

WATER PERMIT NO. 8354-3

Name of Applicant: Two Rivers Inc.

Address: 150 S Oake Tree Lane, Dakota Dunes SD 57049

Phone: 712-253-9124

Amount of Water Claimed: 1.11 cfs

Total Acres: 30

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Union

Type of Waste Disposal System:

Location:

PRIORITY

Date Received: 4-30-18

Application/License Fee: \$ 700

Corrected Application Received:

Period of Annual Use: March 15 – Nov 15

Remarks: Requesting 3 AF for turf irrigation

Diversion Point: NW 1/4 NW 1/4 Sec 26-T89N-R48W

Land to be Irrigated: W 1/2 and Gov't Lot 1 and 2
Sec 26 and Gov't Lot 3 Sec 23; all in T89N-R48W

			23		
		⊗			
			26		

Depth of Well: 120 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 4-30-18

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 8354-3**

Date of first receipt of application April 30, 2018.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8354-3 to Two Rivers Inc., 150 S Oak Tree Lane, Dakota Dunes SD 57049 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. 8354-3 appropriates 1.11 cubic feet of water per second (cfs) from one well to be completed into the Missouri:Elk Point Aquifer (120 feet deep) located in the NW 1/4 NW 1/4 Section 26 for irrigation of 30 acres of golf course located in the W 1/2 NW 1/4, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. This site is located on the east side of Dakota Dunes SD.
2. The amount of the appropriation may not exceed 3 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 15 – November 15.
3. The date from which applicant may claim right is April 30, 2018.
4. The date of approval of Permit No. 8354-3 is July 23, 2018.
5. One-fifth of the construction is to be completed on or before January 23, 2021.
6. All construction is to be completed on or before July 23, 2023.
7. Water is to be put to beneficial use on or before July 23, 2027.
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 Permit No. 8354-3 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 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. 8354-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
 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. 8354-3 authorizes a maximum diversion rate of 1.11 cfs for the irrigation of 30 acres ~~with an annual volume not to exceed 3 acre-feet of water per acre per year.~~
-
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

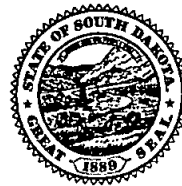
WATER MANAGEMENT BOARD

By: _____

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

AUG 06 2018

date



FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8354-3</u>	(office use only) Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>	
	Newspaper <u>Leader-Courier</u>	
	<u>Press & Dakotan</u>	

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APR 30 2018
WATER RIGHTS
PROGRAM

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 Two Rivers Inc

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

Mailing Address 150 S Oak Tree Lane Dakota Dunes ☒ SD ☒ 57049
(Address) (City) (State) (Zip Code)

Phone 605 232-3241 Mobile 712 253-9124 Email tworiversgc@cableone.net

2. Amount of water claimed 1.11 *CFS or 500 **GPM - ***AF Total Acreage 30
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Ground Water

4. Location of point of diversion 1 Well in NW1/4 NW1/4 Section 26-TO89N-R48W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
County Union ☒

5. County or counties where water will be used Union

6. Annual period during which water is to be used March 15 to November 15

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
NW1/4 NW1/4 Sec 26 TO89N R48W	8		
SW1/4 NW1/4 Sec 26 TO89N R48W	4		
Govt Lot 3 Sec 23 TO89N R48W	10		
Govt Lot 1,2 Sec 26 TO89N R48W	8		

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

Develop an addition to irrigation system as authorized by current permit 2011-3.

We request 3AF per acre for turf irrigation.

I, Roll Slater Manager
Name of Person Title (if applicable)
Head Professional, the applicant, certify under

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.

2015-10

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)

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 1 Have test holes been drilled ☐ Yes ☒ No Drilled by Will do so later at development
(if yes, please provide copies of logs)b) If existing wells, how many 0 Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 120 Depth to Top of Water Bearing Material ? Depth to Water from Surface ?d) Distance to nearest ~~domestic~~ well on applicant's property 2,000 feet est. Property owned by others unknown**2. Wastewater Disposal System Information - NA**

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 - NA

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams - NA

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)

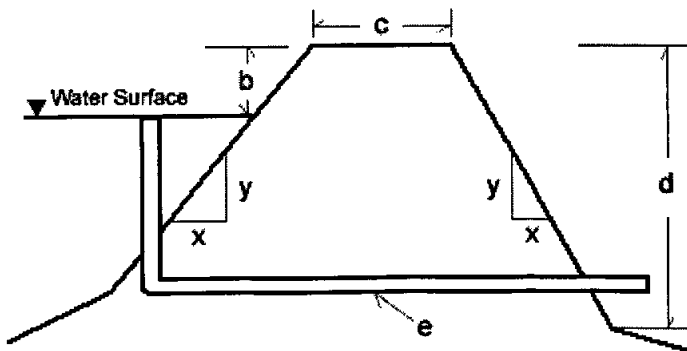
Upstream _____

Downstream _____

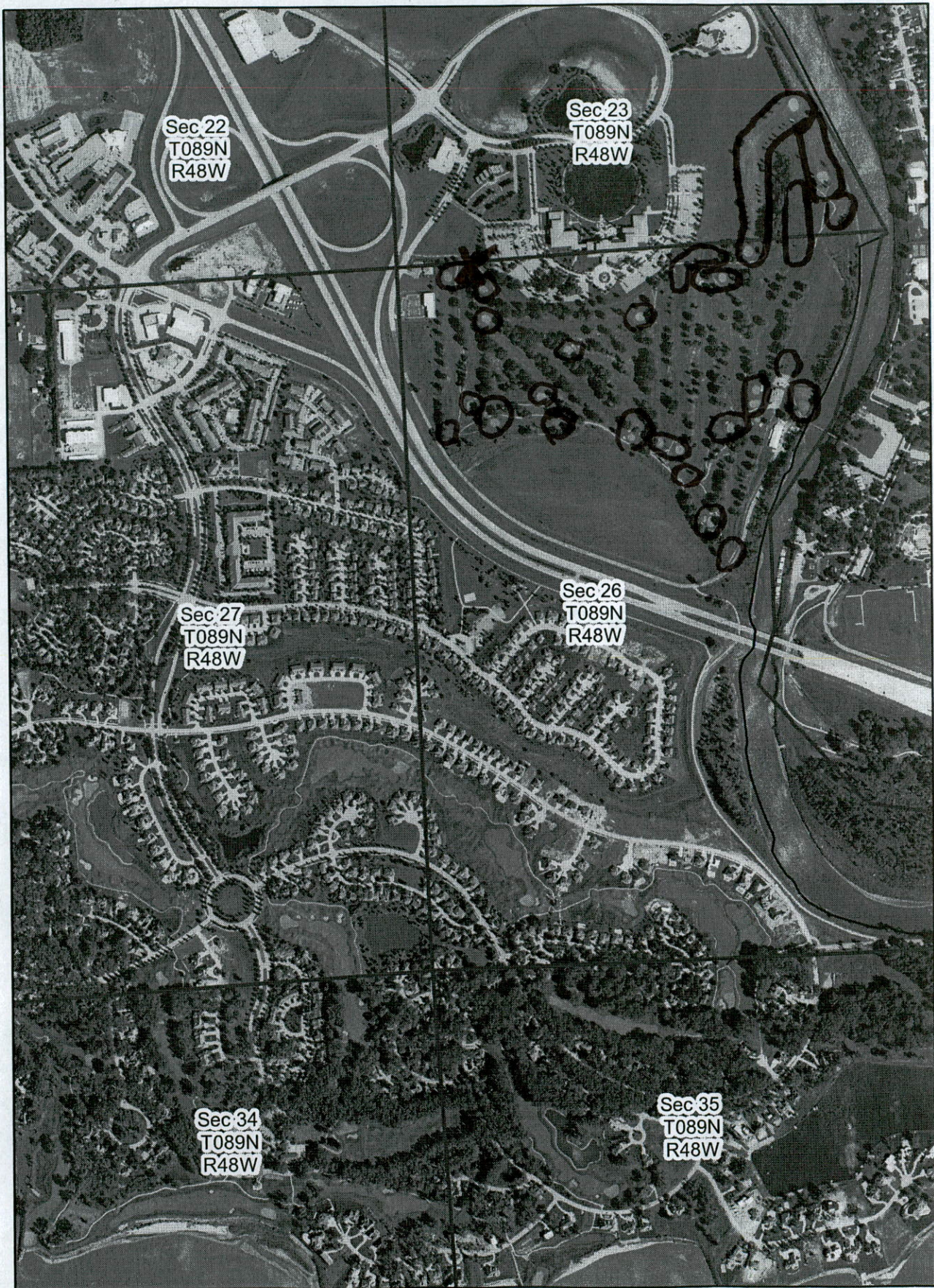
h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres

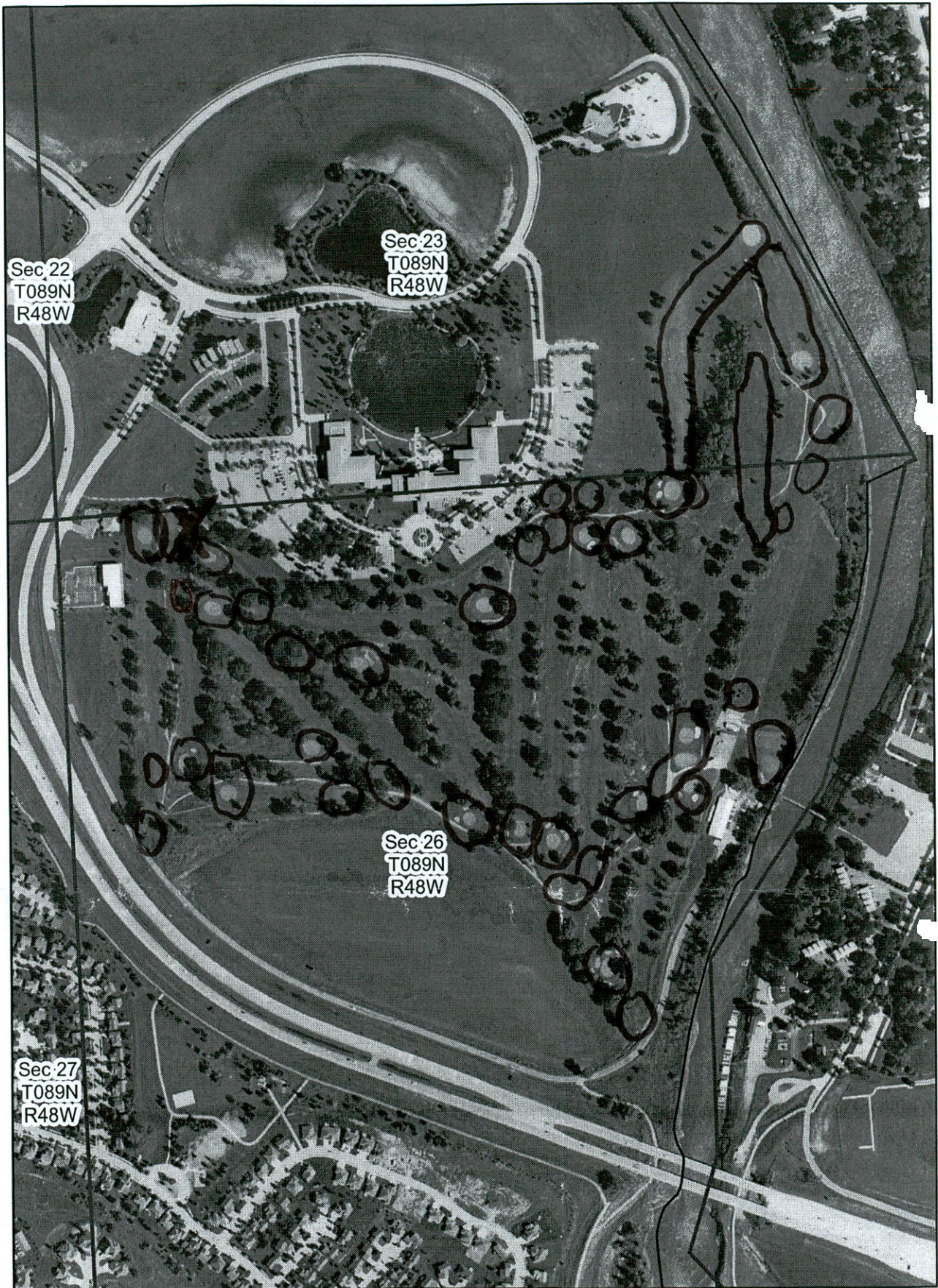


2 RIVERS GOLF WATER PERMIT APPLICATION

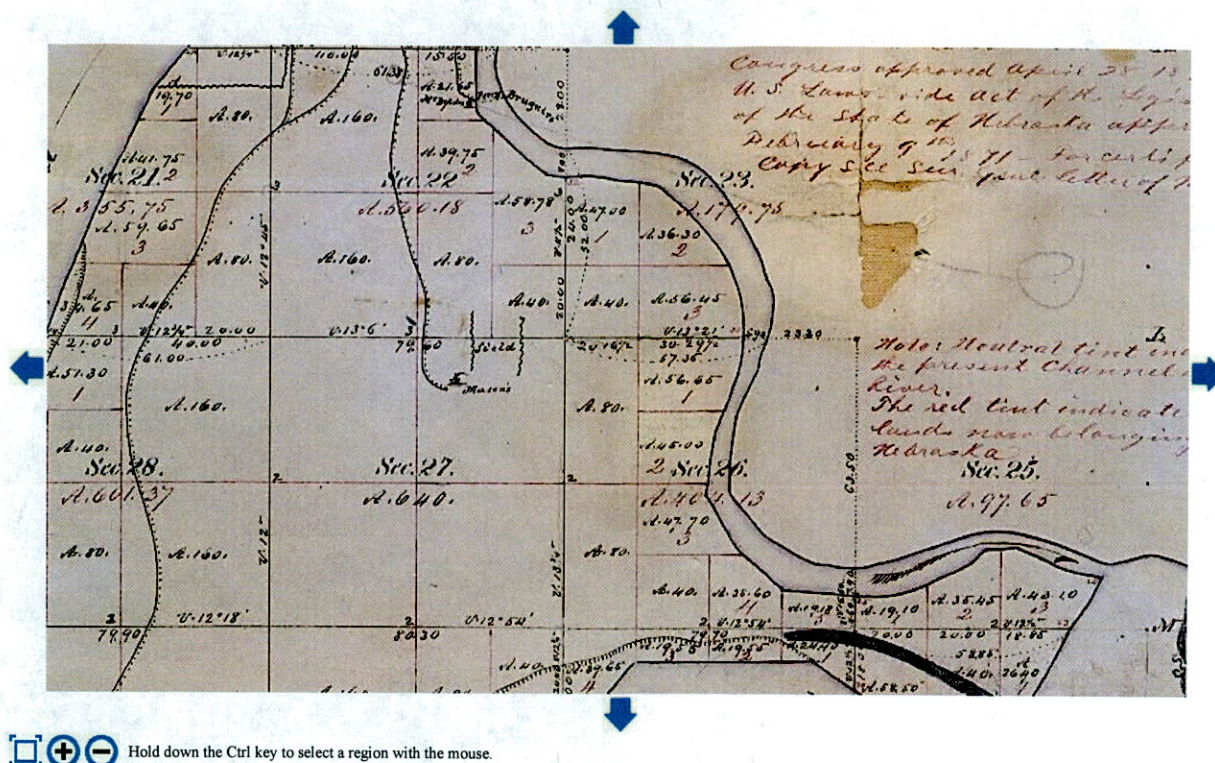


1,200 600 0 1,200 Feet

2 RIVERS GOLF WATER PERMIT APPLICATION



720 360 0 720 Feet





Overview



Legend

- ☐ Corporate Limits
- ☐ Political Township
- ☐ Parcels
- Roads
 - Road
 - CO RD
 - State Highway
 - Interstate

Parcel ID	23.DD.26.2000	Alternate ID	n/a	Owner Address	TWO RIVERS INC
Sec/Twp/Rng	26-89-48	Class	NACC		335 SIOUX POINT RD STE 100
Property Address		Acreage	n/a		DAKOTA DUNES SD 57049
District	23618				
Brief Tax Description	NW1/4NW1/4 LESS I-29 & LESS H-28 LESS TR1 & LOTS 2,3 & 4 TWO RIVERS 1ST ADD LESS PART OF LOT 1 TWO RIVERS 4TH ADD 23.96A				
	(Note: Not to be used on legal documents)				

Date created: 4/16/2018
Last Data Uploaded: 4/16/2018 1:17:39 AM

 Developed by
The Schneider Corporation



BeaconTM Union County, SD



Overview



Legend

- Corporate Limits
- Political Township
- Parcels
- Roads**
 - Road
 - CO RD
 - State Highway
 - Interstate

Parcel ID	23.DD.26.2010	Alternate ID	n/a	Owner Address	DAKOTA DUNES DEVEL CO
Sec/Twp/Rng	26-89-48	Class	AGCC		335 SIOUX POINT RD #100
Property Address		Acreage	15.11		DAKOTA DUNES SD 57049
District	23618				
Brief Tax Description	SW1/4NW1/4 LESS I-29 LESS TR 1 & LOTS 3 & 4 TWO RIVERS 1ST ADD LESS 3.994A FOR PRAIRIE 3RD ADD LESS .061A FOR PRAIRIE 4TH ADD TR 1 LESS (Note: Not to be used on legal documents)				

Date created: 4/16/2018
Last Data Uploaded: 4/16/2018 1:17:39 AM



Developed by
The Schneider Corporation



Overview

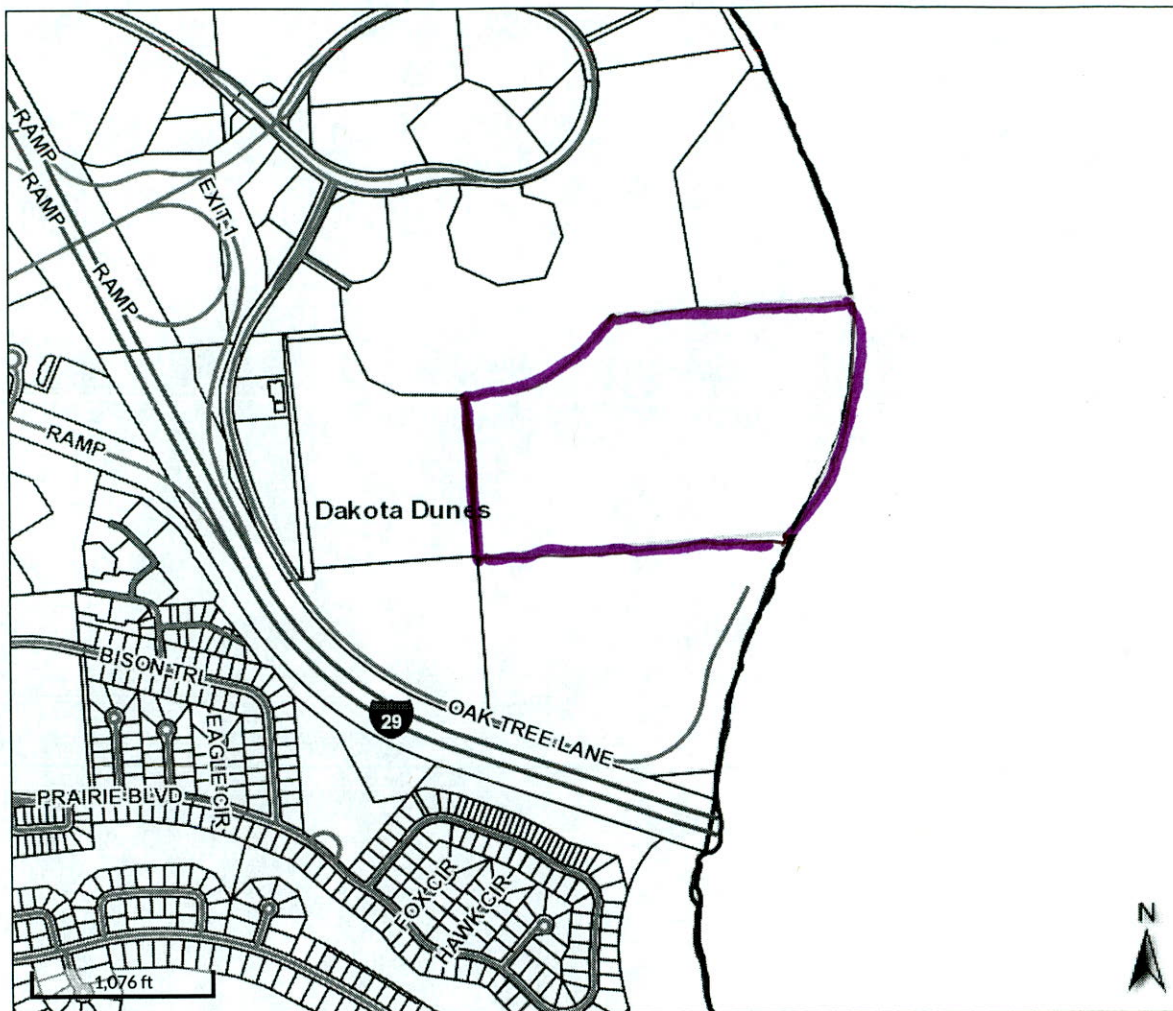


Legend

-  Corporate Limits
-  Political Township
-  Parcels
- Roads**
 -  Road
 -  CO RD
 -  State Highway
 -  Interstate

Parcel ID	23.DD.23.3020	Alternate ID	n/a	Owner Address	TWO RIVERS INC
Sec/Twp/Rng	23-89-48	Class	AGCC		335 SIOUX POINT RD STE 100
Property Address		Acreage	19.88		DAKOTA DUNES SD 57049
District	23618				
Brief Tax Description	GOV'T LOT 3 DD PLAT LESS PRT LOT 1 & TR A & TR 1 TWO RIVERS BUSI CENTER 4TH ADD LESS 6.623A FOR PRT TR 1 & LOT 1 TR BUSI CENTER 8TH ADD (Note: Not to be used on legal documents)				

Date created: 4/16/2018
Last Data Uploaded: 4/16/2018 1:17:39 AM



Overview



Legend

- Corporate Limits
- Political Township
- Parcels
- Roads**
 - Road
 - CO RD
 - State Highway
 - Interstate

Parcel ID	23.DD.26.2015	Alternate ID	n/a	Owner Address	TWO RIVERS INC
Sec/Twp/Rng	26-89-48	Class	NACC		335 SIOUX POINT RD STE 100
Property Address		Acreage	n/a		DAKOTA DUNES SD 57049
District	23618				
Brief Tax Description	GOV'T LOT 1 DD PLAT LESS PART OF LOT 1 TWO RIVERS BUSINESS CENTER 4TH ADD 56.25A				
	(Note: Not to be used on legal documents)				

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Overview



Legend

-  Corporate Limits
-  Political Township
-  Parcels
- Roads**
 -  Road
 -  CO RD
 -  State Highway
 -  Interstate

Parcel ID	23.DD.26.2020	Alternate ID	n/a	Owner Address	TWO RIVERS INC
Sec/Twp/Rng	26-89-48	Class	AGCC		335 SIOUX POINT RD STE 100
Property Address		Acreage	40.65		DAKOTA DUNES SD 57049
District	23618				
Brief Tax Description	GOV'T LOT 2 DD PLAT LESS .068A FOR PART OF PR 11TH ADD (40.652A) (Note: Not to be used on legal documents)				

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WATER RIGHTS
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April 17, 2018

South Dakota DENR
c/o Eric Gronlund
Foss Building
523 E Capitol
Pierre, SD 57532

Mr, Gronlund,

Enclosed is an application for a water permit for irrigation at Two Rivers Golf Club in Dakota Dunes, SD. We plan to develop an addition to our existing permit 2011-3 and request 3AF per acre over 30 acres on our property.

Please contact me for any questions, corrections or revisions to the application.

Thank you for your assistance.

Sincerely,

A handwritten signature in black ink that reads "Rodd Slater". The signature is written in a cursive, flowing style.

Rodd Slater
Two Rivers Golf Club
605 232-3241

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date April 30, 20 18

RECEIVED OF Berkshire Hathaway Energy Two Rivers Inc. PO Box 3006 Sioux City, IA 51102

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

Fee for Application for Permit No. <u>8354-3</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. <u>8354-3</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	700 00

No. **08664**

By

Jeanne Goodman
Chief Engineer

1977



530462124

B0048-2642 12/15/2017 11:08AM Rec'd by SD SOS

ANNUAL REPORT

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

Domestic Business Corporation
SDCL 59-11-24, 24.1

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

Filing Fee: \$50

Total Fee: \$50

2018
FILING YEAR

1. Business ID and Name:

DB040922
BUSINESS ID

TWO RIVERS INC.
BUSINESS NAME

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

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

Actual Street Address

666 GRAND AVE
DES MOINES, IA 50309-2506

Mailing Address

666 GRAND AVE
DES MOINES, IA 50309-2506

4. The South Dakota Registered Agent's Name:

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

(b) The South Dakota Commercial Registered Agent's name & CRA#

CRA: **C T CORPORATION SYSTEM (0000002)**

Actual Street Address in this State

319 S COTEAU ST
PIERRE, SD 57501-3187

Mailing Address in this State

5. The names and business addresses of its principal officers.

Title	Name	Address
President	Donald L Fuxa	370 W Anchor Drive, Dakota Dunes, SD 57049
Vice President	Steven R Evans	666 Grand Ave., Ste. 500, Des Moines, IA 50309
Vice President	Calvin D. Haack	666 Grand Ave., Ste. 500, Des Moines, IA 50309
Treasurer	James C Galt	666 Grand Ave., Ste. 500, Des Moines, IA 50309
Secretary	Paul J Leighton	666 Grand Ave., Ste. 500, Des Moines, IA 50309

6. The names and business addresses of its directors (governors).

Name	Address
Calvin D Haack	666 Grand Ave., Ste. 500, Des Moines, IA

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



No person may execute this report knowing it is false in any material respect. Any violation may be subject to a civil and/or criminal penalty (SDCL 47-1A-129; 22-39-36).

12/15/2017

Dated

Email (Optional)

Paul J Leighton

Signature of an Authorized Person

Paul J Leighton

Printed Name

B0048-2643 12/15/2017 11:08AM Rec'd by SD SOS



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8354-3, Two Rivers Inc.**

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. 8354-3, Two Rivers Inc., c/o Rodd Slater, Manager, 150 S Oak Tree Lane, Dakota Dunes SD 57049.

The Chief Engineer is recommending APPROVAL of Application No. 8354-3 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 Permit No. 8354-3 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 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. 8354-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
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. 8354-3 authorizes a maximum diversion rate of 1.11 cfs for the irrigation of 65 acres with an annual volume not to exceed 3 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.

Jeanne Goodman, Chief Engineer
July 5, 2018

REPORT TO THE CHIEF ENGINEER

Water Permit Application No. 8354-3

Two Rivers Inc.

June 25, 2018

Water Permit Application No. 8354-3 proposes to appropriate water for irrigation of 30 acres at a maximum diversion rate of 1.11 cubic feet per second (cfs) from one well. The proposed well is to be completed into the Missouri: Elk Point aquifer with an approximate depth of 120 feet and located in NW ¼ NW ¼ Section 26 T89N-R48W. The acres to be irrigated are located in the W ½ NW ¼, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23, T89N-R48W. This application is located on the east side of Dakota Dunes, SD in Union County. The applicant is requesting a diversion rate greater than the statutory limit and to apply up to 3 acre-feet of water per acre annually.

The applicant also holds Water Right No. 2011-3 authorizing the withdrawal of water from the Missouri: Elk Point aquifer at a maximum diversion rate of 1.31 cfs for irrigation of 95 acres. Water Right No. 2011-3 is for irrigation of the fairway, and this application is for irrigation of the tees and greens. The tees and greens were previously irrigated from water supplied by the Dakota Dunes Community Improvement District. The existing irrigation system for Water Right No. 2011-3 will remain separate from the irrigation system proposed by this application.

AQUIFER: Missouri: Elk Point (M:EP)

HYDROGEOLOGY

The Elk Point management unit of the Missouri aquifer consists of unconsolidated glacial outwash deposits composed of materials ranging from fine sand to very coarse gravel (Niehus, 1994; Stephens, 1967). The Missouri: Elk Point aquifer in South Dakota is located in Yankton, Clay, and Union Counties, underlying the flood plains of the Missouri and Big Sioux Rivers. Hedges et al. (1982) estimated the areal extent of the aquifer to be 219,100 acres, with 3,287,100 acre-feet of recoverable water in storage. The movement of groundwater within the aquifer is generally from the northwest to the southeast, and towards the Missouri River (Stephens, 1967). The Missouri: Elk Point aquifer is hydraulically connected to the Lower Vermillion Missouri and Lower James Missouri aquifers, and the Missouri, Vermillion, and Big Sioux Rivers (Niehus, 1994; Stephens, 1967).

Hydrologically, the Elk Point management unit can be found under both confined and unconfined conditions. Near the edge of the floodplain, the Missouri: Elk Point is overlain by relatively impermeable glacial till (Niehus, 1994; Stephens, 1967). A nearby test hole shows that the aquifer at this location is comprised of sand and medium gravel from approximately 78 to 130 feet below ground surface, overlain with layers of sand and clay (Water Rights, 2018b). Nearby wells show the depth to water being approximately 20 feet. The glacial outwash deposits in this area are variable, so the area surrounding a well may be technically confined by being overlain by a layer of clay, however the clay deposit may not be laterally extensive and the aquifer generally behaves as an unconfined aquifer.

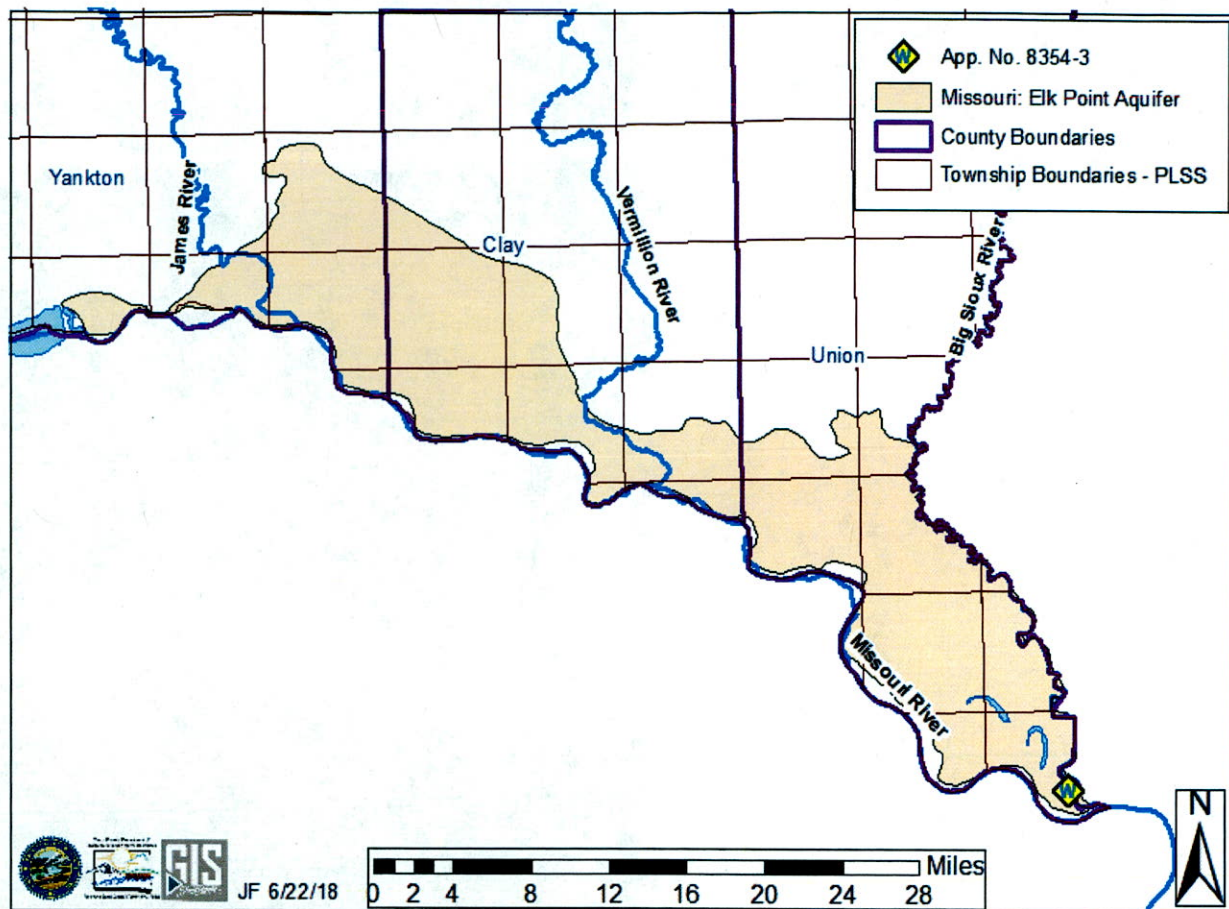


Figure 1. Map showing the location of the proposed diversion and Missouri: Elk Point aquifer boundaries as shown from Hedges et al. (1982).

South Dakota Codified Law 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the 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 the availability of unappropriated water and existing rights within the Missouri: Elk Point aquifer.

WATER AVAILABILITY

The probability of unappropriated water 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 than or stratigraphically lower than the Greenhorn Formation and a water distribution system has applied for a permit, the Board need not take into consideration the balance of aquifer recharge and withdrawal. Here, the water source is not older or lower than the Greenhorn Formation and a water distribution system is not involved. Therefore, the balance of withdrawal and recharge must be considered.

Hydrologic Budget

Recharge

Recharge to the Missouri: Elk Point aquifer occurs through infiltration of precipitation, inflow from the Lower Vermillion-Missouri aquifer, leakage from the Dakota aquifer, and inflow from surface water (Bugliosi, 1986; Niehus, 1994; Stephens, 1967). From analysis of data from 20 observation wells, Hedges et al. (1985) estimated the recharge to the unconfined portions of the Missouri: Elk Point aquifer to be 3.8 inches per year. The areal extent of the Missouri: Elk Point aquifer is 219,100 acres (Hedges et al, 1982), resulting in an estimated recharge to the aquifer of approximately 69,382 ac-ft/yr. By using observation well data, the data represents both withdrawals from and recharge to the aquifer, as they occur simultaneously. When the recharge is greater than discharge, this method produces a lower than actual recharge rate. The same holds true when discharge is greater than recharge, the calculated discharge rate is lower than the actual discharge rate.

The wells for the Lewis and Clark Rural Water System induce recharge from the Missouri River, and Stonesifer (2013) estimated that this amount is at least 50% of their total pumpage. Assuming all of their wells are similar in location with regards to the Missouri River, and the Lewis and Clark RWS uses their full appropriation (current permits and reserved future uses), the Missouri: Elk Point aquifer would gain at least 22,582 ac-ft/yr through induced recharge. Other water rights/permits within the Missouri: Elk Point aquifer may also induce recharge from the Missouri, Vermillion, James, or Big Sioux Rivers, although this amount has not been quantified.

Combining the estimated recharge of Hedges et al (1985), and the induced recharge for the current appropriations of the Lewis and Clark Rural Water System, the estimated average annual recharge to the Missouri: Elk Point aquifer is approximately 92,000 ac-ft/yr.

Discharge

Discharge from the Missouri: Elk Point aquifer occurs through well withdrawals, evapotranspiration from areas where the aquifer is near the land surface, and outflow to the Missouri and Big Sioux Rivers (Bugliosi, 1986; Niehus, 1994; Stephens, 1967). Currently, there are 617 Water Rights/Permits appropriating water from the Missouri: Elk Point aquifer including future use permits (Water Rights, 2018a). Table 1 shows a summary of non-irrigation Water Rights/Permits with their appropriation and estimated annual expected use. The amount of water that can be expected to be withdrawn can be estimated by assuming water rights/permits limited by an annual volume will pump the entire volume appropriated annually, water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time, and future use permits will be fully developed.

Table 1: Summary and expected use of non-irrigation water rights/permits including future use permits (Water Rights, 2018a)

Use Type	No. of Water Rights/Permits	Appropriation (ac-ft)	Appropriation (cfs)	Expected Use (ac-ft)
RWS	4	45,165		45,165.00
SHD	2		0.199	86.50
REC	1	393.3		393.30
COM	10	637	1.539	1,305.96
DOM	2		2.780	1,208.38
IRR*	1	2		2
FWP	4		9.430	4,098.94
IND	5		0.878	381.64
MUN	12	9,111	11.662	14,180.12
Total	41	55,308	26.49	66,821.04
RWS = Rural Water Supply, SHD = Suburban Housing Development, REC = Recreation, COM = Commercial, DOM = Domestic, IRR*=Irrigation (not required to submit irrigation questionnaire), FWP = Fish & Wildlife Propagation, IND = Industrial, MUN =Municipal				

Several of the non-irrigation water rights/permits are required to report their annual water use from the Missouri: Elk Point aquifer. Two of these are recent permits and their systems are considered to be in development. The remaining water rights/permits and their reported water usage from 2006 to 2017 are shown in Table 2.

Table 2: Reported annual water use in acre-feet from non-irrigation water rights/permits for the years 2006 to 2017 (Water Rights, 2018a)

	Clay RWS	Lewis & Clark RWS	City of Vermillion
	5998A-3, 7388-3	6736-3, 7207-3	147-3, 6236-3
2006	170		1,252
2007	217		1,344
2008	213		1,199
2009	215		1,140
2010	183		1,071
2011	137	92	1,127
2012	525	3,836	1,317
2013	301	9,368	1,183
2014	307	11,532	1,121
2015	278	15,591	1,161
2016	231	17,091	1,175
2017	276	18,051	1,215
Max	525	18,051	1,344
Min	137	92	1,071
Average	254.4	10,794.4	1,192

The reported usage for these non-irrigation permits shows that the usage for the City of Vermillion has remained steady over these years. Water Right No. 147-3 has a diversion rate of 2.66 cfs and Water Right No. 6236-3 is limited to an annual volume of 1,161 ac-ft. Combined, these two water rights are estimated to use 2,315 ac-ft/yr, however the average actual reported usage is 1,192 ac-ft/yr. The Clay RWS added Water Permit No. 7388-3 to their system in 2012, so the expected usage from their permits is greater than the average shown. The Lewis & Clark RWS is still under development and the usage will continue to grow. Using the average actual reported use from the City of Vermillion, instead of the appropriated amount, reduces the expected use from non-irrigation water rights/permits by 1,123 ac-ft/yr to 65,698.84 ac-ft/yr.

There are a number of domestic wells on file that withdraw water from the Missouri: Elk Point aquifer, however the magnitude of their withdrawals is small, and since the introduction of rural water systems, many of these wells may no longer be in use (Water Rights, 2018b). The annual quantity of water withdrawn for domestic uses is considered to be negligible to the hydrologic budget of the aquifer.

Irrigation data from 2016 shows that there were 566 water rights/permits that were permitted for irrigation (Water Rights, 2018d). These water rights/permits appropriated 190,934.28 acre-ft of water in 2016, however the actual usage is much less. Farmer (2018) analyzed the irrigation data from 1979 to 2016, and determined that from 1979 to 2005, the number of acres permitted for irrigation in the Missouri: Elk Point aquifer remained steady. Figure 2 shows the acres permitted for irrigation from 1979 to 2016 and the yearly total reported pumpage for the irrigation permits. After 2006, for a number of reasons, there was an increase in the number of applications for permits, and that increase in permits also adjusted the long term ratio of constructed to unbuilt irrigation systems. For estimating usage from irrigation water rights/permits, the usage from 1979 to 2005 was used. Farmer (2018) calculated that the average application rate on all acres permitted for irrigation is 0.35 ft (a little less than 4.2 inches) from 1979 to 2005.

In 2016, there was a total of 80,279.54 acres permitted for irrigation. Between the 2016 irrigation season and June 2018, a total of 12 permits for irrigation have been approved with a total of 979 permitted acres. The total permitted acres for irrigation is 81,358.54 acres. Applying the average application rate of 0.35 ft on the permitted acres results in an estimated average annual use for irrigation purposes of 28,475 acre-feet per year. This application is for the irrigation of turf, which typically requires more water to maintain the turf than the average irrigation application rate. For the purposes of this application, the estimated average annual use is the requested appropriation of 3 acre-ft of water per acre over 30 acres, a total of 90 acre-ft/yr.

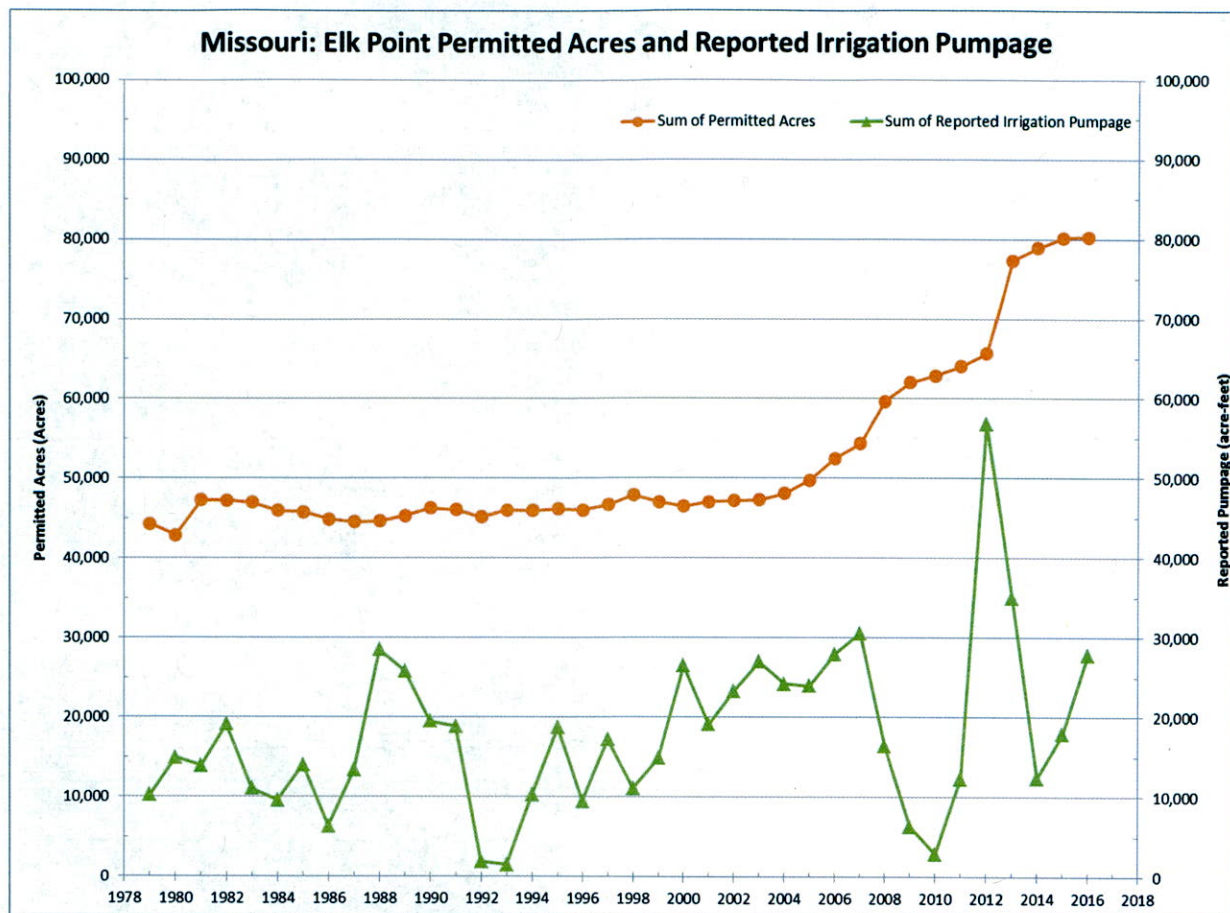


Figure 2: Acres permitted for irrigation and reported irrigation pumpage (taken from Farmer, 2018)

Hydrologic Budget

The estimated withdrawals from the Missouri: Elk Point aquifer are 65,698.84 ac-ft/yr from non-irrigation users, and 28,475 ac-ft/yr from irrigation. Including an estimated 90 ac-ft/yr from this application, and an estimated 22.75 ac-ft/yr from a pending application, the estimated average annual withdrawal from the Missouri: Elk Point aquifer is 94,286.59 ac-ft/yr.

The estimated annual recharge to the Missouri: Elk Point aquifer is approximately 92,000 ac-ft/yr. This estimated annual recharge does not include the recharge induced by well withdrawals aside from Lewis and Clark RWS, the actual recharge is likely to be greater than 92,000 ac-ft/yr. The estimated annual withdrawals equate to roughly three percent of the available water in storage. Due to the relatively small development of this large resource and the ability to induce recharge to the aquifer from nearby bodies of surface water, there is a reasonable probability there is unappropriated water available from the Missouri: Elk Point aquifer for the proposed appropriation.

Observation Well Data

In determining the availability of unappropriated water for a permit application Administrative Rule 74:02:05:07 requires the Water Management Board to rely on 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 annual recharge.

The Water Rights Program monitors 37 observation wells completed in the Missouri: Elk Point aquifer (Water Rights, 2018c). The nearest observation well is UN-78C, located approximately 1.5 miles northwest of the proposed well location. As shown in Figure 3, the location of this application is within a reasonable distance of several other observation wells. By using these other observation wells in this analysis, an idea of how the water table reacts to local pumping and regional climatic conditions can be obtained. The other nearby observation wells that were analyzed include UN-77U (3.1 miles), UN-77V (3.1 miles), and UN-78D (3.3 miles).

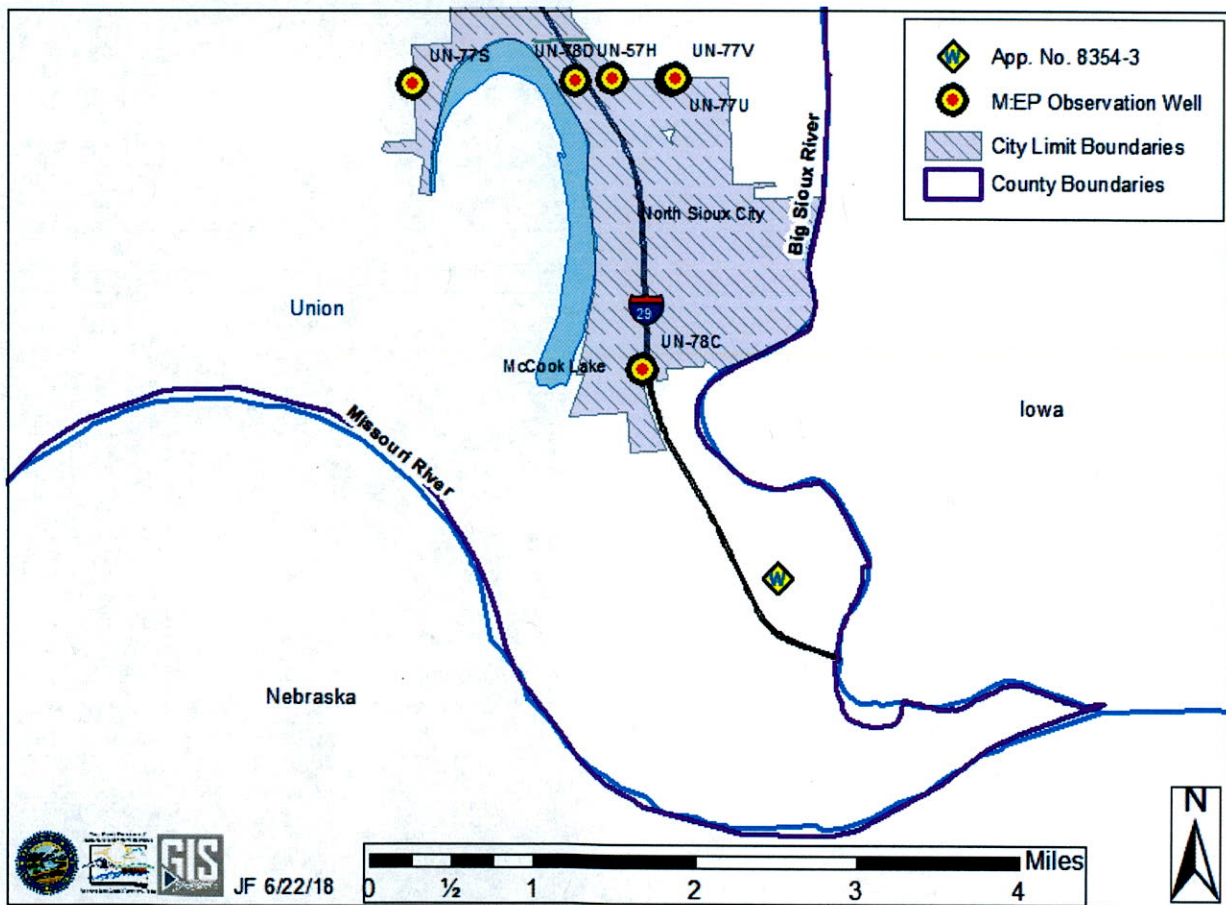


Figure 3. Map showing the location of nearby observation wells in the Missouri: Elk Point aquifer (Water Rights, 2018a; Water Rights, 2018c)

The hydrographs for these observation wells are shown in Figure 4. These observation well hydrographs are representative of the Missouri: Elk Point aquifer. The hydrographs show that the aquifer responds well to hydrologic conditions, recharging during wetter periods and declining during drier periods. The hydrographs of the Missouri River (Figure 5 and 6) generally show the same peaks, rising periods, and declining periods as the hydrographs of the Missouri:

Elk Point aquifer, indicating that the aquifer is hydraulically connected to the Missouri River. Observation wells UN-77U and UN-77V are under locally confined conditions, and observation wells UN-78C and UN-78D are under water table conditions. Figure 5 is the hydrograph of the Missouri River at Sioux City, Iowa, approximately 40 miles downstream from the USGS stream gage Missouri River near Maskell, Nebraska (Figure 6), located across the Missouri River from Vermillion, SD. There are slight differences between these hydrographs as the confluences of the Vermillion and Big Sioux Rivers are located between these gages. Due to the availability of information, Figure 5 shows discharge, whereas Figure 6 shows gage height. The peaks on these hydrographs generally do not correspond with local precipitation events, as in the case of the peak in 2011, which was generated from the effects of snowmelt and rainfall far upstream and the controlled release of water from upstream dams. The observation well measurements show that the effects from pumping are temporal, and that the aquifer generally returns to pre-pumping conditions. There is a downward trend in these observation wells due to the construction of the Gavins Point Dam in Yankton, SD, the Missouri River is entrenching below the dam, lowering the water surface elevation of the river (Goodman, 2007; Iles, 1979). Entrenchment of the Missouri River does not reflect the availability of water, and the downward trend does not show that the Missouri: Elk Point aquifer is over appropriated. The observation well data indicates that there is a reasonable probability that there is unappropriated water available from the Missouri: Elk Point aquifer.

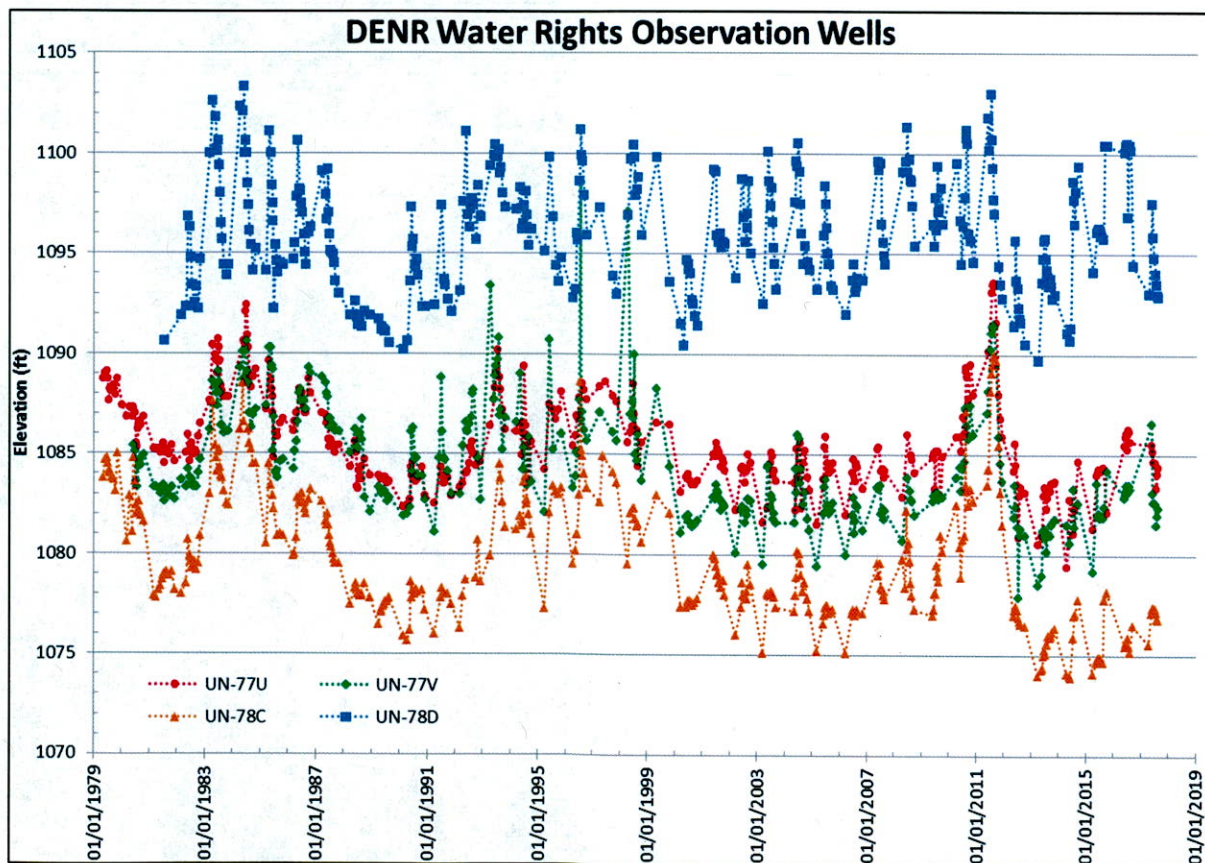


Figure 4: Hydrographs for Observation Wells UN-77U, UN-77V, UN-78C, and UN-78D (Water Rights, 2018c)

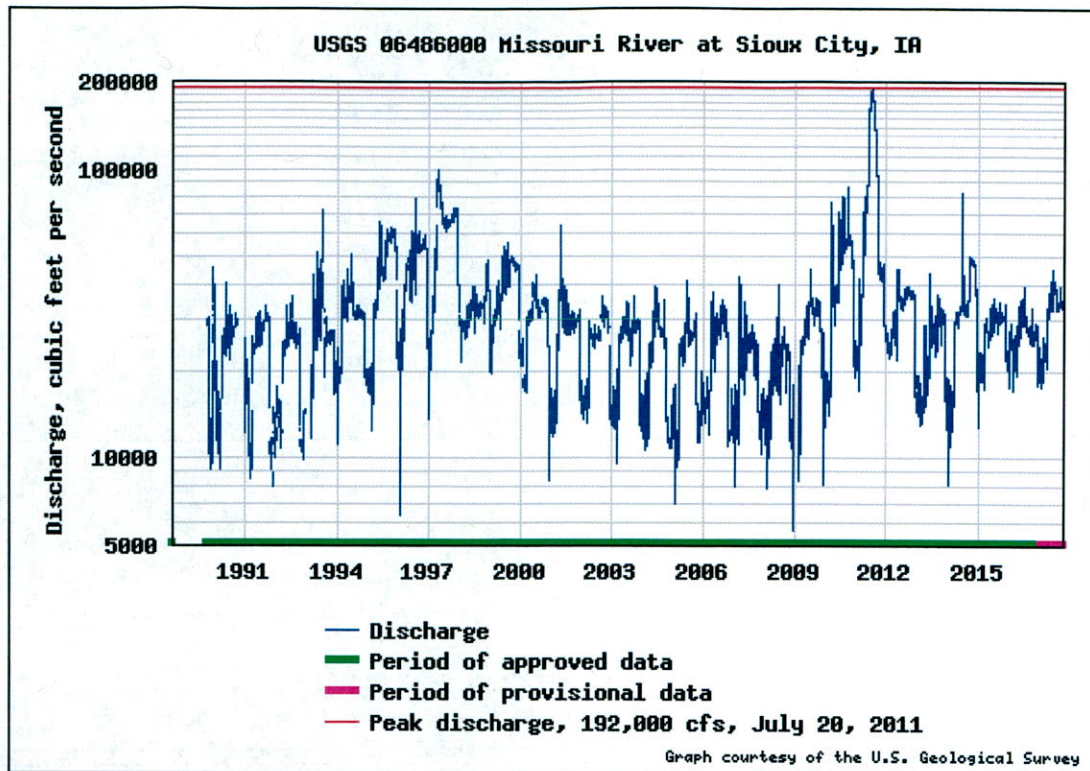


Figure 5: Hydrograph for USGS Stream Gage 06486000 Missouri River at Sioux City, IA (USGS, 2017)

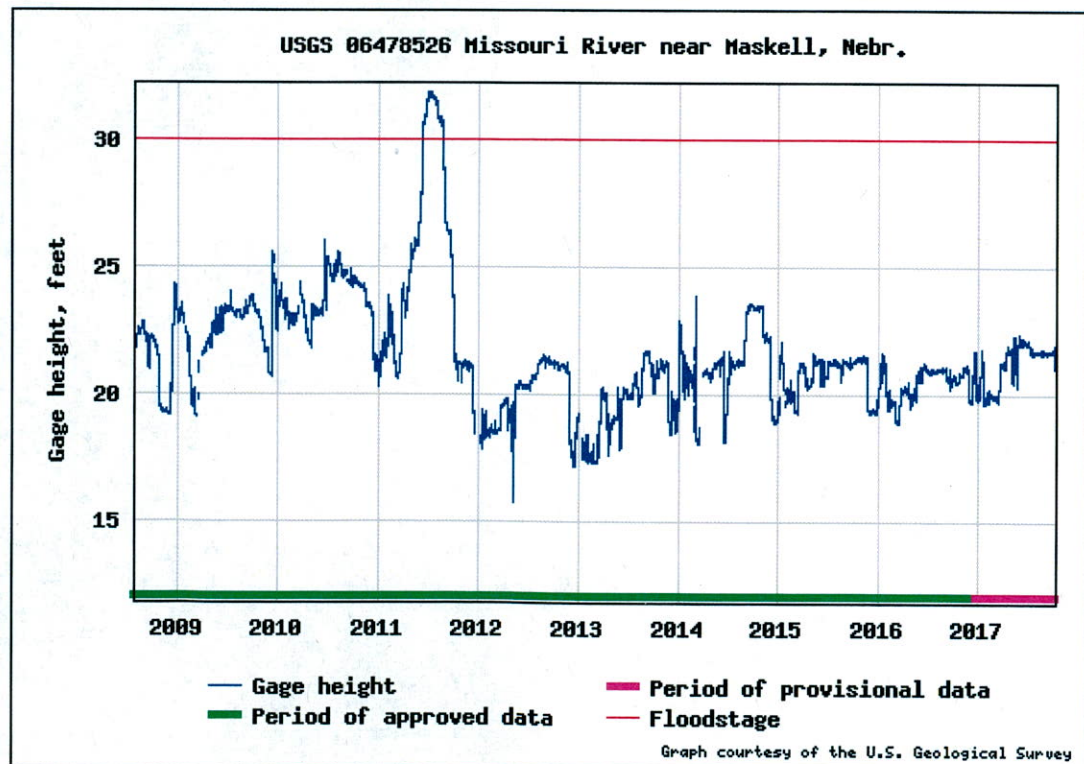


Figure 6: Hydrograph for USGS Stream Gage 06478526 Missouri River near Maskell, NE (USGS, 2017)

EXISTING WATER RIGHTS

There are 613 water rights/permits appropriating water and 4 future use permits reserving water from the Missouri: Elk Point area along with 1 application pending approval and 2 deferred applications (Water Rights, 2018a). The location of the diversion points for water rights/permits authorized to withdraw water from the Missouri: Elk Point aquifer in the vicinity of this application are shown in Figure 7. The areas reserved for the future use permits within the map boundaries are also shown.

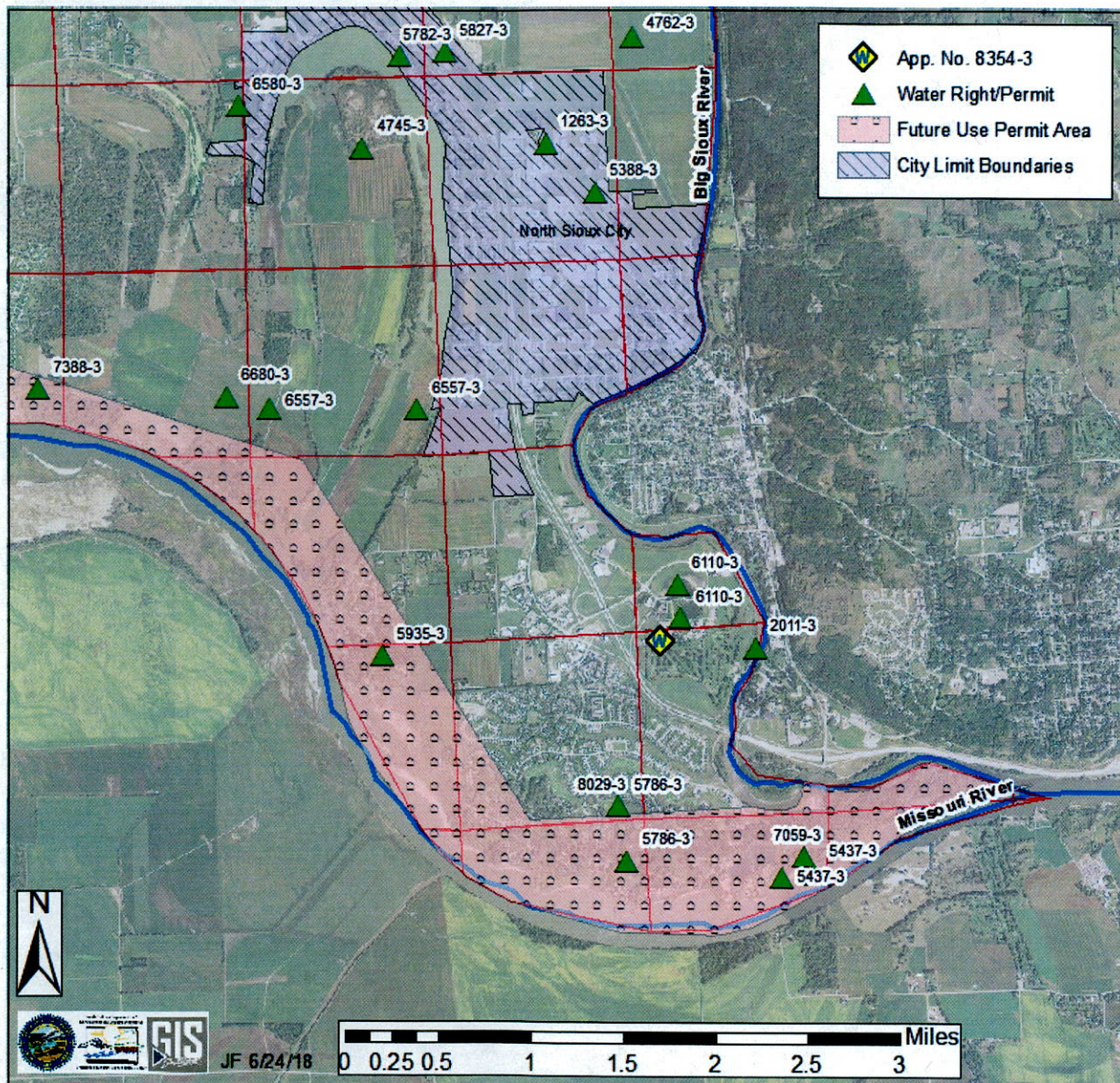


Figure 7: Map of the vicinity of Application No. 8351-3 including Missouri: Elk Point aquifer water rights/permits and future use areas (Water Rights, 2018a)

Drawdown from well withdrawals within the Missouri: Elk Point aquifer is generally not significant at distances far from the pumping well. Examination of the hydrographs of

observation wells completed into the Missouri: Elk Point aquifer show no signs of being significantly impacted by drawdown caused by pumping, despite usually being located within a mile of several irrigation wells. Even though there are a large number of high capacity wells in the Missouri: Elk Point aquifer, there has not been a history of well interference. This application, if approved, is not expected to adversely impact nearby adequate wells.

An adequate well has been defined in Administrative Rule of South Dakota (ARSD) 74:02:04:20(6) as:

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

In the past, the Water Management Board has recognized that to place water to the maximum beneficial use, a certain amount of drawdown may occur. With no history of well interference complaints from users in the Missouri: Elk Point aquifer, adequate wells are not expected to be adversely impacted if this proposed appropriation is approved.

Water Right No. 6110-3 is the nearest existing water right/permit, and uses water from the Dakota and Missouri: Elk Point aquifers to supply the two ponds that are the water source for the business park irrigation system. These ponds are thought to have intercepted the Missouri: Elk Point aquifer and depending upon the difference in the potentiometric surface of the Missouri: Elk Point aquifer and the elevation of the water in these ponds, the aquifer is either supplying water to the ponds, or is being recharged by these ponds (Buhler, 1998).

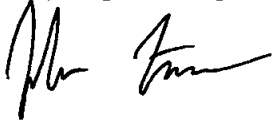
SPECIAL CONSIDERATIONS

The applicant is requesting a diversion rate greater than the statutory limit and to apply up to 3 acre-feet of water per acre annually. This request was made due to the irrigation system requirements, short term application intervals, and the high water demand for turf. SDCL 46-5-6 allows 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.”

CONCLUSIONS

1. Water Permit Application No. 8354-3 proposes to irrigate 30 acres with a maximum diversion rate of 1.11 cfs from one well to be completed into the Missouri: Elk Point aquifer in Union County.
2. This application is seeking a diversion rate that exceeds the statutory limit of 1 cfs for every 70 acres. This application is seeking an equivalent rate of 2.59 cfs per 70 acres due to the time constraints on when the turf grass can be irrigated and irrigation system requirements.

3. This application is seeking a volume of water that exceeds the statutory limit of 2 acre-feet per acre. This application is seeking a volume of water of 3 acre-feet per acre due to the irrigation requirements of turf grass.
4. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer.
5. There is a reasonable probability that the diversion proposed by this application will not adversely impact adequate wells for existing water rights and domestic uses.



John Farmer
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. 41 p.
- Buhler, K.A., 1998, Report for Water Permit Application No. 6110-3, Dakota Dunes Community Improvement District, December 7, 1998: SD DENR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Farmer, J.R., 2018. Report on Water Permit Application No. 8322-3 for Shaun Guthmiller. SD DENR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Goodman, J.A., 2007. Report on Water Permit Application No. 6869-3 for Lewis & Clark RWS. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Hedges, L.S., Allen, J. and 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., Burch, S. L., Iles, D. L., Barari, R. A., and Schoon, R. A. 1982. Evaluation of Ground-Water Resources 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.
- Iles, D.L. 1979. Ground-water Study for Southern Union County. Open-File Report No. UR-28. SD DENR-Geological Survey. Vermillion, South Dakota.

- Niehus, C. A. 1994. Water Resources of Lincoln and Union Counties, South Dakota. USGS Water Resources Investigations Report 93-4195. USGS. Rapid City, SD.
- Stephens, J. C. 1967. Geology and Water Resources of Clay County, South Dakota. Bulletin 19 Part II Water Resources. SDGS. Vermillion, SD.
- Stonesifer, J.R. 2013. Water Availability of the Missouri: Elk Point Aquifer. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- USGS. 2017. USGS Water data for the Nation. <https://waterdata.usgs.gov/nwis> accessed 10/12/2017.
- Water Rights. 2018a. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2018b. Well Completion Report Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2018c, "Observation Well Database", SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2018d. Irrigation Questionnaire Database. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

JUL 18 2018

WATER RIGHTS
PROGRAM

TWO RIVERS INC.
RODD SLATER, MGR.
150 S OAKE TREE LANE
DAKOTA DUNES SD 57049

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

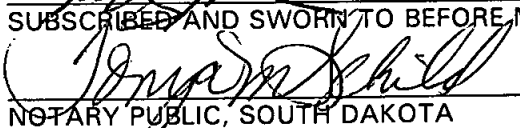
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
7 + 12 NOTICE OF APPLICATIO

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 12th DAY OF July, 2018
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$28.81 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: 07/12/2018

FILED ON: 07/12/2018


SUBSCRIBED AND SWORN TO BEFORE ME THIS 12th DAY OF July, 2018


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 08/19/2021

Ad text : 7 + 12

NOTICE OF APPLICATION NO. 8354-3 to
Appropriate Water

Notice is given that Two Rivers Inc, c/o Rodd Slater, Manager, 150 S Oak Tree Lane, Dakota Dunes SD 57049 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second (cfs) from one well to be completed into the Missouri:Elk Point Aquifer (120 feet deep) located in the NW 1/4 NW 1/4 Section 26 for irrigation of 30 acres of golf course located in the W 1/2 NW 1/4, Govt Lot 1 & 2 Section 26 and Govt Lot 3 Section 23; all in T89N-R48W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres and to apply up to 3 acre-feet of water per acre annually. This site is located on the east side of Dakota Dunes SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8354-3 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 Eric Gronlund 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 July 23, 2018.

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.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of \$28.81.

AFFIDAVIT OF PUBLICATION

State of South Dakota)
:ss
County of Union)

Bruce L. Odson,
the publisher of the Leader-Courier, deposes and says that

The Leader-Courier

is a legal weekly newspaper of a general circulation, printed and published in Elk Point, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Application

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Elk Point, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 12 day of July, 2018

and that the succeeding publications were

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 28.58, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or 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 other person whomsoever.



Subscribed and sworn to before me

this 12 day of July, 2018

My commission expires 7-12-23

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA

Notary Public

NOTICE OF APPLICATION NO. 8354-3 TO APPROPRIATE WATER

Notice is given that Two Rivers Inc, c/o Rodd Slater, Manager, 150 S Oak Tree Lane, Dakota Dunes SD 57049 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second (cfs) from one well to be completed into the Missouri:Elk Point Aquifer (120 feet deep) located in the NW 1/4 NW 1/4 Section 26 for irrigation of 30 acres of golf course located in the W 1/2 NW 1/4, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres and to apply up to 3 acre-feet of water per acre annually. This site is located on the east side of Dakota Dunes SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8354-3 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 Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting this application or recommen-

dation 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 July 23, 2018.

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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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Publish July 12, 2018
Published once at the total approximate cost of \$28.58 28-2-93

RECEIVED

JUL 16 2018

WATER RIGHTS
PROGRAM

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, July 05, 2018 12:56 PM
To: Jackie Lammers (jackie.lammers@yankton.net)
Subject: 8354-3, Two Rivers Inc.
Attachments: 8354-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on July 12, 2018.

Two Rivers Inc., c/o Rodd Slater, Mgr, 150 S Oake Tree Lane, Dakota Dunes SD 57049 (605 232-3241 or 712 253-9124) 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

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



Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, July 05, 2018 12:55 PM
To: G5 (leader1@iw.net)
Subject: 8354-3, Two Rivers Inc.
Attachments: 8354-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on July 12, 2018.

Two Rivers Inc., c/o Rodd Slater, Mgr, 150 S Oake Tree Lane, Dakota Dunes SD 57049 (605 232-3241 or 712 253-9124) has been notified to contact you to authorize publication and arrange for payment.

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

Karen Schlaak

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





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 NEWSPAPERS RIGHT AWAY.**

July 5, 2018

Two Rivers Inc.
c/o Rodd Slater, Manager
150 S Oak Tree Lane
Dakota Dunes SD 57049

Dear Mr. Slater:

Water Permit Application No. 8354-3 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 Leader-Courier printed at Elk Point SD (Ph # 605 356-2632) and the Press & Dakotan printed at Yankton SD (Ph # 605 665-7811). You will need to contact the newspapers 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 newspapers 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,

Eric Gronlund/KS

Eric Gronlund
Natural Resources Engineer
(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. 8354-3 to Appropriate Water

Notice is given that Two Rivers Inc, c/o Rodd Slater, Manager, 150 S Oak Tree Lane, Dakota Dunes SD 57049 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second (cfs) from one well to be completed into the Missouri:Elk Point Aquifer (120 feet deep) located in the NW 1/4 NW 1/4 Section 26 for irrigation of 30 acres of golf course located in the W 1/2 NW 1/4, Gov't Lot 1 & 2 Section 26 and Gov't Lot 3 Section 23; all in T89N-R48W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres and to apply up to 3 acre-feet of water per acre annually. This site is located on the east side of Dakota Dunes SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8354-3 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 Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

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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
<http://denr.sd.gov>

AUG 06 2018

Two Rivers Inc.
c/o Rodd Slater, Manager
150 S Oak Tree Lane
Dakota Dunes SD 57049

Dear Mr. Slater:

Enclosed is Water Permit No. 8354-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

A handwritten signature in black ink that reads "Jeanne Goodman". The signature is fluid and cursive, with the first name "Jeanne" being more prominent than the last name "Goodman".

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

enclosures

8354-3

RECEIPT

WATER RIGHTS PROGRAM
 South Dakota Department of Environment and Natural Resources

Date January 29, 2020RECEIVED OF Connelly Tiehen & Sons PO Box 1268 Dakota Dunes SD 57049

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$
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 <u>8354-3</u>	\$50.00
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	\$50.00

By Jeannie Goodman
 Chief Engineer vm

NOTICE OF TRANSFER OF OWNERSHIP

For assistance call (605) 773-3352

PAID

JAN 29 2020

Ck# 50117

Mail to: PMB 2020
DENR - Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

Water Right/Permit No. 8354-3Date: January 22, 2020

I/We request that Water Right/Permit No. 8354-3 formerly owned by:
Two Rivers Inc., 150 S Oak Tree Lane, Dakota Dunes, SD 57049 be transferred to:

New Owner Name: TR GOLF LLC
Address: 150 S Oak Tree Lane, Dakota Dunes, SD 57049
City, State, Zip Dakota Dunes SD 57049 Telephone No. 712-253-9124

Title to the following described land(s)/property has been transferred as described above:

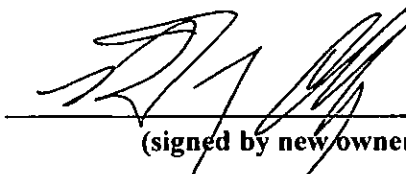
From Beacon:
Parcel ID's: 23.DD.26.2020, 23.DD.26.2015, 23.DD.23.3020, 23.DD.26.2000
GOV'T LOT 2 DD PLAT LESS .068A FOR PART OF PR 11TH ADD (40.652A)
GOV'T LOT 1 DD PLAT LESS PART OF LOT 1 TWO RIVERS BUSINESS CENTER 4TH ADD 56.2
GOV'T LOT 3 DD PLAT LESS PRT LOT 1 & TR A & TR 1 TWO RIVERS BUSI CENTER 4TH ADD
NW1/4NW1/4 LESS I-29 & LESS H-28 LESS TR1 & LOTS 2,3 & 4 TWO RIVERS 1ST ADD

☒ I understand that the validity of Water Right/Permit No. 8354-3 has not been determined by this transfer action. If I have any questions on validity, I understand that only the Water Management Board has the authority to determine if a water right/permit is valid (see note below.)

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

(A fee of Fifty Dollars (\$50.00) is included to cover the filing fee as required by SDCL 46-2-13.)

I, Bart Connelly, the new owner, certify that the above information is true and correct.


(signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIVED

JAN 29 2020

WATER RIGHTS
PROGRAM

8354-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 29, 2020

2011-3
8354-3

Bart Connelly
TR Golf LLC
150 S Oak Tree Lane
Dakota Dunes SD 57049

Dear Mr. Connelly:

I am writing to acknowledge receipt of the transfer forms and filing fees you submitted for changing ownership on Water Right No. 2011-3 and Water Permit No. 8354-3.

The ownership changes have been completed. Both Nos. 2011-3 and 8354-3 are now listed under "TR Golf LLC".

Enclosed for your records are receipts for the filing fees that were paid. If you have any questions, please let me know.

Sincerely,

A handwritten signature in black ink, which appears to read "Genny McMath".

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

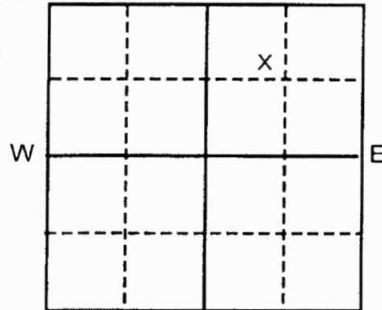
enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NE 1/4 Sec 26 Twp 89N Rg 48WCounty UNION

North

Please mark well
location with an "X"

Well Completion Date

11-11-2020

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
160.0 ft. from SEPTIC TANK (identify source)

PROPOSED USE:

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	5.00 IN	0.0 FT	85.0 FT	8.75 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
GROUT WEL	7	9.5 Lb/gal	6.0 Ft	85.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE METHOD

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 5.00 Inches Length 20.0 FeetMaterial PVCSlot Size .040 Set From 85.0 Feet to 105.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? HTH TABLETS
☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: TWO RIVERS GOLF CLUB

Business Name:

Address: 150 OAK TREE LANECity, State, Zip: DAKOTA DUNES SD 57049

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	3
GRAY CLAY	3	17
FINE GRAY SAND	17	47
FINE BROWN SAND	47	62
SMALL-MEDIUM GRAVEL SAND	62	105

STATIC WATER LEVEL 24.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

3.0 Ft. After 0.5 Hrs. pumped 52.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

LATITUDE: 42.500711LONGITUDE: -96.476214ELEVATION: 1190This well was drilled under license # 810 and this
report is true and accurate.Drilling firm: HEINE ELECTRIC & IRRIGATION, INC.

Signature of License Representative:

RECEIVED

Signature of Well Owner or Equitable Property Owner: DEC 18 2020WATER RIGHTS
PROGRAMDate: 12-15-2020