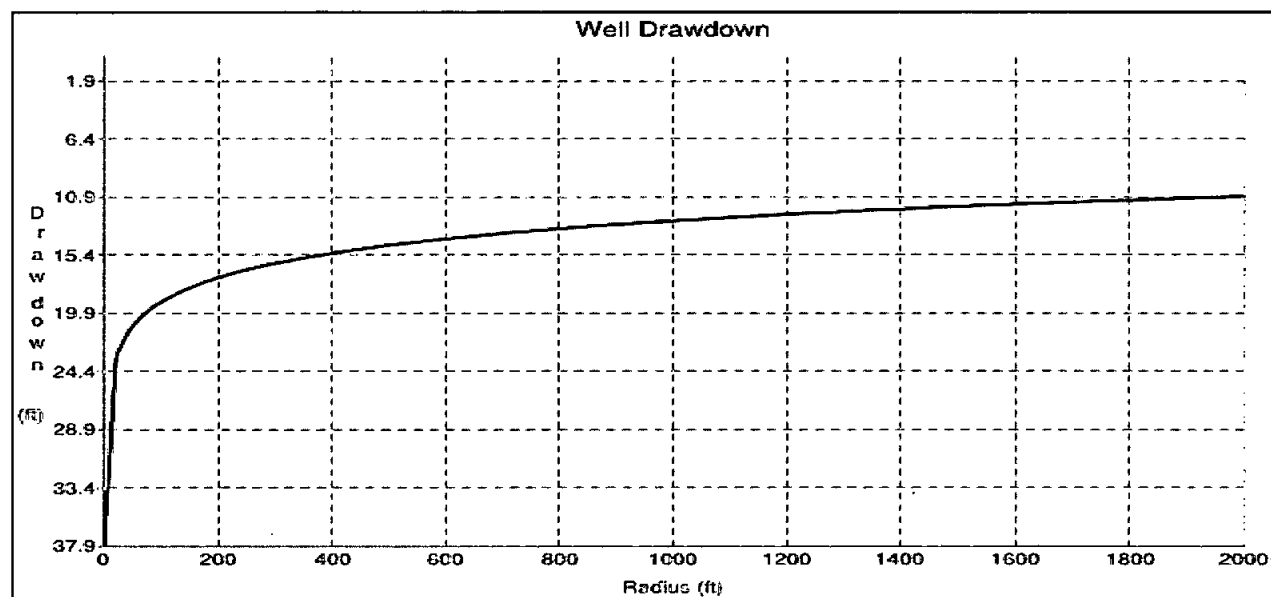


Figure 11. Drawdown predicted from a well pumping 1.11cfs from the Madison aquifer, continuously for one year, assuming $T = 5,589 \text{ ft}^2/\text{d}$, $S = 2 \times 10^{-4}$, $t = 1 \text{ yr.}$ (modified from ("Theis Equation Calculator"))

If this application is approved, the drawdown caused by pumping a well 1.11 cfs is not expected to adversely impact domestic wells or wells supplying prior appropriation due to the distances between wells. Well interference is not expected to be significant. This is especially the case when considering the Madison is under artesian conditions with several hundred feet of head pressure at the documented natural fluctuation in this area (see Figure 7).

Wells supplying existing Water Rights/Permits and domestic uses are protected from adverse impacts per Water Management Board rules 74:02:04 and 74:02:05, which were promulgated pursuant to SDCL 46-6-6.1. These rules provide for the regulation of large capacity wells to the degree necessary to maintain an adequate depth of water for a prior appropriator in wells that have the ability to produce water **independent of artesian pressure**. Simply put, the pump placement in a prior appropriator's well is not necessarily protected.

If the water levels in the Madison aquifer were to decline, owners of existing wells bear the responsibility of lowering the pump inlet in the well to the top of the aquifer, if necessary. Increased lift would decrease the pump discharge or require a larger pump or a different type of a pump to maintain the same output.

An increase in operating expenses that may result from interference between wells is not necessarily an adverse impact. The Water Management Board considered this situation in the matter of Water Permit Application 2313-2, Coca-Cola Bottling Company of the Black Hills (Water Rights, 1995). The Board adopted findings of fact and conclusions of law that basically state that if the increased cost or decreased production is considered an adverse impact, it could be in conflict with SDCL 46-1-4, which requires South Dakota's water resources to be put to beneficial use to the fullest extent of which they are capable.

It should be noted however, that well interference (drawdown) measured at Water Rights' observation wells located near high capacity municipal wells in Spearfish, Sturgis and Rapid City has never been significant (i.e. drawdown of only a few feet or tens of feet) (Water Rights, 2014a). Given the distance between the well that is to supply this appropriation and existing Madison wells, well interference is not expected to be adverse.

The well site proposed by this application is located within the area reserved for future use by Future Use Permit No. 1872-1 for the City of Spearfish. Although the effect on existing water rights must be considered to place water reserved by the future use permit to beneficial use, following issuance of a permit, the permit will retain the priority date of the future use permit and be senior to Permit No. 1945-1 (if approved). Considering the size of the future use area reserved, approval of this application should not interfere with Spearfish's ability to develop their future use permit.

PUBLIC INTEREST:

Historically, "public interest issues" have been raised by the public during Water Management Board hearings. However, the Chief Engineer has raised the question of whether the Board should consider a large decrease in spring output as a public interest issue if such a decrease would occur. The Water Management Board accepted that SD Water Law does not protect artesian head pressure as a means of diversion and determined that well interference resulting in

decreased discharge from these “artesian” springs likely could not be considered an adverse impact. The Board concluded that “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 Findings dated 19 March 2007 (Paragraph 11)). Consequently, the Board has conditioned a number of recent water permits appropriating water from the Madison aquifer with a qualification similar to:

“The Permit Holder shall control withdrawals from the well so there is not a significant adverse effect on the water flow from area springs or a significant adverse effect on the water quality and character in area springs.”

Although there are a number of springs in the subareas defined by Carter and others (2001b) in which this proposed project is to be located, all of them are located northwest of the well site proposed by this application. Neither Rahn and Gries, (1973), Putnam and Long (2007), nor Carter and others (2001) identify springs within approximately seven and one half miles of this proposed well site.

A fairly large change in the hydraulic gradient in the vicinity of the springs would be necessary to significantly affect the groundwater flow rates and consequently a spring’s discharge. Given the distance involved and the relatively low diversion rate proposed by this application, it is unlikely that drawdown from this well would have a measurable impact on spring discharge.

TERM LIMITATION:

SDCL 46-2A-20 requires that “... 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 the 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, show 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.”

Pursuant to SCL 46-2A-21, “at the end of the twenty-year limitation, the board may cancel a permit or amend the permit with a new term limitation of up to twenty years, if the board is unable to make a finding after notice and hearing that sufficient information is available to delete the term.”

Although the criteria for approval of a water permit established by SDCL 46-2A-9 are met, (i.e., there is a reasonable probability that unappropriated water is available for the applicant's proposed use, and this proposed diversion can be developed without unlawful impairment of existing rights) evidence is not available to justify issuing this permit without a term limitation of 20 years.

CONCLUSIONS:

1. The Madison aquifer is a major regional aquifer and a viable source of water for this proposed appropriation.
2. This application proposes to appropriate 1.11 cubic feet of water per second.
3. There is a reasonable probability that unappropriated water is available in the Madison aquifer to supply this appropriation.
4. There is a reasonable probability this appropriation can be made without adversely impacting existing water rights including domestic users.
5. Information is not available to justify issuing these permits without a term limitation of 20 years.
6. Following notice and a public hearing, the Water Management Board can cancel this permit or amend it with a new term limitation after 20 years.



Ken Buhler
Natural Resources Engineer

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RECEIVED

MAY - 9 2014

WATER RIGHTS
PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA:

COUNTY OF LAWRENCE:

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

Notice Of Application

a printed copy of which is hereto attached, was printed and published in said newspaper for 1 successive and consecutive weeks, the first publication being made on the 2nd day of May, 2014, and the last publication on the _____ day of _____, that the amount of fees charged for publishing same, to-wit: The sum of \$ 25.32 insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.

Subscribed and sworn to before me this 10th day of May, 2014

Richard L. Richards

Notary Public, Lawrence County, South Dakota

My commission expires: 10-24-2016

NOTICE OF APPLICATION NO. 1945-1 to Appropriate Water

Notice is given that Elkhorn Ridge at Frawley Ranches LLC, 12600 W Colfax Ave, Lakewood CO 80226 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second from one well to be completed into the Madison Aquifer (700 feet deep) located in the SW 1/4 NW 1/4 Section 14 for irrigation of 265 acres located in the E 1/2 SW 1/4, S 1/2 NW 1/4, SW 1/4 SW 1/4 Section 14, N 1/2 NW 1/4 Section 23 and E 1/2 SE 1/4 Section 15; all in T6N-R3E.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1945-1 for a 20-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing the permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available, 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. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD

57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 12, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

Steven M. Pirner,
Secretary, Department
of Environment and Natural Resources

Published once at the total approximate cost of \$24.87.

#529

May 2



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



April 22, 2014

Black Hills Pioneer
PO Box 7
Spearfish SD 57783

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1945-1 to Appropriate Water. Please publish the notice once on May 2, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Elkhorn Ridge at Frawley Ranches LLC, c/o Daryll Propp, 12600 W Colfax Ave, Lakewood CO 80226 (Ph # 303-233-4000).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



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

April 22, 2014

Elkhorn Ridge at Frawley Ranches LLC
Daryll Propp
12600 W Colfax Ave
Lakewood CO 80226

Dear Mr. Propp:

Water Permit Application No. 1945-1 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Black Hills Pioneer printed at Spearfish SD (Ph # 605-642-2761). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352
Enclosures

cc: Patrick H Wyss, Wyss Associates, 728 6th St, Rapid City SD 57701

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

Instruction to Newspaper - Publish the Notice on May 2, 2014. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 1945-1 to Appropriate Water

Notice is given that Elkhorn Ridge at Frawley Ranches LLC, 12600 W Colfax Ave, Lakewood CO 80226 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second from one well to be completed into the Madison Aquifer (700 feet deep) located in the SW 1/4 NW 1/4 Section 14 for irrigation of 265 acres located in the E 1/2 SW 1/4, S 1/2 NW 1/4, SW 1/4 SW 1/4 Section 14, N 1/2 NW 1/4 Section 23 and E 1/2 SE 1/4 Section 15; all in T6N-R3E .

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1945-1 for a 20-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing the permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available, 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 In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 12, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of_____.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

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



MAY 22 2014

Elkhorn Ridge at Frawley Ranches LLC
Daryll Propp
12600 W Colfax Ave
Lakewood CO 80226

Dear Mr. Propp:

Enclosed is Water Permit No. 1945-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures