

WATER PERMIT NO. 8431-3

Name of Applicant: Hillcrest Golf and Country Club

Address: 2206 Mulberry St, Yankton SD 57078

Phone: 605 660 4025

Amount of Water Claimed: 1.89 add'l cfs

Total Acres: 27 add'l acres

Source of Water Supply: groundwater (3 existing wells)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: north edge of Yankton

PRIORITY Date Received: 6-15-20

Application/License Fee: \$ 500

Corrected Application Received: 6-22-20

Period of Annual Use: April 1 – October 31

Remarks: Add'l diversion authority, add'l pump rate from pond and add'l irrigated acres as authorized by Water Right No. 5315-3 and 6319-3

Diversion Point: NW 1/4 SW 1/4, NE 1/4 SE 1/4,
SE 1/4 SE 1/4 Sec 6-T93N-R55W

Land to be Irrigated: SE 1/4 Sec 6 and N 1/2 NE
1/4 Sec 7; all in T93N-R55W

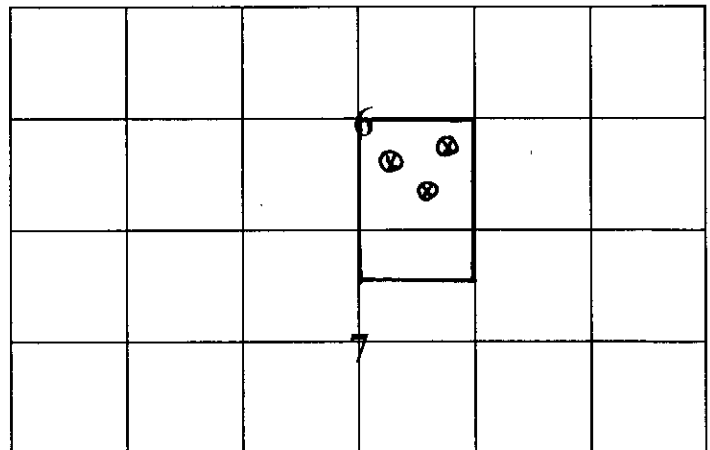
Depth of Well: 118, 60 and 86 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Keith DeJong



Reviewed and the Number Assigned on: 6-22-20

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

RECEIVED

JUN 15 2020

WATER RIGHTS
PROGRAM

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8431-3</u> (office use only)	Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>	
	Newspaper <u>Daily Press & Dakotan, Yankton</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.)

Additional diversion rate authority, additional pump rate from pond, and additional irrigated acres as authorized by Water Right No. 5315-3 and Water Permit No. 6319-3.

1. Name to Appear on Irrigation Permit Hillcrest Golf and Country Club

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

Mailing Address 2206 Mulberry st Yankton SD 57078
(Address) (City) (State) (Zip Code)

Phone 605 665 4522 Mobile 605 660 4025 Email hillcrestturf@hillcrestyankton.com

2. Amount of water claimed _____ *CFS or _____ **GPM _____ ***AF Total Acreage 27 add'l
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Lower James Missouri Aquifer

4. Location of point of diversion 3 wells located in the NW 1/4 SE 1/4, NE 1/4 SE 1/4, SE 1/4 SE 1/4 and one
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
pond in the SE 1/4 SE 1/4 of Section 6; all in T93N-R55W County Yankton

5. County or counties where water will be used Yankton6. Annual period during which water is to be used April 1 - October 31

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
NW 1/4 SE 1/4 Section 6; T93N-R55W	38	NW 1/4 NE 1/4 Section 7; T93N-R55W	13
NE 1/4 SE 1/4 Section 6; T93N-R55W	26	NE 1/4 NE 1/4 Section 7; T93N-R55W	5
SW 1/4 SE 1/4 Section 6; T93N-R55W	36		
SE 1/4 SE 1/4 Section 6; T93N-R55W	9		

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

Item No. 2:

- Additional 1.89 cfs from three wells
- Additional application rate to irrigated acres 0.11 cfs

Item No. 7:

- Breakdown of acres represents all 127 acres

I, Warren Muller General 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.

SOUTH DAKOTA WATER PERMIT NO. 8431-3

Date of first receipt of application June 15, 2020.

Date of return to applicant for corrections, amendments or changes June 15, 2020.

Date of receipt of corrected application June 22, 2020.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8431-3 to Hillcrest Golf and Country Club, 2206 Mulberry St, Yankton SD 57078 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. 8431-3 authorizes an additional 1.89 cubic feet of water per second (cfs) diversion rate authority, an additional 0.11 cfs pump rate from the southern pond to irrigated acres and irrigation of 27 additional acres to what is authorized by Water Right No. 5315-3 and Water Permit No. 6319-3. Water Right No. 5315-3 and Water Permit No. 6319-3, combined authorize 1.78 cfs from three wells (Lower James:Missouri Aquifer) located in the NW 1/4 SE 1/4, NE 1/4 SE 1/4, SE 1/4 SE 1/4 Section 6-T93N-R55W to irrigate 100 acres. An investigation found the system capable of diverting an additional 1.89 cfs from the three wells and the pumping system was capable of withdrawing an additional 0.11 cfs from the southern pond located in the SE 1/4 SE 1/4 Section 6-T93N-R55W. Irrigation of 27 additional acres is located in the SE 1/4 Section 6; N 1/2 NE 1/4 Section 7; all in T93N-R55W. This permit, Water Right No. 5315-3, and Water Permit No. 6319-3 will authorize a total diversion of 3.67 cfs from three wells and a 2.78 cfs pump rate from the southern pond to irrigate a total of 127 acres of golf course. This site is located on the north edge of Yankton SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is June 15, 2020 (1.89 cfs and 27 additional acres).
4. The date of approval of Permit No. 8431-3 is September 14, 2020.
5. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under Water Permit No. 8431-3 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 irrigation withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Any well that is abandoned must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8431-3 and Nos. 5315-3 and 6319-3, combined, authorize a maximum diversion rate of 2.78 cfs from the pond for irrigation of 127 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

OCT 21 2020

date





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

October 28, 2019

Warren Mueller
2206 Mulberry St
Yankton SD 57078

Dear Mr. Mueller:

Hillcrest Golf and Country Club holds Water Right No. 5315-3 and Water Permit No. 6319-3. Water Right No. 5315-3 appropriates 1.42 cfs from 3 wells to irrigate 100 acres located in the SE ¼ of section 6 and the N ½ NE ¼ of section 7; all in T93N R55W. Water Permit No. 6319-3 authorizes an additional 0.36 cfs from the three existing wells authorized by Water Right No. 5315-3 and change the location of the diversion points authorized by Water Right No. 5315-3. Water Right No. 5315-3 authorizes water from the wells to be diverted to two ponds with a storage capacity of 15.8 acre-feet prior to irrigation of the golf course. Water is authorized to be diverted from the wells at a maximum diversion rate of 1.78 cfs into the two ponds. Water may be diverted from the southern pond at a rate of 2.67 cfs to the land.

After an inspection conducted by Keith DeJong on October 8, 2019, it was determined that your systems were capable of withdrawing 3.67 cfs from the three wells rather than the 1.78 cfs authorized under Water Right No. 5315-3 and Water Permit No. 6319-3. It was also determined that the pumping system used to withdraw water from the southern pond located in the SE ¼ SE ¼ of Section 6 T93N-R55W was capable of withdrawing 2.78 cfs rather than the 2.67 cfs authorized by Water Permit No. 5315-3. During the inspection, it was also determined that the acres currently being irrigated are 127 acres rather than the 100 acres authorized under Water Right No. 5315-3.

In order to authorize the additional pump rate, a new water use permit is required. The water permit will need to increase the diversion rate from the three wells by an additional 1.89 cfs, the pump rate from the southern pond in the SE ¼ SE ¼ of Section 6 T93N-R55W would need an additional 0.11 cfs, and an additional 27 acres added to the total irrigated acres to reflect the current systems in place.

Enclosed is a partially completed application to obtain a water permit for these additional amounts. Please review, sign and return the application form. The fee for the application will be \$500 made payable to the Water Rights Program. Enclosed is also a self addressed stamped envelope.

If you have any questions, please contact Eric Gronlund at Eric.Gronlund@state.sd.us or (605) 773-3352.

Sincerely,


Timothy Magstadt
Natural Resources Engineer I
DENR Water Rights Program

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

January 17, 2020

Warren Mueller
Hillcrest Golf and Country Club
2206 Mulberry St
Yankton SD 57078

Dear Mr. Mueller:

On October 28, 2019, you were sent applications forms for a permit to appropriate water based on an investigation of Water Right No. 5315-3 and Water Permit No. 6319-3 for Hillcrest Golf and Country Club. As stated in the letter, at the time of the investigation it was found that additional water was being diverted and additional acres were being irrigated. Enclosed is a copy of the letter, another partially completed application form and map.

This is a reminder that we have not received the application. Obtaining a water permit that accurately reflects the actual water use ultimately benefits the golf course by protecting it's right to use water. Now is the time to submit the application in order to have the proper permitting in place by the 2020 irrigation season.

If you have any questions, please contact me.

Sincerely,

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

enclosures

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date June 22, 2020

RECEIVED OF Hillcrest Golf & Country Club 2206 Mulberry Street Yankton SD 57078

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

Fee for Application for Permit No. <u>8431-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$500.00
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. _____	\$
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	\$500.00

By Eric Gronlund
Chief Engineer

vm

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, June 15, 2020 3:46 PM
To: hillcrestturf@hillcrestyankton.com
Subject: RE: [EXT] Emailing: Hillcrest Golf & Country Club.pdf
Attachments: invoice.pdf

-----Original Message-----

From: hillcrestturf@hillcrestyankton.com <hillcrestturf@hillcrestyankton.com>
Sent: Monday, June 15, 2020 2:56 PM
To: Schlaak, Karen <Karen.Schlaak@state.sd.us>
Cc: McMath, Genny <Genny.McMath@state.sd.us>
Subject: RE: [EXT] Emailing: Hillcrest Golf & Country Club.pdf

I apologize I did not and still don't see anything that says you need \$500 for this application. I do see that it has a "X" under new application.
This is certainly not a new application for water rights. I thought this was just kind of a check up if you will. We have not made any updates or changes to this system since 2002.

If you need money I would like some sort of invoice.

Waren Muller, CGCS
2206 Mulberry Street
Yankton, SD 57078
hillcrestyankton.com
605.665.4522 (office)
605.660.4025 (cell)

-----Original Message-----

From: Schlaak, Karen <Karen.Schlaak@state.sd.us>
Sent: Monday, June 15, 2020 1:13 PM
To: hillcrestturf@hillcrestyankton.com
Subject: FW: Emailing: Hillcrest Golf & Country Club.pdf

We received this application in the mail today. The \$500 filing fee was not included. Please submit this amount.

Karen Schlaak
SD DENR, Water Rights Program
(605) 773-3352

-----Original Message-----

From: hillcrestturf@hillcrestyankton.com
<hillcrestturf@hillcrestyankton.com>
Sent: Monday, June 15, 2020 12:38 PM
To: McMath, Genny <Genny.McMath@state.sd.us>
Subject: RE: [EXT] Emailing: Hillcrest Golf & Country Club.pdf

I sent the application out on Saturday. Thank you for your patience.

Waren Muller, CGCS
2206 Mulberry Street
Yankton, SD 57078
hillcrestyankton.com
605.665.4522 (office)
605.660.4025 (cell)

-----Original Message-----

From: McMath, Genny <Genny.McMath@state.sd.us>
Sent: Friday, June 5, 2020 8:41 AM
To: hillcrestturf@hillcrestyankton.com
Cc: Schlaak, Karen <Karen.Schlaak@state.sd.us>
Subject: Emailing: Hillcrest Golf & Country Club.pdf

Warren,

Attached are copies of the letters, application form, inspection sheet and map we talked about.

The application form is what needs to be signed and returned to us. The fee for the application is \$500.

Please look over the information and let us know if you have any questions. I am cc'ing Karen with this email because she typically handles the applications that come in.

Genny McMath
DENR - Water Rights Program
773-3352 (main phone)
773-5455 (desk phone)
Website: <https://denr.sd.gov/des/wr>

Your message is ready to be sent with the following file or link attachments:

Hillcrest Golf & Country Club.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

* INVOICE *

Hillcrest Golf and Country Club
2206 Mulberry St
Yankton SD 57078

Application for Permit to Appropriate Water filing fee	\$500.00
--	----------

Additional 27 acres and additional 1.89 cfs to Water Permit No. 6319-3

PLEASE PAY THIS AMOUNT:	\$500.00
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Karen Schlaak
Water Rights Program
(605) 773-3352

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

SEP 04 2020

WATER RIGHTS
PROGRAM

HILLCREST GOLF & COUNTRY CLUB
2206 MULBERRY ST
YANKTON SD 57078

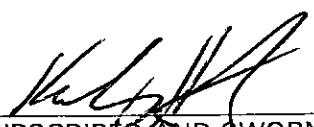
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

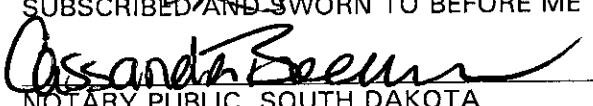
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
9+2 NOTICE OF APPLICATION

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 2nd DAY OF September, 2020
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT: \$31.87 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 09/02/2020

FILED ON: 09/02/2020


SUBSCRIBED AND SWORN TO BEFORE ME THIS 2nd DAY OF September, 2020


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

NOTICE OF APPLICATION

NO. 8431-3 to Appropriate Water

RECEIVED

SEP 04 2020

WATER RIGHTS
PROGRAM

Notice is given that Hillcrest Golf and Country Club, c/o Warren Mueller, General Manager, 2206 Mulberry St, Yankton SD 57078 has filed an application for a water permit for an additional 1.89 cubic feet of water per second (cfs) diversion rate authority, an additional 0.11 cfs pump rate from the southern pond to irrigated acres and irrigation of 27 additional acres to what is authorized by Water Right No. 5315-3 and Water Permit No. 6319-3. Water Right No. 5315-3 and Water Permit No. 6319-3, combined authorize 1.78 cfs from three wells (Lower James:Missouri Aquifer) located in the NW 1/4 SE 1/4, NE 1/4 SE 1/4, SE 1/4 SE 1/4 Section 6-T93N-R55W to irrigate 100 acres. An investigation found the system capable of diverting an additional 1.89 cfs from the three wells and the pumping system was capable of withdrawing an additional 0.11 cfs from the southern pond located in the SE 1/4 SE 1/4 Section 6-T93N-R55W. Irrigation of 27 additional acres is located in the SE 1/4 Section 6; N 1/2 NE 1/4 Section 7; all in T93N-R55W. This application, if approved, Water Right No. 5315-3, and Water Permit No. 6319-3 will authorize a total diversion of 3.67 cfs from three wells and a 2.78 cfs pump rate from the southern pond to irrigate a total of 127 acres of golf course. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located on the north edge of Yankton SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8431-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineers recommendation with qualifications, the application, and staff report are available at <http://denr.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 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 September 14, 2020.

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.

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 \$31.87.

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, August 24, 2020 12:58 PM
To: Jackie Lammers
Subject: 8431-3, Hillcrest Golf and Country Club
Attachments: 8431-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on September 2, 2020.

Hillcrest Golf and Country Club, c/o Warren Muller, 2206 Mulberry St, Yankton SD 57078 (605 660-4025) 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
Water Rights Program
(605) 773-3352





DENR
SOUTH DAKOTA

**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 RIGHT AWAY.**

August 24, 2020

Hillcrest Golf and Country Club
c/o Warren Muller
2206 Mulberry St
Yankton SD 57078

Dear Mr. Muller:

Water Permit Application No. 8431-3 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 Daily Press and Dakota printed at Yankton SD (Ph # 605 665-7811). 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 papers 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
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. 8431-3 to Appropriate Water

Notice is given that Hillcrest Golf and Country Club, c/o Warren Mueller, General Manager, 2206 Mulberry St, Yankton SD 57078 has filed an application for a water permit for an additional 1.89 cubic feet of water per second (cfs) diversion rate authority, an additional 0.11 cfs pump rate from the southern pond to irrigated acres and irrigation of 27 additional acres to what is authorized by Water Right No. 5315-3 and Water Permit No. 6319-3. Water Right No. 5315-3 and Water Permit No. 6319-3, combined authorize 1.78 cfs from three wells (Lower James:Missouri Aquifer) located in the NW 1/4 SE 1/4, NE 1/4 SE 1/4, SE 1/4 SE 1/4 Section 6-T93N-R55W to irrigate 100 acres. An investigation found the system capable of diverting an additional 1.89 cfs from the three wells and the pumping system was capable of withdrawing an additional 0.11 cfs from the southern pond located in the SE 1/4 SE 1/4 Section 6-T93N-R55W. Irrigation of 27 additional acres is located in the SE 1/4 Section 6; N 1/2 NE 1/4 Section 7; all in T93N-R55W. This application, if approved, Water Right No. 5315-3, and Water Permit No. 6319-3 will authorize a total diversion of 3.67 cfs from three wells and a 2.78 cfs pump rate from the southern pond to irrigate a total of 127 acres of golf course. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located on the north edge of Yankton SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8431-3 with qualifications because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.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 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 September 14, 2020.

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.

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_

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, August 24, 2020 1:17 PM
To: 'hillcrestturf@hillcrestyankton.com'
Subject: Water Permit Application No. 8431-3
Attachments: 8431-3.pdf

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

Karen Schlaak

Water Rights Program
(605) 773-3352



DENR
SOUTH DAKOTA



DENR
SOUTH DAKOTA

**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. 8431-3, Hillcrest Golf and Country Club**

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. 8431-3, Hillcrest Golf and Country Club, 2206 Mulberry St, Yankton SD, 57078.

The Chief Engineer is recommending APPROVAL of Application No. 8431-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing 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 Water Permit No. 8431-3 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 irrigation withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Any well that is abandoned must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8431-3 and Nos. 5315-3 and 6319-3, combined, authorize a maximum diversion rate of 2.78 cfs from the pond for irrigation of 127 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
August 21, 2020

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8431-3
HILLCREST GOLF AND COUNTY CLUB
JULY 20, 2020

Water Permit Application Number 8431-3 proposes to add an additional 1.89 cubic feet per second (cfs) of water diversion rate authority, an additional 0.11 cfs pump rate from the southern pond used to irrigate, and to irrigate an additional 27 acres, in the SE $\frac{1}{4}$ and N $\frac{1}{2}$ NE $\frac{1}{4}$ Section 6 T93N-R55W, to what is authorized by Water Right Numbers 5315-3 and 6319-3. These two water rights together authorize the irrigation of 100 acres by diverting 1.78 cfs from three wells completed into the Lower James Missouri aquifer, located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 6 T93N-R55W, into two ponds with a storage capacity of 15.8 acre-feet. Water may be diverted from the southern pond, located in SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 6 T93N-R55W, with a 2.67 cfs pump rate.

If approved, Water Right Application Number 8431-3 combined with Water Right Numbers 5315-3 and 6319-3 will authorize a total appropriation of 3.67 cfs from three wells completed into the Lower James Missouri aquifer, with a 2.78 cfs pump rate from the southern pond, to irrigate a total of 127 acres.

The site is located on the north edge of the City of Yankton. The applicant is requesting a diversion rate greater than the statutory limit of 1.0 cfs per 70 acres.

AQUIFER: Lower James Missouri (LJM)

Aquifer Characteristics:

The Lower James Missouri aquifer was deposited as glacial outwash and is composed primarily of sand and gravel (Bugliosi, 1986; Lindgren and Hansen, 1990). It underlies approximately 191,700 acres of Clay, Hutchinson, and Yankton counties with an estimated 2,795,400 million acre-feet of recoverable water in storage (Hedges et al., 1982). Bugliosi (1986) and Lindgren and Hansen (1990) both note the extensive hydraulic connection between the Lower James Missouri aquifer with surrounding bedrock and surficial aquifers, as-well-as the James and Missouri Rivers. This has resulted in both confined and unconfined groundwater conditions being present in the aquifer. Unconfined conditions are generally along the James River where the aquifer is exposed to the surface but, in other locations, the aquifer can be buried by as much as 355 feet of till (Bugliosi, 1986; Lindgren and Hansen, 1990). The general direction of water movement in the aquifer is to the south and toward the James River (Hedges et al., 1982; Lindgren and Hansen, 1990).

The well completion reports for Water Right Numbers 5315-3 and 6319-3 indicates there is between 12 to 61 feet of glacial till overlying sand and gravel ranging in thickness from 57 to 72 feet thick. The average thickness of the overlaying glacial till is 20 feet and average thickness of the sand and gravel is 65 feet. The reported static water level at the time of drilling, was an average of 31 feet below ground surface. This indicates that the proposed site is under unconfined conditions.

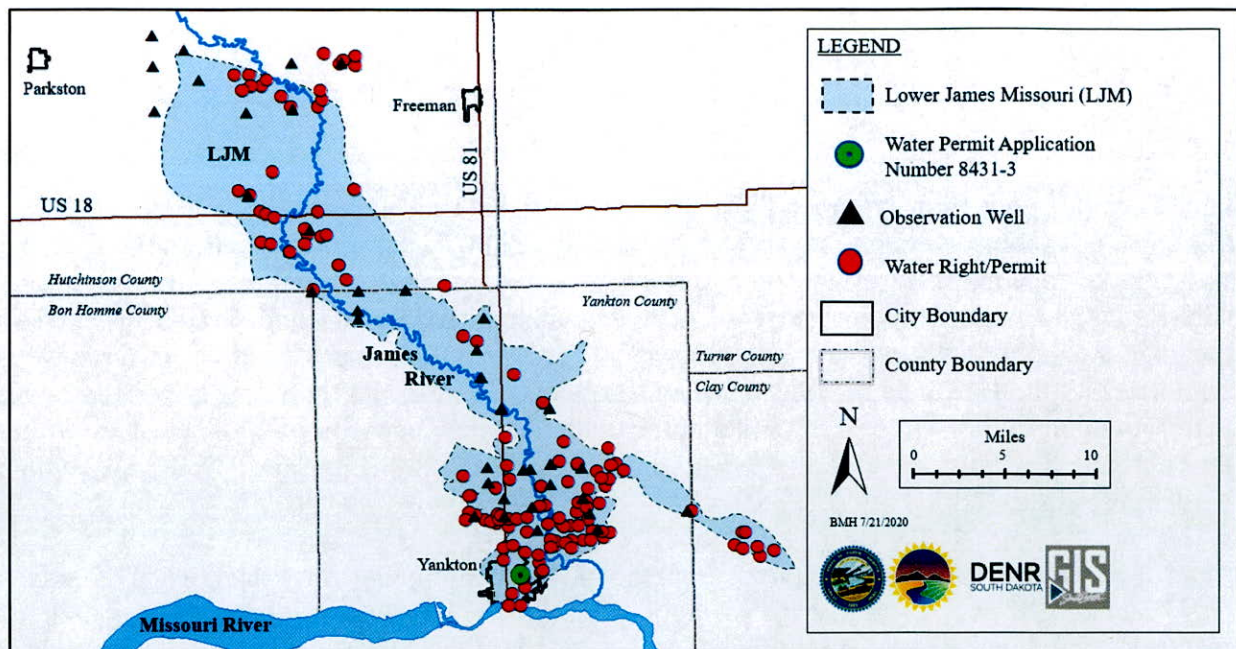


Figure 1. Water Permit Application Number 8431-3 shown within the Lower James Missouri aquifer unit (modified from: Hedges et al., 1982, Water Rights 2020a, Water Rights 2020b).

SOUTH DAKOTA CODIFIED LAW (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is 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. This report will address water availability and potential for unlawful impairment of existing water rights within the Lower James Missouri aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8431-3 proposes to appropriate water from the Lower James Missouri aquifer. The probability of unappropriated water being available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source..." If the source of the water is older or lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not consider the balance of recharge to and withdrawal from the aquifer. For this application, a water distribution system is not involved, and the aquifer is not older or lower than the Greenhorn Formation, therefore the balance of recharge and withdrawal must be considered.

Hydrologic Budget:

Recharge:

The Lower James Missouri aquifer is recharged from infiltration by precipitation where the aquifer is at or near land surface, inflow from surface water, and leakage from underlying and

adjacent aquifers (Bugliosi, 1986; Lindgren and Hansen, 1990). This results in both confined and unconfined conditions throughout the estimated 191,700 total acres (Hedges, et al., 1982) of the aquifer. Hedges, et al. (1985) utilized regional flow-net analysis to estimate a recharge rate of 1.5 inches per year (in/yr) for the aquifer. When this is applied to 191,700 acres, a recharge value of 23,960 acre-feet/year (ac-ft/yr) is obtained for the aquifer. Hedges, et al. (1985) utilized observation well analysis to estimate a recharge rate of 3.9 in/yr for the unconfined portions of the aquifer. Stonesifer (2014) estimated the areal extent of the unconfined portion to be approximately 82,200 acres. This results in a recharge for the unconfined portion of the aquifer is approximately 26,715 ac-ft/yr. It should be noted that Stonesifer (2014) used a larger estimated areal extent for the aquifer than Hedges et al. (1982). This larger areal extent also included unconfined portions of what Hedges et al. (1982) identified as the Plum Creek and Choteau: East aquifers. Stonesifer's (2014) recharge estimate should be considered a likely maximum recharge rate for the Lower James Missouri aquifer. These values produce a range between 23,960 to 26,715 ac-ft/yr annual recharge rate for the Lower James Missouri aquifer.

Discharge:

Discharge from the Lower James Missouri aquifer is by leakage to the James River, evapotranspiration where the aquifer is near land surface, groundwater outflow to adjacent aquifers, and well withdrawals (Bugliosi, 1986; Lindgren and Hansen, 1990). Currently, there are 135 water rights/permits authorized to appropriate water and 1 pending permit proposing to irrigate 129 acres from the Lower James Missouri aquifer (Water Rights, 2020a). Eight are for non-irrigation use and are comprised of six commercial (COM) and two industrial (IND) water rights (Table 1). In order to estimate the volume of average annual withdrawals, use designations are calculated differently. For non-irrigation water rights/permits (COM and IND), withdrawals are either assumed to pump 60 percent of the time at their authorized diversion rate if limited only by diversion rate or, will pump their full permitted appropriation if limited by an annual volume. All permits in Table 1 are assumed to pump 60 percent of their authorized diversion rate except for 8412-3, which is limited by its annual volume. No discharge values have been established for evapotranspiration, leakage to adjacent aquifers, or surface water. There are no future use permits reserving water from the Lower James Missouri aquifer (Water Rights, 2020a).

Table 1- Non-irrigation water rights/permits from the Lower James Missouri aquifer with estimated or permitted water use (Water Rights, 2020a)

Permit Number	Name	County	Status ^a	Use ^a	CFS	Estimated Volume ^b (acre-feet/year)
840-3	Stuelpnagels Inc.	Yankton	LC	COM	1.11	482.5
1288-3	National Food Stores Inc.	Yankton	LC	IND	0.16	69.5
4556-3	Concrete Materials	Yankton	LC	COM	0.44	191.3
6264-3	Yankton Land & Cattle Co.	Yankton	LC	COM	0.56	243.4
6320-3	Wolf Creek Colony	Hutchinson	LC	COM	0.08	34.8
6925-3	Tschetter Colony	Hutchinson	LC	COM	0.07	30.4
7827-3	Maxwell Colony	Hutchinson	PE	COM	0.33	143.4
8412-3	Concrete Materials Co.	Yankton	LC	IND	7.8	400 ^c
					Total:	1,595.4
a - LC: Licensed Water Right; PE: Water Permit; COM: Commercial; IND: Industrial						
b - These permits are all assumed to pump at 60% of their volume except where noted						
c - this permit is by annual volume						

Table 2- Historic irrigation pumpage from the Lower James Missouri aquifer (Water Rights, 1979-2019).

Year	Number of Permits Reporting	Appropriation (acre-feet/year)	Pumpage (acre-feet/year)
1979	22	11,265.0	588.00
1980	23	11,561.0	1,299.13
1981	33	14,407.8	1,834.06
1982	23	9,440.1	1,301.25
1983	27	9,883.1	1,306.54
1984	28	12,283.1	1,360.00
1985	27	10,033.1	1,483.00
1986	30	11,613.5	989.60
1987	30	11,613.5	1,041.60
1988	31	11,769.5	2,744.90
1989	31	10,909.1	2,144.80
1990	35	12,673.1	2,928.10
1991	42	15,497.9	2,599.00
1992	45	16,791.9	1,159.00
1993	45	16,241.9	230.44
1994	45	17,094.1	1,918.17
1995	41	15,088.1	1,483.32
1996	49	17,240.1	2,102.99
1997	50	17,072.1	2,320.00
1998	53	16,915.1	2,787.03
1999	50	15,992.1	2,102.15
2000	51	17,048.1	3,751.08
2001	53	17,208.1	2,940.09
2002	53	17,108.1	4,061.52
2003	53	17,373.1	2,843.15
2004	47	14,525.1	2,886.65
2005	48	14,749.1	2,866.63
2006	50	15,627.1	3,630.92
2007	56	17,477.7	3,425.91
2008	79	23,891.7	4,494.03
2009	84	25,451.1	1,463.27
2010	85	25,731.1	665.37
2011	89	27,367.1	4,147.47
2012	93	28,626.7	13,058.45
2013	118	33,664.1	7,855.75
2014	125	36,286.1	3,347.27
2015	127	37,695.2	4,822.86
2016	126	37,607.2	5,747.01
2017	126	37,142.4	5,727.12
2018	126	36,758.4	1,035.87
2019	127	36,958.4	328.01
Maximum:	127	37,695.2	13,058.45
Minimum:	22	9,440.1	230.44
Average:	60.4	19,602.0	2,800.52

Well withdrawals from the Lower James Missouri aquifer are primarily for irrigation use. Table 2 shows the historic irrigation water use from the aquifer as reported to the DENR-Water Rights Program through annual irrigation questionnaires. The average annual appropriation for irrigation is 19,602 acre-feet, however, the average annual reported pumping is 2,800.52 acre-feet (Water Rights, 1979-2019). The estimated average annual withdrawal for the pending application (Application No. 8434-3) is estimated to be less than 129 ac-ft/yr. For aquifers east of the Missouri River where irrigation application rates have been calculated, the application rates have been less than 1 ac-ft/acre for center pivot crop irrigation. Therefore, it is reasonable to estimate the pending application will pump less than 129 ac-ft/yr. Many domestic wells have been completed into the aquifer (Water Rights 2020c), but domestic users are not required to report their annual water usage. Domestic users are generally not considered a significant portion of the hydrologic budget because of their low diversion rate and the availability of rural water systems.

Water Balance:

The Lower James Missouri aquifer estimated average annual withdrawal rate is 4,524.92 ac-ft/yr (non-irrigation: 1,595.4 ac-ft/yr, irrigation: 2,800.52 ac-ft/yr, and pending 129 ac-ft/yr). The estimated average annual recharge ranges between 23,960 to 26,715 ac-ft/yr. The request for an appropriation of up to 54 ac-ft/yr for this application does not result in an exceedance of the estimated average annual recharge of this aquifer. Therefore, there is a reasonable probability that unappropriated water is available to support the proposed appropriation.

Observation Well Data:

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

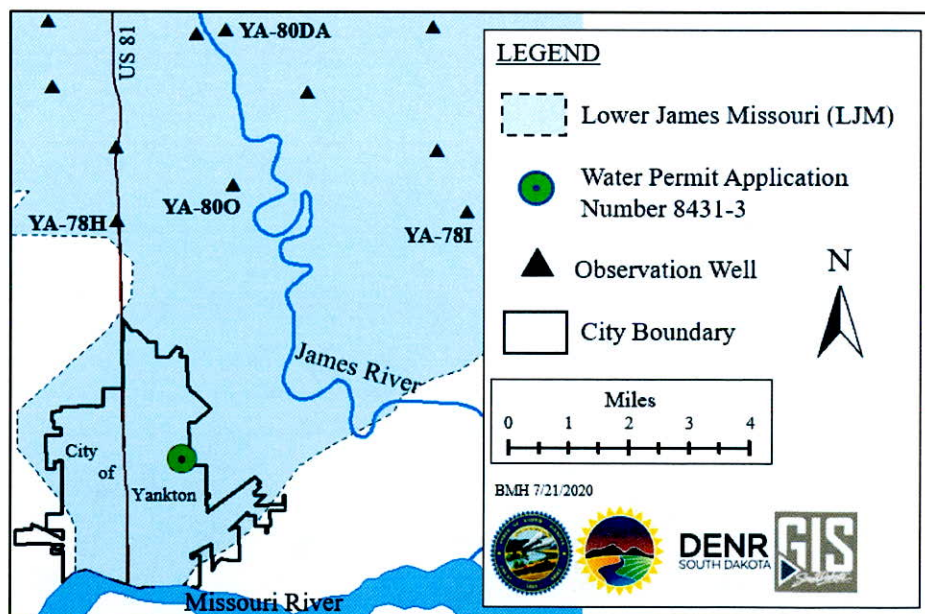


Figure 2. Existing Lower James Missouri aquifer observation wells in the vicinity of Water Permit Application Number 8431-3 (modified from Hedges, et al., 1982; Water Rights 2020b).

The DENR-Water Rights Program monitors 33 observation wells completed into the Lower James Missouri aquifer (Water Rights, 2020b). Figure 2 shows the locations of eleven Lower James Missouri aquifer observation wells within eight miles of Water Permit Application Number 8431-3. The hydrographs of four selected wells, shown in Figures 3 through 6, are representative of the other nearby observation well hydrographs completed into the Lower James Missouri aquifer. The hydrographs show the water level of the aquifer is relatively stable over the period of record. The hydrographs show the aquifer responds well to climatic conditions with rising water levels during wet periods and declining water levels during drier periods. The hydrographs show the water levels readily recover from recharge events, (e.g. snowmelt, precipitation, etc.) that occur throughout the year. This indicates that climatic conditions rather than pumping dominate the water level in the aquifer. The hydrographs also demonstrate the interconnectedness of the southern portion of the Lower James Missouri aquifer with the Missouri: Elk Point aquifer and the Missouri and James Rivers. This is most easily demonstrated by the high points in the 2011 flooding and the rapid lowering of the water level during the 2012 drought. Since the observation well hydrographs show recharge to and natural discharge from the aquifer exceed withdrawals, and recognizing that recharge to and natural discharge from an aquifer can be captured for pumping, there is reasonable probability that unappropriated water is available for this proposed application.

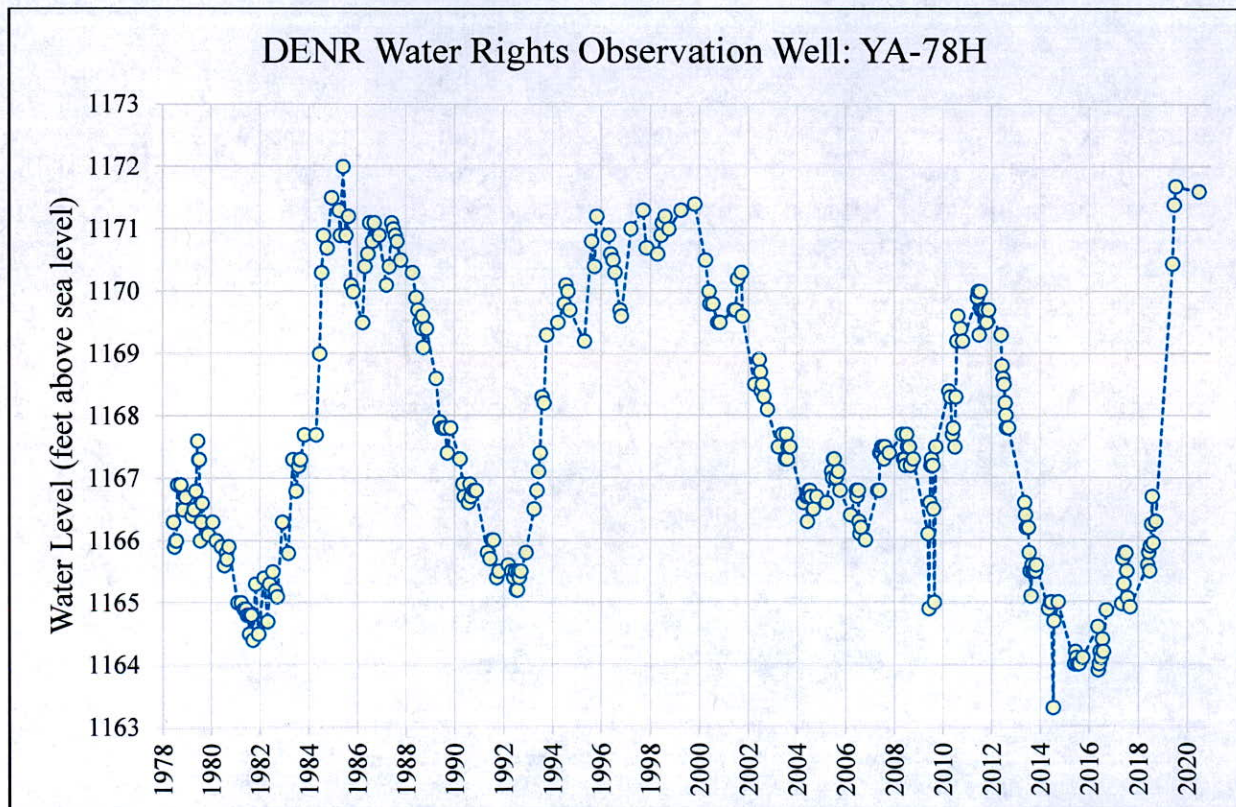


Figure 3. Hydrograph for observation well YA-78H. It is approximately 4.0 miles north of the proposed well location for Water Permit Application Number 8431-3 (Water Rights, 2020b).

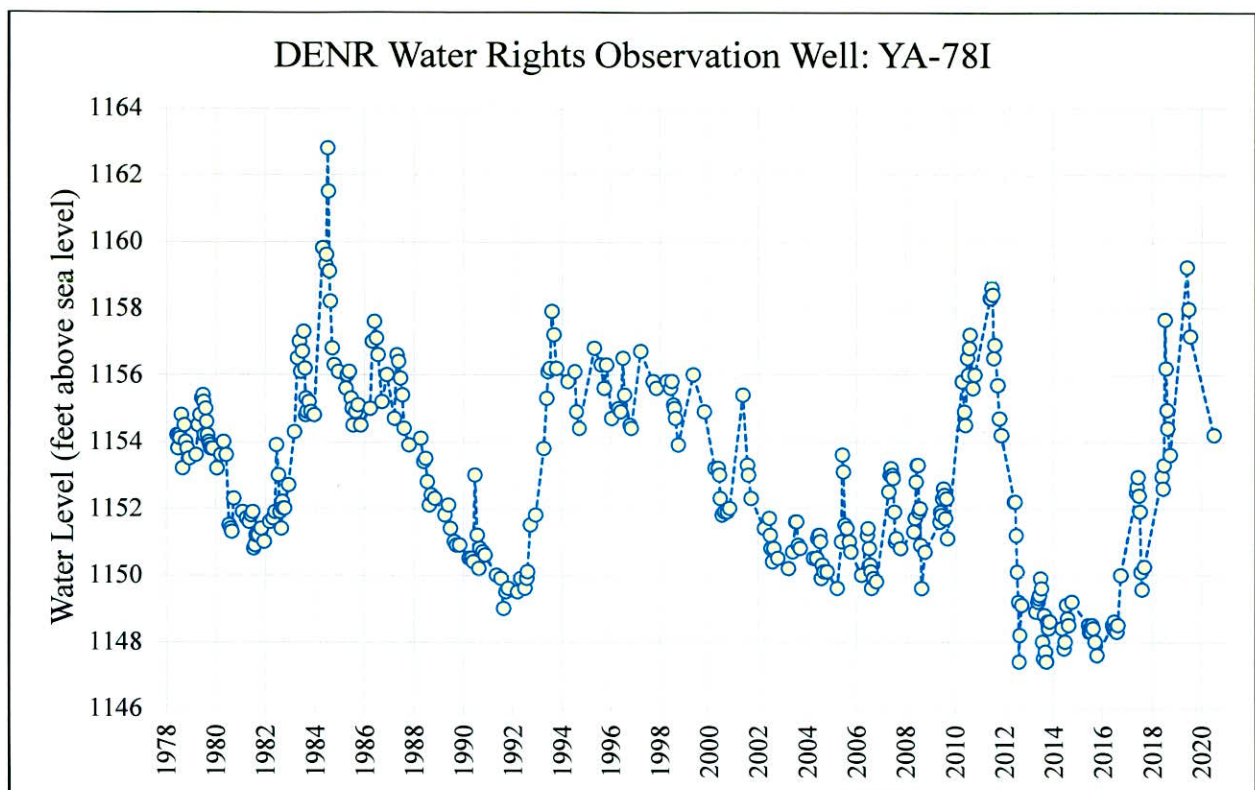


Figure 4. Hydrograph for observation well YA-78I. It is approximately 5.8 miles northeast of the proposed well location for Water Permit Application Number 8431-3 (Water Rights, 2020b).

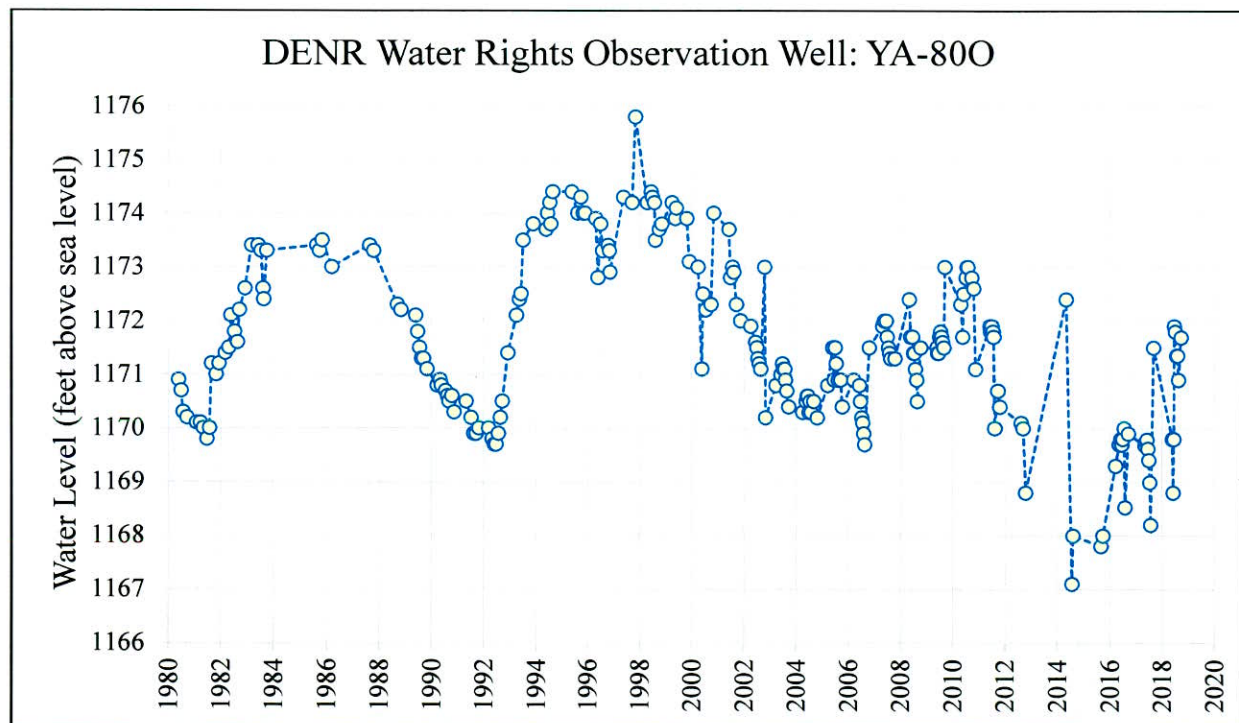


Figure 5. Hydrograph for observation well YA-800. It is approximately 4.5 miles north of the proposed well location for Water Permit Application Number 8431-3 (Water Rights, 2020b).

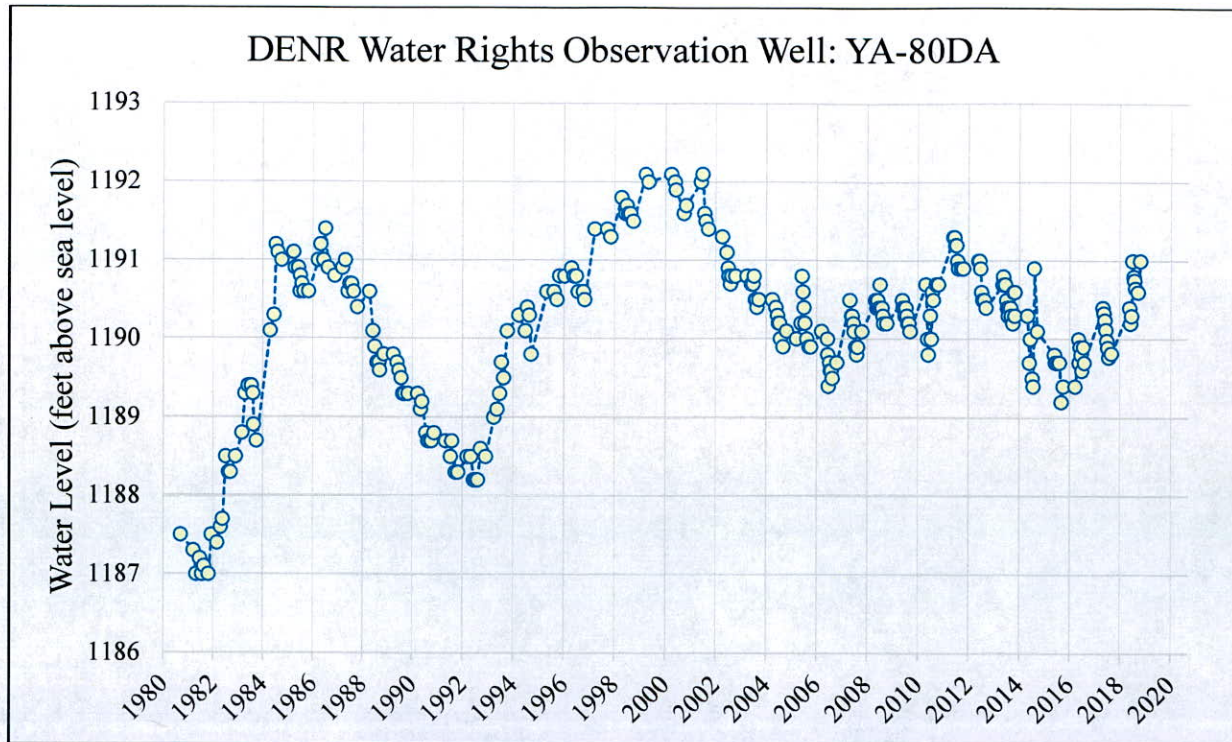


Figure 6. Hydrograph for observation well YA-80DA. It is approximately 7.0 miles north of the proposed well location for Water Permit Application Number 8431-3 (Water Rights, 2020b).

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS

Currently, there are 135 water rights/permits authorized to appropriate water and 1 pending irrigation permit to appropriate more irrigation acres from the Lower James-Missouri aquifer (Water Rights, 2020a). Figure 7 is a map of the project area showing the locations of water rights/permits authorized to withdraw water from the Lower James Missouri aquifer within 2 miles of the proposed application. Table 3 lists the water rights/permits shown in Figure 7. The closest water right is Water License 1919-3, an irrigation permit held by Dakota Acres, at 0.33 miles to the southeast of the proposed site. The aquifer is under unconfined conditions in the vicinity of the application site so interference from pumping is not expected to be a concern with existing appropriative users with adequate wells.

There are a number of domestic wells on file with the DENR-Water Rights Program in the vicinity of the proposed well site for this application that are completed into the Lower James Missouri aquifer (Water Rights, 2020c). However, many wells may no longer be the primary water source since rural water systems have been introduced to the area. There are several high capacity appropriative users in close proximity to each other and domestic wells in the area of this application. However, there is no history of well interference complaints in Yankton County (Water Rights, 2020d).

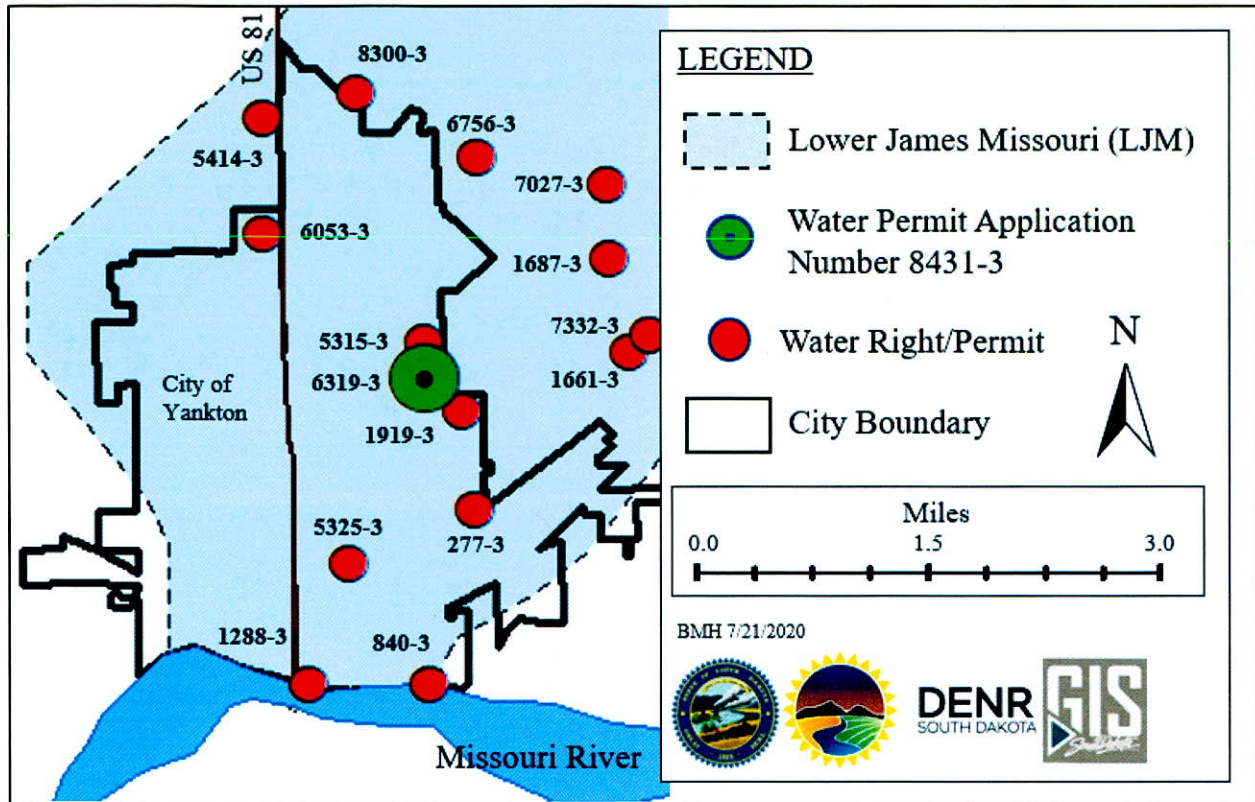


Figure 7- Water Rights/Permits within 2 miles of Water Permit Application Number 8431-3 (Water Rights, 2020a).

Table 3- Water rights/permits shown in Figure 7 (Water Rights, 2020a)

Permit Number	Name	Status ^a	Use ^b	Rate (cfs)	Acres
1919-3	Dakota Acres	LC	IRR	2.23	156.7
277-3	Dakota Acres	LC	IRR	0.57	40.0
840-3	Stuelpnagels Inc	LC	COM	1.11	0.0
1288-3	National Food Stores	LC	IND	0.16	0.0
1661-3	Gurney Seed & Nursery	LC	IRR	2.85	200.0
1687-3	John Frick	LC	IRR	1.20	83.0
5325-3	Federal Prison Camp	LC	IRR	0.39	27.0
5315-3	Hillcrest Golf & Country Club	LC	IRR	1.42	100.0
5414-3	Morris Nelson	LC	IRR	3.00	300.0
6053-3	City of Yankton	LC	IRR	0.21	15.0
6319-3	Hillcrest Golf & Country Club	PE	IRR	0.36	0.0
6756-3	Nelson Family Partnership	LC	IRR	2.22	164.0
7027-3	Jack Frick	PE	IRR	1.89	160.0
7332-3	Rudolph Hill Farm LLLP	PE	IRR	2.00	157.8
8300-3	Samual & Adam Arens	PE	IRR	1.56	100.0

a - LC: Licensed Water Right; PE: Water Permit

b - IRR: Irrigation; COM: Commercial; IND: Industrial

To protect domestic well users, the Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

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

There has been an increase in the previous 12 years of high capacity wells (Table 2) but, there are no complaints on file with the DENR-Water Rights Program regarding pumping issues negatively impacting well production (Water Rights, 2020d). Nearby adequate wells are not expected to be adversely impacted as defined in ARSD 74:02:04:20(7). Nevertheless, if this application is approved, the water permit should include a qualification that the well owner should control their withdrawals so there is not a reduction of water for adequate domestic wells or for adequate wells having prior water rights.

When considering the unconfined nature of the aquifer, the lack of well interference complaint history due to pumping, and the distant proximity of the nearest water right, there is reasonable probability that the proposed diversion can be developed without unlawfully impairing existing appropriative or domestic water users with adequate wells.

SDCL 46-5-6:

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cfs for every 70 acres, or “the equivalent thereof.” The statute does provide that: “The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires. However, no annual volume may be greater than three acre-feet per acre delivered to the land.” Water Permit Application Number 8431-3 proposes an additional 1.89 cfs of water diversion rate authority, an additional 0.11 cfs pump rate from a pond used to irrigate, and to irrigate an additional 27 acres to what is authorized by Water Right Numbers 5315-3 and 6319-3. These values were established after on-site inspection of the irrigation system by a SD DENR staff member. This application would bring the as-built irrigation system into compliance with appropriative permitting. While the applicant did not state a specific reason for the request to apply water at a rate greater than 1 cfs per 70 acres, golf courses typically need to apply water quickly during set times to accommodate their customers and the soil types and drainage underlying the golf course. This reasoning has been accepted by the Water Management Board and the Water Rights Program in the past.

CONCLUSIONS:

1. Water Permit Application Number 8431-3 proposes an additional 1.89 cfs of water diversion rate authority from three existing wells completed into the Lower James Missouri aquifer, to divert water into two existing ponds for irrigation use. This application also seeks an additional 0.11 cfs pump rate from the southern pond and to irrigate an additional 27 acres to what is authorized by Water Right Numbers 5315-3 and 6319-3.
2. Water Permit Application Number 8431-3 combined with Water Right Numbers 5315-3 and 6319-3 will authorize a total appropriation of 3.67 cfs from three existing wells completed into the Lower James Missouri aquifer, to divert water into two existing ponds. This application will increase the total pump rate to 2.78 cfs from the southern pond and to increase the total irrigation to 127 acres.
3. Based on the observation well data and a hydrologic budget, there is a reasonable probability unappropriated water is available for this proposed appropriation.
4. There is a reasonable probability the diversion proposed by this application can be made without adversely impacting existing appropriative or domestic users.
5. Application No. 8431-3 has requested a diversion rate in excess of the statutory limit of one cfs per 70 acres. No reason for the request was provided, however it is typical for a golf course to apply water in this manner and that has been accepted in the past as a valid reason.



Blaise Hansen
SD DENR – Water Rights Program



Adam Mathiowetz
SD DENR-Water Rights Program

REFERENCES:

- Bugliosi, E.F. 1986. Water Resources of Yankton County, South Dakota. Water Resources Investigations Report 84-4241. U.S. Geological Survey, Huron, South Dakota.
- Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-water Resources in Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Lindgren, R.J. and Hansen, D.S. 1990. Water Resources of Hutchinson and Turner Counties, South Dakota. Water-Resources Investigations Report 90-4093. U.S. Geological Survey. Huron, South Dakota.
- Stonesifer, J.R. 2014. Report to the Chief Engineer Water Permit Application No. 7977-3. Dahlerup Family Trust April 25, 2014. SD DENR-Water Rights Program. Pierre, South Dakota.
- Water Rights. 1979-2019. "1979-2019 Irrigation Questionnaires": SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2020a. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2020b. Observation Well Files. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights. 2020c. Well Completion Reports. SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.
- Water Rights, 2020d. Yankton County Files, SD DENR-Water Rights Program, Joe Foss Building, Pierre, South Dakota.

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 6319-3

I have this day, October 8, 2019, made a thorough examination of the water use system constructed by Hillcrest Golf and Country Club, 2206 Mulberry, Yankton, SD 57078, holder of Permit No. 6319-3, bearing the priority of April 8, 2002, authorizing the diversion of 0.36 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for irrigation at the Hillcrest Golf and Country Club in Yankton County.

Inspection contact: Warren Mueller

A. Works used to divert the water:

Well No. 1:

- 1) Well Drilling Firm: Wetmore Drilling
- 2) No. of Wells 1
- 3) Depth(s) 118 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 12 inches
- 2) Length 78 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Diameter 12 inches
- 3) Length 40 feet
- 4) Static water level 36 feet

Pump:

- 1) Make Goulds (submersible)
- 2) Model 8RJLC
- 3) Capacity 400 GPM

Motor:

- 1) Make Franklin (submersible)
- 2) Model No. Unknown
- 3) Horsepower rating 7.5 hp

Well No. 2:

- 1) Well Drilling Firm: Wetmore Drilling
- 2) No. of Wells 1
- 3) Depth(s) 60 feet
- 4) Well log is available No

Casing:

- 1) Diameter Unknown
- 2) Length Unknown
- 3) Type Unknown

Screen:

- 1) Type Unknown
- 2) Diameter Unknown
- 3) Length Unknown
- 4) Static water level Unknown

Pump:

- 1) Make Western Land Roller
- 2) Model 8A (3 stage)
- 3) Capacity 250 GPM

Motor:

- 1) Make General Electric
- 2) Model No. Unknown
- 3) Horsepower rating 7.5 hp

Well No. 3:

- 1) Well Drilling Firm: Christensen Well & Irrigation, Inc.
- 2) No. of Wells 1
- 3) Depth(s) 86 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 26 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Diameter 16 inches
- 3) Length 60 feet
- 4) Static water level 25 feet

Pump:

- 1) Make Goulds
- 2) Model 10RJLC
- 3) Capacity 1,000 GPM

Motor:

- 1) Make Franklin
- 2) Model No. Unknown
- 3) Horsepower rating 20 hp

B. Works used to transport water to place of use:

- 1) Type PVC
- 2) Size Variable inches
- 3) Length Unknown feet

C. Works used to apply water to beneficial use:

- 1) Sprinkler Irrigation System

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by No (see page 4 for explanation)
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period NA
- 3) Exceptions to compliance are: The three well pumps have a total capability of 3.67 cfs instead of 1.78 cfs and the irrigation pump system is rated for 2.78 cfs instead of 2.69 cfs. (see page 4 for explanation)

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:

Well No. 1 is 190 feet west and 2,180 feet north of the southeast corner of Section 6-T93N-R55W (Latitude 42.900280, Longitude -97.378010 – NE1/4 of the SE1/4).

Well No. 2 is 1,760 feet west and 1,790 feet north of the southeast corner of Section 6-T93N-R55W (Latitude 42.899200, Longitude -97.383700 – NW1/4 of the SE1/4).

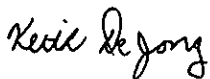
Well No. 3 is 1,040 feet west and 1,160 feet north of the southeast corner of Section 6-T93N-R55W (Latitude 42.897540, Longitude -97.381160 – SE1/4 of the SE1/4).

- 2 The works are capable of diverting and conveying to the place of use 3.67 cu. ft. per second of water which is to be used for irrigation at Hillcrest Golf and Country Club. Water has been put to beneficial use to the maximum extent at the facility in the SE1/4 of the Section 6-T93N-R55W and in the N1/2 of the NE1/4 of Section 7-T93N-R55W
- 3 All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: Well No. 1 and Well No. 2 are licensed under Water Right No. 5315-3. Well No. 3 was added under Water Right No. 6319-3. The information above updates the well information from Water Right No. 5315-3 since the pumps and motors have been changed out since that water right was licensed. Water Right No. 6319-3 and Water Right No. 5315-3 could be combined into one license. The original well in the SW1/4 of the SW1/4 of Sec 6, T93N-R55W that was licensed under Water Right No. 512-3 has been plugged.

Well No. 2 is still capable of pumping water, but Pond A leaks water as fast as water can be pumped into it. Because of this, Well No. 2 is not currently being used. Well No. 1 and Well No. 3 both pump directly into Pond B. If the pump station goes down for maintenance, Well No. 1 can pump directly into the irrigation system. The pumping system in the pump house pulls water directly from Pond B and feeds the irrigation system. The pumping system has a VFD and the flow rate is set at 1,100 gpm. The system is rated for 1,250 gpm (2.78 cfs). Water Right No. 6319-3 allowed 2.67 cfs to be pumped out of the ponds and through the irrigation system.

Also, I visited with Mr. Muller about the areas being irrigated and he stated that all of their property except for the ponds is irrigated. Based on that information, I came up with 127 acres of irrigation.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: October 23, 2019

Note: Permit No. 8431-3 was obtained to add the diversion authority, additional pump rate from the south pond and the increase in acres to reflect the system as developed.

The applicable portions of Nos. 5315-3 and 6319-3 will be incorporated into Water License No. 8431-3.

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8431-3**

(1) Hillcrest Golf and Country Club, 2206 Mulberry St., Yankton SD 57078 made Application No. 8431-3, June 15, 2020 for a water permit to divert an additional 1.89 cubic feet of water per second (cfs) from ground water (three wells – Lower James Missouri Aquifer) and an additional application rate of 0.11 cfs from the southern pond, all located in Yankton County, South Dakota to irrigate an additional 27 acres. Permit No. 8431-3, with a priority date of June 15, 2020 was approved September 14, 2020 and issued to the applicant for diversion of water with construction of the described water supply system and the application of water to beneficial use completed.

Water Right No. 5315-3 (Inc. 512-3), with priority dates of September 8, 1958 and April 7, 1989, authorizes 1.42 cfs to irrigate 100 acres with 15.8 acre feet of storage.

Water Permit No. 6319-3, with a priority date of April 8, 2002, appropriated an additional 0.36 cfs and changed the location of the diversion points authorized under No. 5315-3. No. 6319-3 authorized diversion of 1.78 cfs from the wells into the south pond with a rate of 2.67 cfs applied to the acreage.

An investigation of the water use system found additional diversion rate authority, additional pump rate from the pond and additional acres being irrigated. Water Permit No. 8431-3 was obtained for the additional diversion rate and acreage to reflect the system as developed.

The applicable portions of Water Right No. 5315-3 and Water Right No. 6319-3 are incorporated into this water license. Priority dates are as follows:

September 8, 1958 (512-3)	April 7, 1989 (5315-3)	April 8, 2002 (6319-3)	June 15, 2020 (8431-3)
0.67 cfs (from wells)	0.75 cfs (from wells)	0.36 cfs (from wells)	1.89 cfs (from wells)
		2.67 cfs (pond to acres)	0.11 cfs (pond to acres)
60 acres	40 acres		27 acres

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 3.67 cubic feet of water per second from three wells with diversion from the south pond to the irrigated acres at a rate of 2.78 cfs for beneficial use.

The three wells are located as follows:

- Well No. 1: 190' W and 2,180' N of the SE corner of Section 6, T93N, R55W (NE ¼ SE ¼)
Latitude 42.900280, Longitude -97.378010
- Well No. 2: 1,760' W and 1,790' N of the SE corner of Section 6, T93N, R55W (NW ¼ SE ¼)
Latitude 42.899200, Longitude -97.383700
- Well No. 3: 1,040' W and 1,160' N of the SE corner of Section 6, T93N, R55W (SE ¼ SE ¼)
Latitude 42.897540, Longitude -97.381160

The ponds are located in the NW ¼ SE ¼ and SE ¼ SE ¼ of Section 6, T93N, R55W. Water is pumped from the pond in the SE ¼ SE ¼ to irrigate the golf course.

Continued

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate 127 acres of the golf course located in the SE ¼ Section 6 & N ½ NE ¼ Section 7, all in T93N, R55W.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Hillcrest Golf and Country Club, 2206 Mulberry St., Yankton SD 57078 the holder and/or owner of Incorporated Water Right No. 8431-3 is issued a license to appropriate water, the right to divert 3.67 cubic feet of water per second from ground water (three wells – Lower James Missouri Aquifer) and divert at a rate of 2.78 cfs from the southern pond to irrigate 127 acres of the golf course. Priority dates of September 8, 1958, April 7, 1989, April 8, 2002 and June 15, 2020 are retained.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8431-3 and subject to the following qualifications:

- The wells approved under this Water Right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this 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.
- Any well that is abandoned must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Nos. 8431-3, 5315-3 and 6319-3 combined, authorize a maximum diversion rate of 2.78 cfs from the pond for irrigation of 127 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

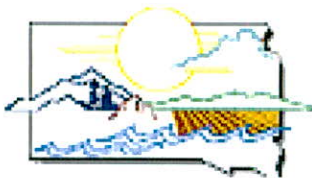
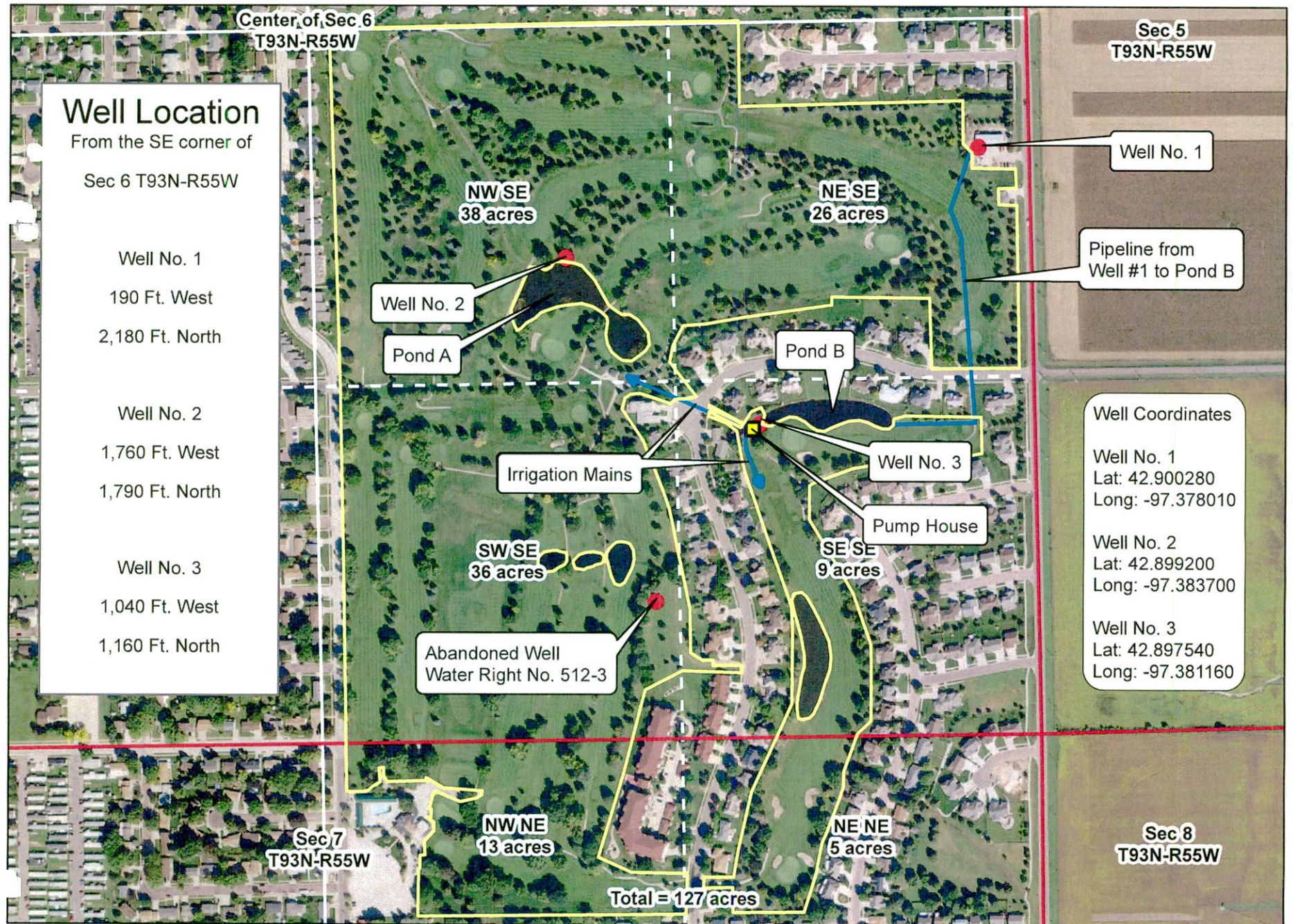
Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

OCT 21 2020

date



Water Right No. 6319-3



0 165 330 660 990 1,320
Feet
SCALE



Keith DeJong

Keith DeJong, PE
Staff Engineer
October 23, 2019



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

OCT 21 2020

Hillcrest Golf & Country Club
Waren Muller
2206 Mulberry St
Yankton SD 57078

Dear Mr. Muller:

Enclosed are Water Permit and Water License No. 8431-3. These are the final water right documents completing your process of obtaining a Water Right.

For your information SDCL 46-6-27 requires that if in the future the owner drills a replacement well and has no plan to use the old existing well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures

Note: The applicable portions of Water Right No. 5315-3 and Water Right No. 6319-3 are incorporated into this water license.



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

January 22, 2021

NOTICE

TO: HILLCREST GOLF AND COUNTRY CLUB, WARREN MULLER, MGR, 2206 MULBERRY ST, YANKTON, SD 57078 0327

FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2020 Irrigation Questionnaire(s)

Our records indicate your 2020 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 8431-3. The request for the Questionnaire was dated October 23, 2020. The Water Management Board has directed that owners of water permits who have not submitted the 2020 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 8431-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **Wednesday, March 3, 2021 at 10:00 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 8431-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 3, 2021** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. **If you prefer, you can complete the questionnaire online at the following link: <https://denr.sd.gov/iq> using this password: CMUEXS**

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 8, 2021

8431-3

Warren Muller
Hillcrest Golf & Country Club
2206 Mulberry St
Yankton SD 57078

Dear Mr. Muller:

I am writing to acknowledge receipt of your 2020 irrigation questionnaire.

You may disregard the January 22, 2021, "Notice" concerning reporting requirements for Water Right No. 8431-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Genny McMath".

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us