

WATER PERMIT NO. 8882-3

Name of Applicant: Arlingh E Gretschrann II

Address: PO Box 212, Avon SD 57315

Phone: 605-286-3461

Amount of Water Claimed: 0.89 cfs

Total Acres: 30

Source of Water Supply: Surface

Water to be used for: Irrigation

County: Bon Homme

Type of Waste Disposal System:

Location: Approx. 10 miles southwest of Avon SD

PRIORITY Date Received: 06-05-24

Application/License Fee: \$700.00

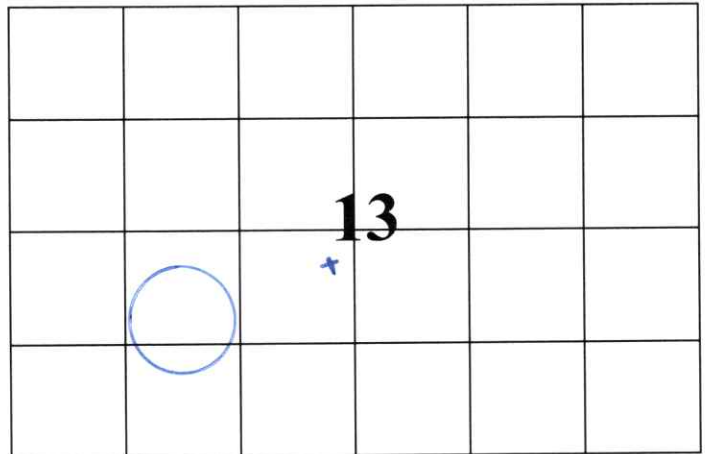
Corrected Application Received: 06-20-24

Period of Annual Use: May 1 – September 30

Remarks: Pumping from same system as Permit 7408-3

Diversion Point: NE 1/4 SW 1/4 Sec 13-T93N-
R62W

Land to be Irrigated: W 1/2 SW 1/4 Sec 13-T93N-
R62W



Depth of Well: N/A

Well Driller: N/A

Remarks:

Type of Map: aerial

Reviewed and the Number Assigned on: 8882-3

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8882-3

Date of first receipt of application June 5, 2024.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8882-3 to Arlingh E. Gretschnann II, PO Box 212, Avon SD 57315, 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. 8882-3 appropriates 0.89 cubic feet of water per second (cfs) from the Choteau Creek at points in the NW 1/4 NE 1/4, NE 1/4 SW 1/4 Section 13, and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek in the SE 1/4 NE 1/4 Section 13, for irrigation of 30 acres located in the W 1/2 SW 1/4 Section 13; all in T93N-R62W. Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage. Water Right No. 7408-3 authorizes irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights, the same would apply to Permit No. 8882-3. This site is located approximately eleven and one-half miles west northwest of Springfield 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: May 1 - September 20 (irrigation), January 1 – December 31 (to dam).
3. The date from which applicant may claim right is June 5, 2024.
4. The date of approval of Permit No. 8882-3 is September 9, 2024.
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. This Permit and Water Right No. 7408-3 authorize an impoundment with a storage capacity of 32 acre-feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.
3. Water may be diverted from Choteau Creek to the dam only during flow events that are obviously sufficient to meet downstream domestic uses, including livestock water and prior water rights. At no time, may the entire creek flow be diverted. Pumping is allowed each year from April 1 - June 30 unless the Chief Engineer is contacted and grants written authorization to pump from the creek past June 30. Storage water from the dam may be pumped for the purpose of irrigating land authorized by this Permit after June 30 of each year.

(continued)

4. 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. 8882-3 authorizes a maximum diversion rate of 0.89 cfs for the irrigation of 30 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year. The water right holder will need to distinguish on the irrigation questionnaire when the stored water is being pumped for irrigation.

WATER MANAGEMENT BOARD

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

SEP 27 2024
date



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

Mail to: SD DANR, Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8882-3</u> Hydrologic Unit <u>1017 0101</u>
	Basin <u>Missouri R</u>
	Newspaper <u>Tyndall Tribune & Register</u> <u>Platte Enterprise</u> (office use only) <u>Daily Press & Dakotan</u>

PAID

JUN 05 2024

Ck# 3464

Rec't# _____

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 Arlingh E Gretschmann II

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

Mailing Address PO Box 212 Arvon SD 57315
(Address) (City) (State) (Zip Code)

Phone 605 286 3461 Mobile _____ Email _____

2. Amount of water claimed 0.89 *CFS or 400 **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 Choteau Creek & Reservoir Dam SE 1/4 NE 1/4 (NE 1/4 SW 1/4)

4. Location of point of diversion NE Corner of sec 13 T93N R62W
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W) County Charles Mix
Ben Homme

5. County or counties where water will be used Charles Mix

6. Annual period during which water is to be used May thru Sept 30 Jan 1-Dec 31 dam

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
sec 13 T93N-R62W SW 1/4	30		

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

Small 3 Tower Center Pivot
pumping from existing perm. ts 7056-3 & 7408-3

1. Arlingh E Gretschmann Land Owner, 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.

2021-08

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)

RECEIVED

JUN 05 2024

OFFICE OF
WATER

Supplemental Information

(type or print)

1. Well Information (check one or both as applicable)

☐ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many _____ Have test holes been drilled? ☐ Yes ☐ No Drilled by _____
(if yes, please provide copies of logs)
- b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

For either existing or proposed wells:

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

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

3. Dugout Information

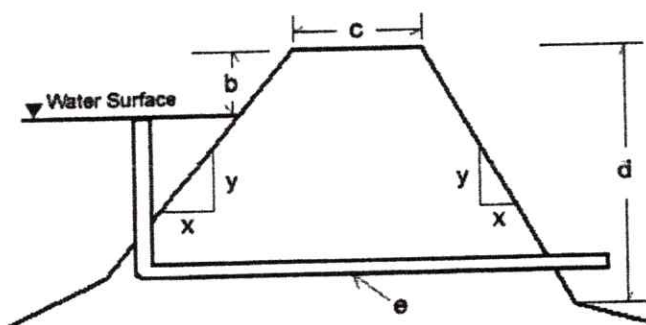
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

using existing Reservoir
perm. # 7408-3



- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

93N 62W
Section 11

93N 62W
Section 12

93N 61W
Section 07

314th St

93N 62W
Section 13

93N 61W
Section 08

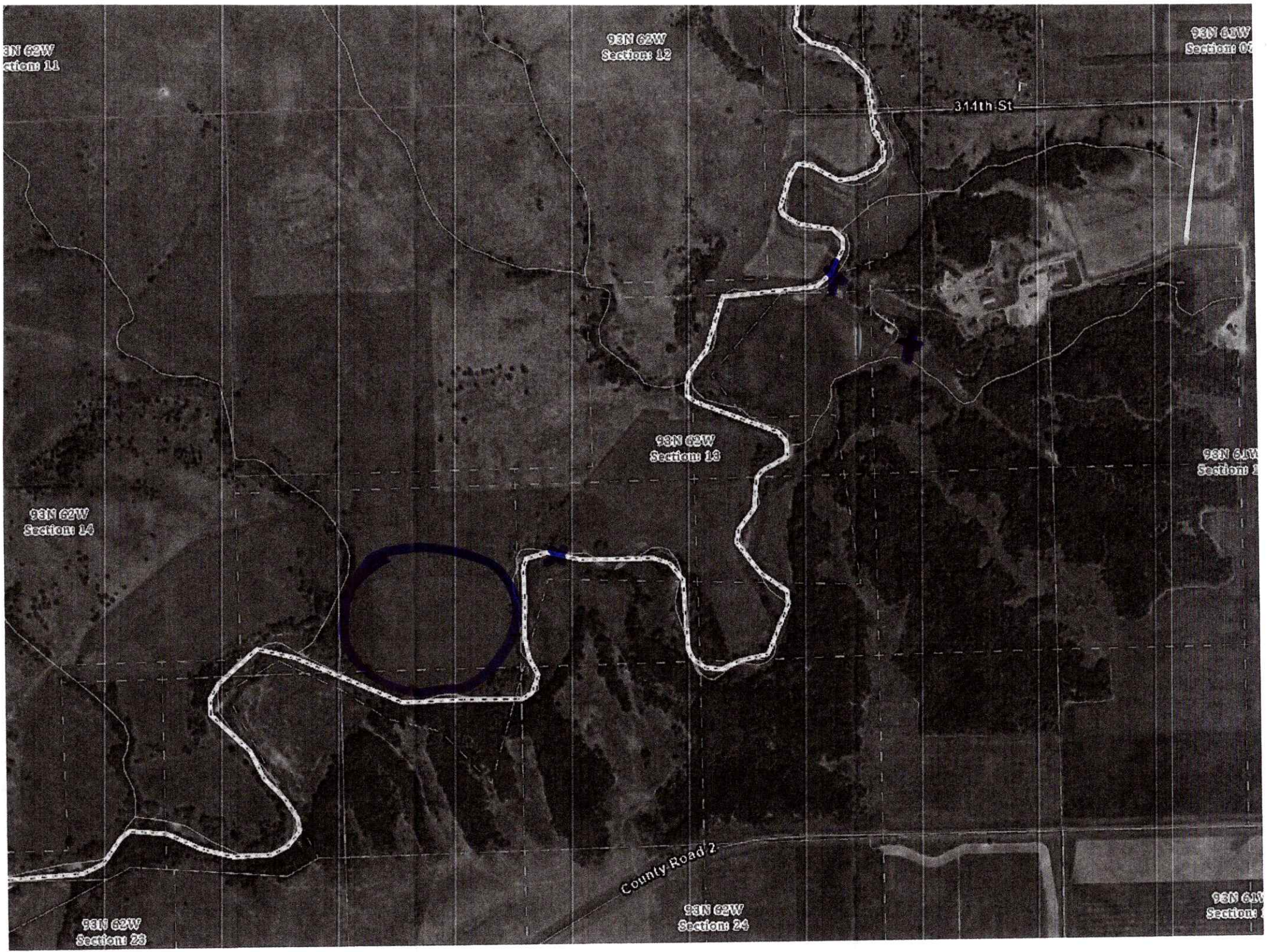
93N 62W
Section 14

93N 62W
Section 23

93N 62W
Section 24

93N 61W
Section 09

County Road 2



93N 62W
Section: 02

93N 62W
Section: 01

93N 61W
Section: 06

93N 62W
Section: 11

93N 62W
Section: 12

93N 61W
Section: 07

BEESON RD

311 ST

93N 62W
Section: 13

93N 61W
Section: 18

10170101 Lewis and Clark Lake

Lewis and Clark Lake

93N 62W
Section: 14

COUNTY RD

93N 61W
Section: 19

93N 62W
Section: 23

93N 62W
Section: 24

313 ST

93N 62W

93N 62W

93N 61W
Section: 20

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7408-3**

(1) Roger Baumfalk, 40429 311th St, Avon SD 57315, made Application No. 7056-3, April 14, 2008, for a water permit to divert 1.33 cubic feet of water per second from Choteau Creek, Bon Homme County, South Dakota for irrigation purposes. Permit No. 7056-3, with a priority date of August 14, 2008, was approved November 17, 2008, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 17, 2013, and for the application to beneficial use of water on or before November 17, 2017.

Mr. Baumfalk made Application No. 7408-3, August 7, 2012, for a water permit to divert from Choteau Creek to impound 32 acre-feet of water in a dam, to be used for the irrigation system authorized under Permit No. 7056-3. Permit No. 7408-3, with a priority date of August 7, 2012, was approved October 9, 2012, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 9, 2017, and for the application to beneficial use of water on or before October 9, 2021.

The applicable portions of Permit No. 7056-3 have been incorporated into Water Right No. 7408-3.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.11 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- Choteau Creek Intake: 1,280 ft S & 1,550 ft W of the NE $\frac{1}{4}$ Section 13, T93N, R62W (NW $\frac{1}{4}$ NE $\frac{1}{4}$) (Latitude 42.87654 & Longitude -98.11494)
- Dam & Reservoir: 1,820 ft S & 940 ft W of the NE $\frac{1}{4}$ Section 13, T93N, R62W (SW $\frac{1}{4}$ NE $\frac{1}{4}$) (Latitude 42.87524 & Longitude -98.11291)

(3) The amount of 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 (irrigation) & January 1 – December 31 (storage dam).

(4) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate to following land:

Section 18, T93N, R61W	Section 13, T93N, R62W
NE $\frac{1}{4}$ NW $\frac{1}{4}$ - 31 acres	SW $\frac{1}{4}$ NE $\frac{1}{4}$ - 15 acres
SE $\frac{1}{4}$ NW $\frac{1}{4}$ - 32 acres	

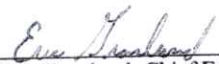
TOTAL: 78 acres

(5) Pursuant to South Dakota Water Law 46-5-30.1 Roger Baumfalk, the holder and/or owner of Water Right No. 7408-3 is issued a license to appropriate water, the right to use 1.11 cubic feet of water per second from Choteau Creek & the storage dam, with priority dates of August 14, 2008 (for diversion from Choteau Creek) and August 7, 2012 (storage dam), specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7408-3 and subject to the following qualifications:

1. Water Right No. 7408-3 authorizes an impoundment with a storage capacity of 32 acre-feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.
3. Water may be diverted from Choteau Creek to the dam only during flow events that are obviously sufficient to meet downstream domestic uses, including livestock water and prior water rights. At no time, may the entire creek flow be diverted. Pumping is allowed each year from April 1 – June 30 unless the Chief Engineer is contacted and grants written authorization to pump from the creek past June 30. Storage water from the dam may be pumped for the purpose of irrigating land authorized by Permit No. 7056-3 after June 30 of each year. *(The applicable portions of Permit No. 7056-3 have been incorporated into this water right. Irrigation of land is now authorized by Water Right No. 7408-3.)*
4. This Water Right is approved subject to the irrigation water use questionnaire being submitted each year. The water right holder will need to distinguish on the irrigation questionnaire when the stored water is being pumped for irrigation.


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

APR 29 2024
date



RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date June 12th, 2024

RECEIVED OF Roger L Baumfalk for Arlingh E Gretschmann 40429 311th Street Avon SD 57315

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

Fee for Application for Permit No. <u>8882-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>500.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8882-3</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	\$ <u>700.00</u>

By Eric Gronlund
Chief Engineer

Se



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8882-3, Arlingh E Gretschnann II**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8882-3, Arlingh E Gretschnann II, PO Box 212, Avon SD 57315.

The Chief Engineer is recommending APPROVAL of Application No. 8882-3 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 domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. This Permit and Water Right No. 7408-3 authorize an impoundment with a storage capacity of 32 acre-feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be bypassed.
3. Water may be diverted from Choteau Creek to the dam only during flow events that are obviously sufficient to meet downstream domestic uses, including livestock water and prior water rights. At no time, may the entire creek flow be diverted. Pumping is allowed each year from April 1 - June 30 unless the Chief Engineer is contacted and grants written authorization to pump from the creek past June 30. Storage water from the dam may be pumped for the purpose of irrigating land authorized by this Permit after June 30 of each year.
4. 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. 8882-3 authorizes a maximum diversion rate of 0.89 cfs for the irrigation of 30 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year. The water right holder will need to distinguish on the irrigation questionnaire when the stored water is being pumped for irrigation.

See report on application for additional information.

Eric Gronlund, Chief Engineer
August 15, 2024

Report to the Chief Engineer
On Water Permit Application No. 8882-3

Arlingh E Gretschrann II

August 16, 2024

Water Permit Application No. 8882-3 proposes to appropriate 0.89 cubic feet of water per second (cfs) from Choteau Creek at points in the NW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 13, and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 13 for the irrigation of 30 acres located in the W $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 13; all in T93N-R62W. Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage. Water Right No. 7408-3 authorized the irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under Water Right No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights/permits. The applicant is requesting a diversion rate greater than the statutory limit of 1.0 cfs per 70 acres. The site of interest is located in Bon Homme/Charles Mix Counties approximately 11.5 miles northwest of Springfield, SD.

South Dakota Codified Law SDCL 46-2A-2 directs the Chief Engineer to make a recommendation to the Water Management Board on a water permit application. The Chief Engineer needs to consider four criteria when making a recommendation on whether a permit should be approved, approved with qualifications, denied, or deferred. They are: 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 domestic water uses and water rights, 3) the proposed use is beneficial use, and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board.

This report will analyze the best available information and make a recommendation to the Chief Engineer on the first two criteria the Chief Engineer needs to consider in making an official recommendation to the Water Management Board.

WATER SOURCE: Choteau Creek and runoff into dam on side tributary

Review of Water Source and Availability

Water Permit Application No. 8882-3 proposes to appropriate 0.89 cfs from Choteau Creek and an existing dam (32 acre-feet storage capacity and 2.18-acre surface area coverage at the primary spillway) for the irrigation of 30 acres (Water Rights, 2024a). Crop irrigation water rights are limited to two acre-feet per authorized acre; therefore, the estimated use for Water Permit Application No. 8882-3, if approved, is 60 acre-feet per year. It should be noted irrigation reports indicate less than two acre-feet per authorized acre is generally applied in this area (Water

Rights, 2024a and 2024b). Construction plans and specifications for the dam can be found in the permit file for Water Right No. 7408-3 (Water Rights, 2024a).

Choteau Creek is a stream that headwaters in north-central Douglas County and flows south into the Missouri River between Lake Francis Case and Lewis and Clark Lake. In the upstream part of the basin, Choteau Creek is essentially ephemeral. Downstream from Wagner, Choteau Creek receives ground-water discharge providing perennial flow during most years (Sando and Neitzert, 2003). The creek has a contributing drainage area of approximately 594 square miles, or 380,160 acres (USGS, 2024).

The watershed area above the existing dam was delineated using NRCS Engineering Tools for ArcGIS 10.3 (USDA-NRCS, 2024a). The elevation data used is a Light Detection and Ranging radar (LiDAR) DEM (Digital Elevation Model) dataset with 1-meter grid spacing (SDGS, 2024). A DEM is a representation of the bare ground (bare earth) topographic surface of the Earth excluding trees, buildings, and any other surface objects. Within the Choteau Creek (outlet) watershed, the contributing watershed to the existing dam was delineated to be 0.31 square miles, or approximately 200 acres. Figure 1 displays a delineation of the contributing watershed area above the existing dam within the Choteau Creek (outlet) watershed.

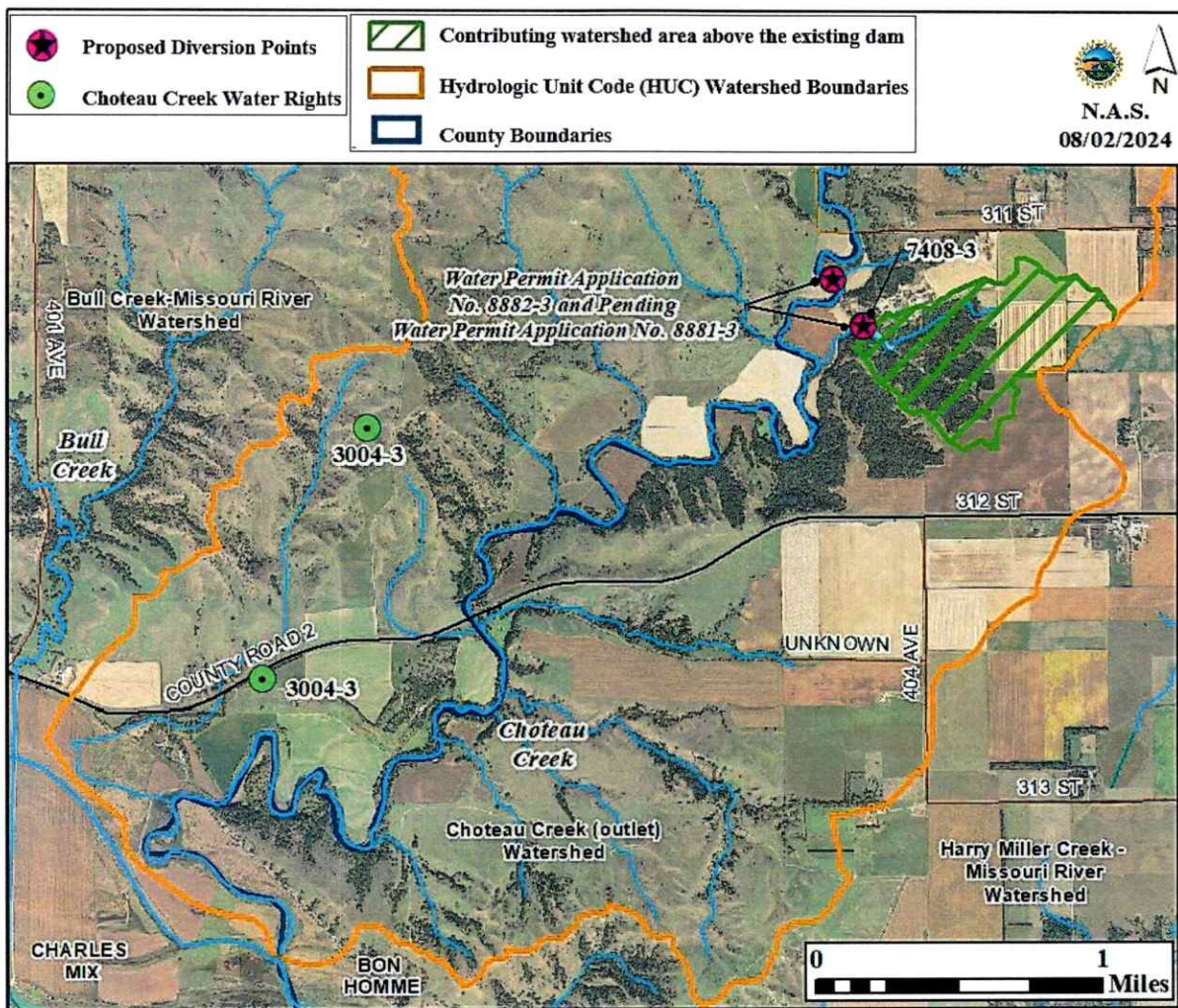


Figure 1: Map of the approximate watershed delineation above the existing dam within the Choteau Creek (outlet) watershed made using the LiDAR 1-meter spaced dataset (SDGS, 2024; USGS, 2004)

The NRCS annual surface yield method for South Dakota was used to estimate annual surface yield for the drainage area upstream of the existing dam (USDA-NRCS, 1984). This NRCS method estimates the volume of runoff which can be expected for a twelve-month period at certain annual probabilities using contributing drainage area, soil cover complex number (runoff curve number, CN), and watershed location on an isogram map (USDA-NRCS, 1984).

The soil cover complex number, or the runoff curve number (CN) is necessary to determine the annual surface yield using the NRCS method (USDA-NRCS, 1984). The determination of the runoff curve number depends on the delineated watershed's soil and cover conditions (accessed from USDA-NRCS, 2024b), represented as hydrologic soil group, cover type, treatment, and hydrologic condition (USDA-NRCS, 1986). The general cover type for the delineated watershed is pasture or range (good condition) (USDA-NRCS, 1984). Using USDA-NRCS Soil Survey, a shapefile of the delineated watershed using 1-meter LiDAR data was imported to determine hydrologic soil groups for regions of the watershed (Figure 2) (SDGS, 2024; USDA-NRCS,

2024b). Using cover type and hydrologic soil group, a runoff curve number was determined by calculating the weighted average of hydrologic soil groups and their respective curve numbers and rounding to the nearest whole number. This method is shown on Table 1. Runoff curve numbers range from 40 to 100 and a higher curve number means that more runoff occurs in the watershed (USDA-NRCS, 1986).

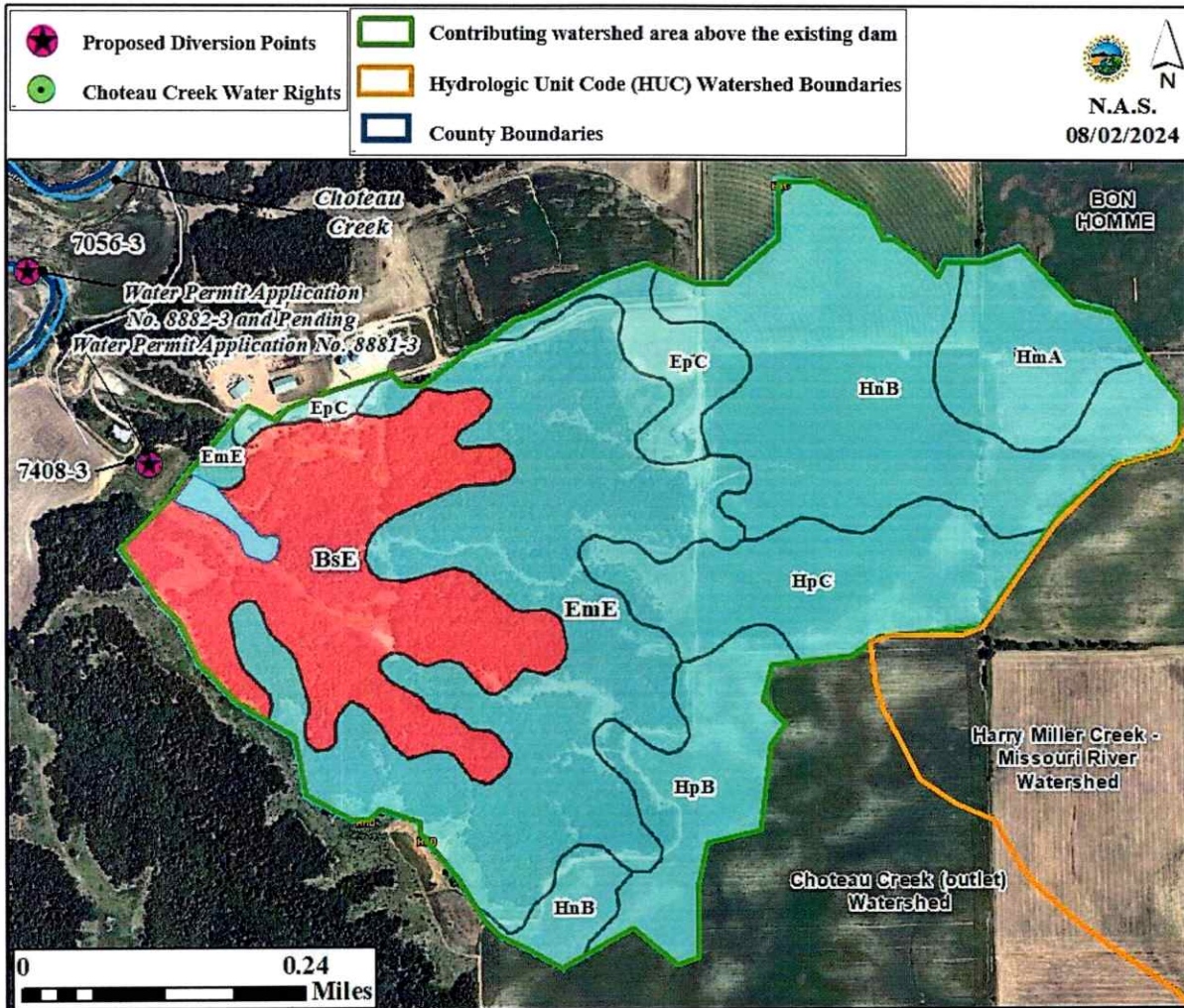


Figure 2: Shapefile of the contributing watershed above the existing dam delineated from 1-meter spaced LiDAR data to determine hydrologic soil groups as determined by soil map units (SDGS, 2024; USDA-NRCS, 2024b; USGS, 2004)

Table 1: Weighted average of hydrologic soil group ratios for pasture/range land (good condition) used to determine curve number (USDA-NRCS, 1984 and 2024b)

Soil Group	CN	Map Unit Symbol	Map Unit Name	Weight	Weighted Values
C	74	EmE, EpC, HmA, HnB, HpB, HpC	Loam(s), Complex	0.802	59.35
D	80	BsE	Boyd-Sansarc clays	0.196	15.68
				Weighted Average CN	75.03
				CN	75

The NRCS method is then used to determine the volume of runoff which can be expected for a twelve-month period. For example, an 0.8 probability of occurrence has an 80% change of occurring each year. The annual surface yields for the drainage area at certain probabilities are displayed in Table 2.

Table 2: Estimated Total Annual Yield of Surface Runoff (USDA-NRCS, 1984) using an estimated watershed area of approximately 200 acres using the 1-meter LiDAR dataset and runoff curve number of 75 (SDGS, 2024; USDA-NRCS, 1984)

Probability of Occurrence	Inches of Annual Yield per Acre	Annual Yield (Acre-feet)
0.8	0.23	4
0.5	0.58	10
0.2	1.5	25
0.1	2.6	43

Water Permit Application No. 8882-3 proposes to divert water from the Choteau Creek to be stored in an existing dam and capture the upland runoff on the Choteau Creek tributary the existing dam is constructed on. To determine the probability of occurrence for the amount water in the catchment, the total runoff from Table 2 was plotted against the probability of occurrence, shown in Figure 3. The closer an r square value is to 1, the data is better correlated, and there is more reliability in a trendline. The estimated annual probability of 10 acre-feet of upland runoff being available to be captured is expected around five out of every ten years.

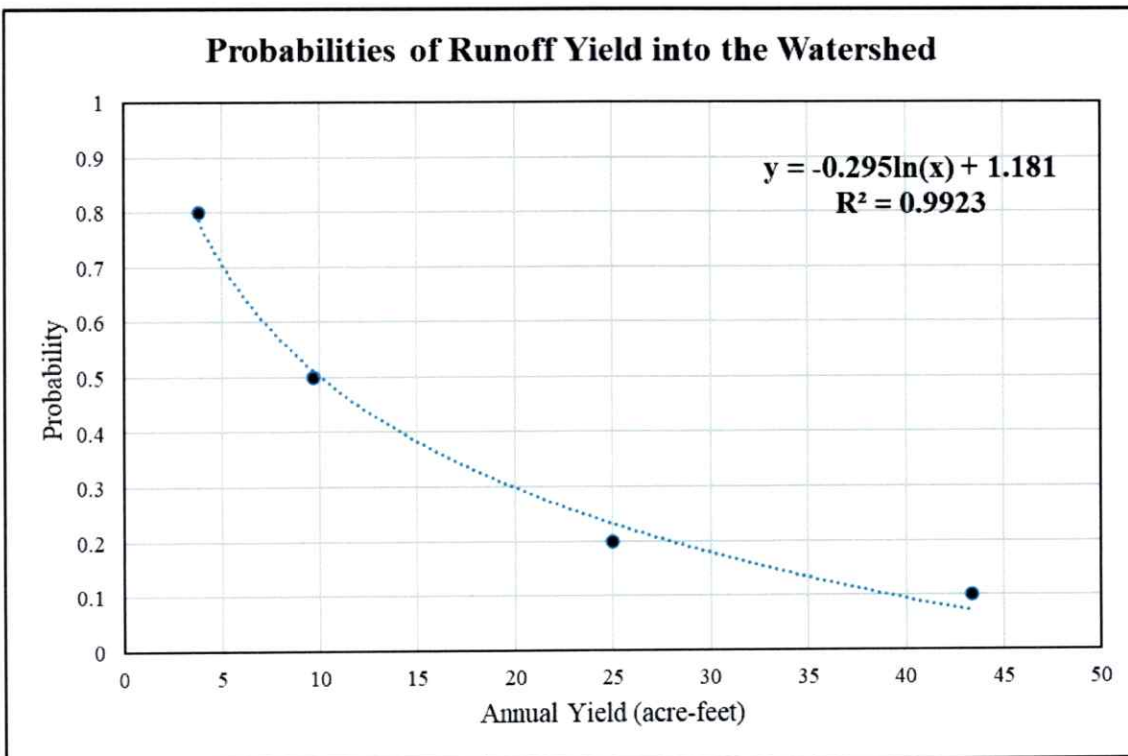


Figure 3: Plot of annual yield for the existing dam from runoff against the probability of occurrence. Note that this plot and trendline is only applicable for this specific watershed location and area.

Hydraulic data was submitted with the plans and specifications for the dam in Water Right No. 7408-3 (drawn August 2012) estimating a drainage area of 210 acres, a runoff curve number of 76, and an annual runoff yield (50% chance) of 11.4 acre-feet per year, which is comparable and agreeable with the NRCS methods used in this analysis and climate data at that time (Water Rights, 2024a).

The application indicated the intent is to store the captured runoff and diverted Choteau Creek water in an existing storage pond. Annual water losses from the reservoir are mainly due to evaporation and seepage. It has been found that evaporation from a shallow lake, wet soil, or other moist natural surfaces is roughly 70% of the evaporation from a Class A pan for the same conditions (Farnsworth and Thompson, 1982). Near the existing dam, the estimated average pan evaporation rate for April through October is 45.5 inches/year, and for November through March is 10.5 inches/year, for a total of 56 inches/year (4.67 feet/year) in pan evaporation (Poudyal, 2006). To account for evaporation from natural surfaces, 70% of that rate is approximately 39.2 inches/year (3.3 feet/year). While evaporation is not constant throughout the year, approximately 3.27 inches (0.27 feet/month) of evaporation occurs each month. Estimated loss due to seepage is not available since this is not known until after years of operation and is typically not measured (Kilts, 2022).

From 1895 to 2024, Bon Homme and Charles Mix Counties received approximately 24.45 inches of precipitation per year (2.04 feet/year) on average (NOAA, 2024). While precipitation is not constant throughout the year, approximately 2.04 inches of precipitation occurs each month in the county. The net loss between direct precipitation and evaporation is approximately 1.26 feet per year. Based on the surface area of the existing dam at the primary spillway elevation (2.18 acres), and the estimated net loss between evaporation and direct precipitation, the lost storage for the existing dam is approximately 2.75 acre-feet per year. These precipitation and evaporative estimates are not a guarantee of what will occur in any given year, but are on average, over time, estimates.

The US Geological Survey (USGS) has constructed and maintained gaging sites on streams and rivers to monitor real-time flow information. This includes historical daily flow data and statistical daily, monthly and annual flow information. The streamflow datasets can be graphed to further understand how the flow values of streams and rivers fluctuate during wet and dry periods. The nearest stream flow gage operated from 1982 to 2023 approximately six miles upstream of the existing dam on Choteau Creek near Avon, SD (Site No. 6453255) (USGS, 2024).

Statistical terms, mean and median, have a similar role in understanding the central tendency of a set of statistical results. The mean value, often referred to as average, is calculated by dividing the sum of the data values by the sum of the number of data values. The disadvantage of using the mean value to describe flow is that the value can be drastically affected by any single value in the data set whether very high or very low compared to the rest of the data values. For example, in the analysis of long-term flow data, large flood event flow values increase the calculated mean value giving an unreasonable expectation of a higher flow value during a time period. The median (middle/50th percentile) value of flow data separates the higher half of the

data set from the lower half. Median values tend to give a more representative measure of a mid-point value when analyzing river flow data. This is because large runoff events can cause the mean values to be much larger than median values, specifically in early spring and summer months.

Daily mean versus monthly median flow values (from 1982 to 2003) for the USGS Stream Gage #06453255 on Choteau Creek near Avon, SD are compared in Figure 4 (USGS, 2024).

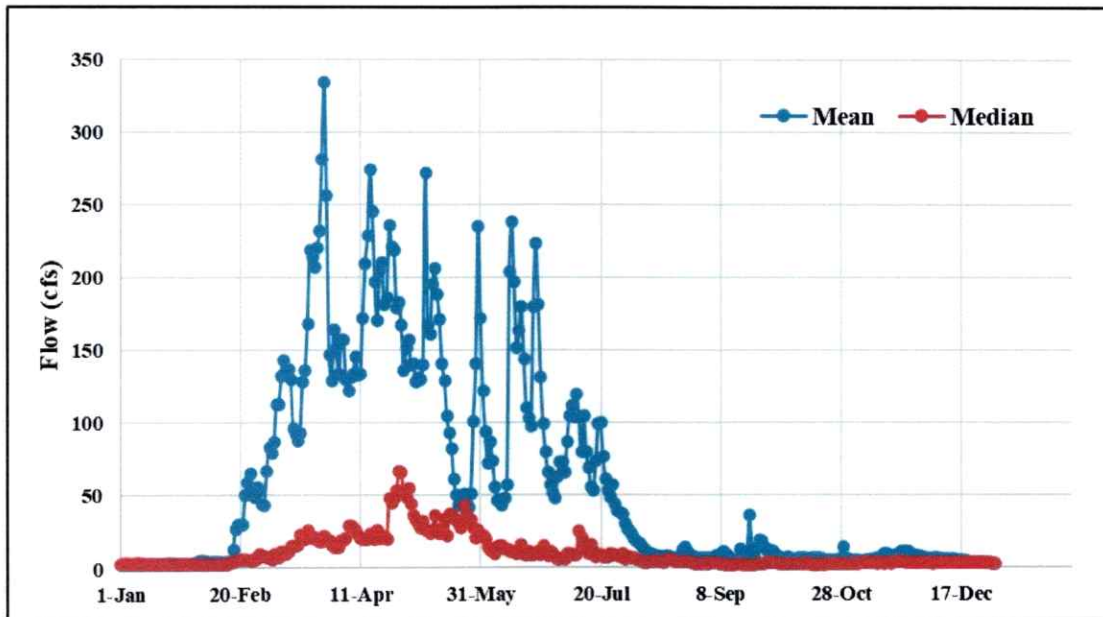


Figure 4. USGS Choteau Creek gaging station (No. 06453255) near Avon, SD, 1982-2003 daily mean versus monthly median flow values, contributing drainage area: 594 sq. miles (USGS, 2024)

The average daily streamflow measured at this gage over the period of record (from 1982 to 2003) was 58.1 cfs. The precipitation data for Bon Homme and Charles Mix Counties from 1982 to 2003 was 24.8 inches per year on average, which is near the current average of 24.45 inches per year from 1895 to 2024 for these counties (NOAA, 2024). A hydrograph was constructed using the 10th, 25th, and 50th percentile flow level data measured at this stream gage (Figure 5).

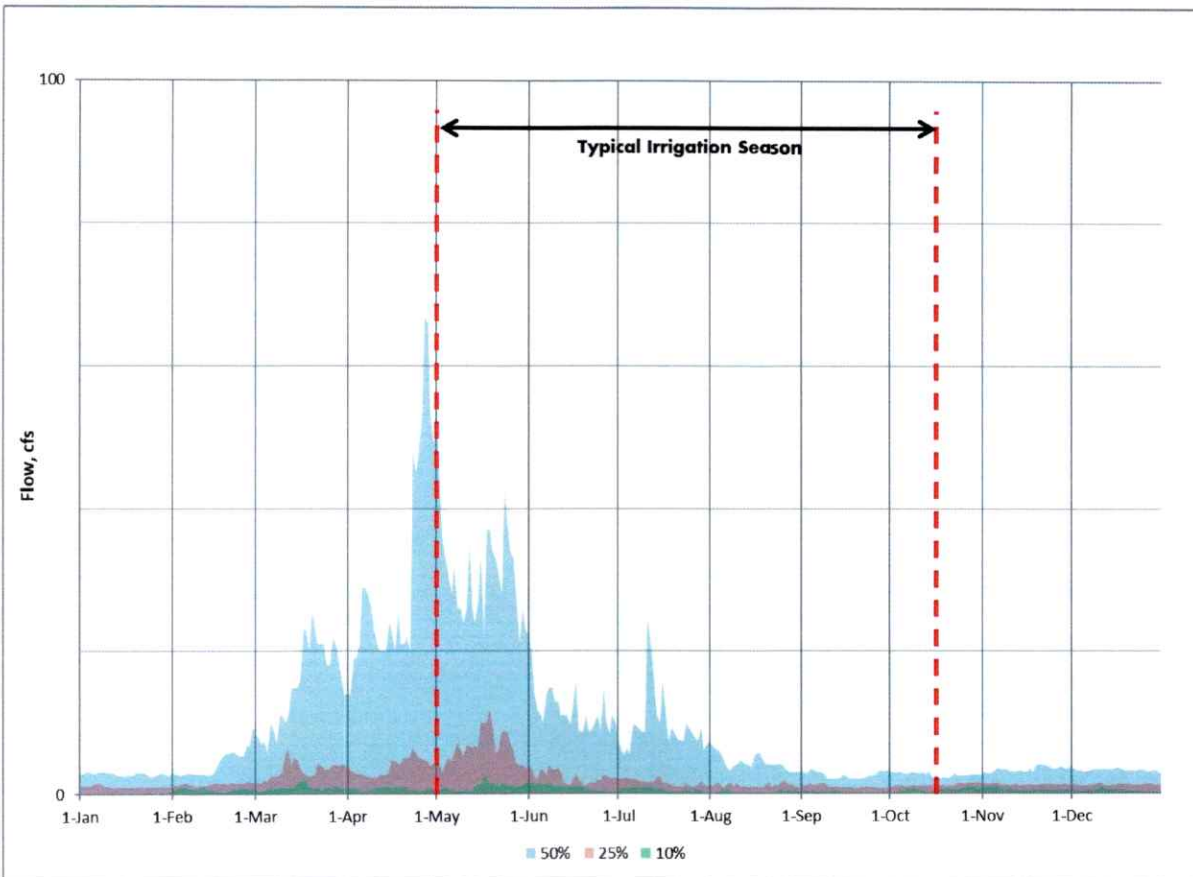


Figure 5. Daily percentile flow hydrographs for the USGS gage on Choteau Creek near Avon, SD, 1982-2003, contributing drainage area: 594 sq. miles (USGS, 2024)

The median (50th percentile) hydrograph curve exhibits the daily flow values at or below the indicated level on average one out of two years. The hydrograph displays an increase in flow beginning in March, due to spring snowmelt, then values remain steady (approximately 20 cfs to 60 cfs) with peaks during spring/summer rain events until June. Flow values decrease by July to 3 to 5 cfs for the remainder of the year.

The 25th percentile hydrograph curve exhibits the daily flow values at or below the indicated level on average one out of four years. The hydrograph displays an increase in flow beginning in March, due to spring snowmelt, and a steady flow (approximately 3 to 10 cfs) with peaks during spring/summer rain events through June. September displays a low flow value of approximately 0.7 cfs, but then values remain steady (approximately 1 cfs) for the remainder of the year.

The 10th percentile hydrograph curve exhibits the daily flow values at or below the indicated level on average one out of ten years. A similar trend of increasing flow values through the spring months (up to 2.5 cfs) before lowering in July and remaining steady (approximately 0.5 to 1 cfs) for the remainder of the year.

Review of Existing Water Rights, Discussion, and Recommendation

Currently, there are four water rights/permits collectively authorized to appropriate 2.55 cfs from Choteau Creek, plus one pending permit – Water Permit Application No. 8881-3 proposing to irrigate 38 acres at a diversion rate of 0.89 cfs utilizing the same diversion works as this application and Water Right No. 7408-3. Two water rights are located downstream from the existing dam proposed to be used - Water Right No. 3004A-3 authorized to divert 0.99 cfs and Water Right No. 3004B-3 authorized to divert 0.45 cfs, each for irrigation use and located 5 river miles downstream from the existing dam (Water Rights, 2024a).

If this application and the pending application are approved, 4.33 cfs would be authorized to be withdrawn from Choteau Creek by appropriative users (Water Rights, 2024a).

Utilizing flow data from USGS Stream Gage #06453255 on Choteau Creek near Avon located approximately six miles upstream from the existing dam, the median (50th percentile) hydrograph indicates on average one out of two years flow values remain steady (approximately 20 cfs to 60 cfs) until June, with flow values levelling out to approximately 3 to 5 cfs for the remainder of the year. The 25th percentile hydrograph indicates on average one out of four years flow values remain steady (approximately 3 to 10 cfs) through June. September displays a low flow value of approximately 0.7 cfs, but then values remain steady (approximately 1 cfs) for the remainder of the year. Review of the 10th percentile hydrograph indicates there may be times less than one cfs is available in Choteau Creek at the Avon stream gage during the irrigation season.

To satisfy downstream water rights and domestic uses, at least 2 cfs of water needs to be bypassed at the applicant's Choteau Creek diversion point(s). Flow of that magnitude may not be available in the creek one (up to four) out of every ten years. Additionally, the annual yield contribution from the runoff captured upstream of the dam is expected to be lower than average on these drier years (Table 2).

The proposed water source(s) may not be a reliable source during multi-year drought periods. During dry years, the applicant may not be able to pump from Choteau Creek to supplement the dam. Given that, if drier climatic conditions occur causing low flow values, the applicant may be restricted in the amount of water allowed for diversion to protect downstream domestic use, including livestock watering and prior water rights/permits from unlawful impairment. If this permit is approved, it is recommended it contain the following qualification, "Water may be diverted from Choteau Creek only during flow events obviously sufficient to meet the downstream domestic uses, including livestock water and prior water rights. At no time may the entire creek flow be diverted. Pumping is allowed each year from April 1 to June 30 unless the Chief Engineer is contacted, and grants written authorization to pump past June 30."

Given the small volume of water appropriated by users downstream of the existing dam, and the lack of complaints for appropriative and domestic water uses, if Water Permit Application No. 8882-3 is approved, is not expected to unlawfully impair existing downstream appropriative uses or domestic uses.

SDCL 46-5-6:

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of 1.0 cfs per 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...”

If approved, Water Permit Application No. 8882-3 would authorize a maximum instantaneous diversion rate of 0.89 cfs from either Choteau Creek or a storage dam for the irrigation of 30 acres, or at a rate of 2.1 cfs per 70 acres. The applicant did not provide a reason for the exceedance; however, it appears to be due to the size of the pivot. Generally, center pivots that are undersized seem to operate at a higher pump rate than their size would indicate proportionally. This reason falls within SDCL 46-5-6 which allows the Water Management Board to allow a greater diversion rate without exceeding the annual volume limitation and has been accepted by the Water Management Board and the Water Rights Program in the past.

CONCLUSIONS:

1. Water Permit Application No. 8882-3 proposes to appropriate 0.89 cfs from Choteau Creek and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek for the irrigation of 30 acres. Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage.
2. Water Right No. 7408-3 authorized the irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under Water Right No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights/permits. The site of interest is located in Bon Homme/Charles Mix Counties approximately eleven miles northwest of Springfield, SD.
3. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres due to the size of the center pivot. This reason falls within SDCL 46-5-6 which allows the Water Management Board to allow a greater diversion rate and has been accepted by the Water Management Board and the Water Rights Program in the past.
4. Using a runoff curve number of 75 for pasture or range land (good condition), the estimated annual probability of 10 acre-feet of upland runoff being available to be captured is expected around five out of every ten years.
5. Based on the surface area of the existing dam at the primary spillway elevation (2.18 acres), and the estimated net loss between evaporation and direct precipitation, the lost storage for the existing dam is approximately 2.75 acre-feet per year. These precipitation

and evaporative estimates are not a guarantee of what will occur in any given year, but are on average, over time, estimates.

6. Based upon an assessment of the historical flow data and a review of reported use, there is a reasonable probability that there is unappropriated water available for the applicant's proposed use.
7. Analysis of existing historical flow data for Choteau Creek demonstrates the creek is a reliable source of surface water; however, the proposed water source(s) may not be a reliable source during multi-year drought periods.
8. If this application is approved, it should contain the following qualification:
 - "Water may be diverted from Choteau Creek only during flow events obviously sufficient to meet the downstream domestic uses, including livestock water and prior water rights. At no time may the entire creek flow be diverted. Pumping is allowed each year from April 1 to June 30 unless the Chief Engineer is contacted, and grants written authorization to pump past June 30."
9. Approval of this application is not expected to unlawfully impair existing water rights/permits, location notices, or domestic uses.

Nakaila Steen

Nakaila Steen
Natural Resources Engineer II
SD DANR - Water Rights Program

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Water Rights, 2024b. "1979-2023 Irrigation Summaries by Aquifer", SD DANR-Water Rights Program, Joe Foss Building, Pierre, SD.

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: Roger Baumfalk – Avon SD

DATE: 6/20/2024

TELEPHONE: 605 286-3596

RE: irrigation permit applications

COMMENTS:

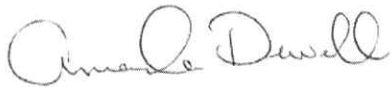
Roger recently submitted an application in his name, as well as an application in the name of Arlingh Gretschmann II, for which there was some confusion on which diversion point would be servicing which pivot system.

I called Roger for clarification.

He would like to use the creek intake located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec 13, T93N, R62W and the reservoir in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 13, T93N, R62W, to provide water to the windshield wiper pivot in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18, T93N, R61W.

The creek intake located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 13, T93N, R62W, will provide water to the center pivot located in the center of Section 13, T93N, R62W (Baumfalk application), as well as the center pivot located in the W $\frac{1}{2}$ SW $\frac{1}{4}$ (Gretschmann application).

Roger did confirm during our phone conversation that if needed, he was able to deliver water to all pivots from the reservoir and other diversion points.



Amanda Dewell
Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

August 20, 2024

Arlingh E Gretschnann
PO Box 212
Avon SD 57315

Dear Mr. Gretschnann:

Water Permit Application No. 8882-3 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 following newspapers:

Tyndall Tribune & Register	605 589-3242
Platte Enterprise	605 337-3101
Daily Press & Dakotan	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 publishers have been instructed to publish your notice. The newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on August 28 or 29, 2024. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 8882-3 to Appropriate Water

Notice is given that Arlingh E. Gretschnann II, PO Box 212, Avon SD 57315, has filed an application for a water permit to appropriate 0.89 cubic feet of water per second (cfs) from the Choteau Creek at points in the NW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 13, and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 13, for irrigation of 30 acres located in the W $\frac{1}{2}$ SW $\frac{1}{4}$ Section 13; all in T93N-R62W. Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage. Water Right No. 7408-3 authorizes irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately eleven and one-half miles west northwest of Springfield SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8882-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by September 9, 2024.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by September 9, 2024.

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_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, August 20, 2024 8:32 AM
To: eprise@midstatesd.net
Subject: 8882-3 Arlingh E Gretschmann - Public Notice
Attachments: 8882-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on August 29, 2024.

Arlingh E. Gretschmann II, PO Box 212, Avon SD 57315, 605-286-3461 has been notified to contact you to authorize publication and arrange for payment.

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

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

Thank you,

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



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, August 20, 2024 8:33 AM
To: tyndalltribune@gmail.com
Subject: 8882-3 Arlingh E Gretschrnann - Public Notice
Attachments: 8882-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on August 28, 2024 in the Tyndall Tribune & Register.

Arlingh E. Gretschrnann II, PO Box 212, Avon SD 57315, 605-286-3461 has been notified to contact you to authorize publication and arrange for payment.

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

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

Thank you,

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



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, August 20, 2024 8:34 AM
To: Kelly Kronaizl
Subject: 8882-3 Arlingh E Gretschrnann - Public Notice
Attachments: 8882-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on August 28, 2024, in the Daily Press & Dakotan.

Arlingh E. Gretschrnann II, PO Box 212, Avon SD 57315, 605-286-3461 has been notified to contact you to authorize publication and arrange for payment.

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

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

Thank you,

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



AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

ARLINGH GRETSCHMANN II
PO BOX 212
AVON SD 57315

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

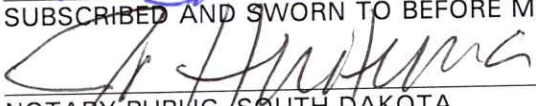
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION NO.

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 29th DAY OF August, 2024
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$47.68 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: 08/29/2024

FILED ON: 08/29/24


SUBSCRIBED AND SWORN TO BEFORE ME THIS 29th DAY OF August, 2024


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/15/2028

RECEIVED

SEP 03 2024

OFFICE OF
WATER

NOTICE OF APPLICATION NO. 8882-3 to Appropriate Water

Notice is given that Arling E. Gretschmann II, PO Box 212, Avon SD 57315, has filed an application for a water permit to appropriate 0.89 cubic feet of water per second (cfs) from the Choteau Creek at points in the NW 1/4 NE 1/4, NE 1/4 SW 1/4 Section 13, and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek in the SE 1/4 NE 1/4 Section 13, for irrigation of 30 acres located in the W 1/2 SW 1/4 Section 13; all in T93N-R62W. Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage. Water Right No. 7408-3 authorizes irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately eleven and one-half miles west northwest of Springfield SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8882-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by September 9, 2024.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by September 9, 2024.

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 \$47.68 and can be viewed free of charge at

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Published August 29, 2024.

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SEP 03 2024

**OFFICE OF
WATER**

The Platte Enterprise

Platte, SD 57369

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)

) SS.

COUNTY OF CHARLES MIX)

Sharon Huizenga, being duly sworn, deposes and says: That she is a resident of Charles Mix County, and State of South Dakota; that the Platte Enterprise is a weekly newspaper of general circulation, printed and published in the City of Platte, is said County and State, published once a week, printed in the English language, and has a bona fide circulation of 200 copies weekly, has been admitted to the United State mail under the second class mailing privilege for at least one year prior to the publication of the annexed notice and said newspaper is printed either in whole or in part in the office maintained at the above place of publications, that the newspaper has been published as aforesaid continuously for more than one year last preceding the publication of said noticed, and is a legal newspaper.

That the affiant is the publisher of said newspaper, in charge of advertising department thereof and has personal knowledge of all the facts slated in this affidavit, and that the notice and advertisement headed

Notice of Application No. 8882-3 To Incorporate Water

a printed copy of which is hereunto attached, was printed and published in the Platte Enterprise for One issue/s, the first publication being made on Thursday, the 29th day of August, A.D., 2024 and succeeding publications were made severally on

Thursday the _____ day of _____ A.D., 20____

Thursday the _____ day of _____ A.D., 20____

Thursday the _____ day of _____ A.D., 20____

Thursday the _____ day of _____ A.D., 20____

and the last publication being made on Thursday, the _____ of _____ A.D., 20____

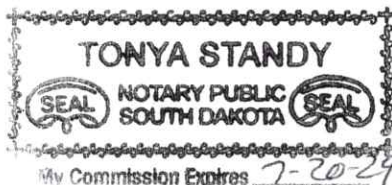
That the publication fee for publishing said notice is the sum of \$ 45.09

Sharon Huizenga
Subscribed and sworn to before me this 29th day of August, A.D., 2024

Tonya Standy

Notary Public for Charles Mix County, SD

My Commission Expires on 7-20-29



RECEIVED

SEP 03 2024

OFFICE OF
WATER

LEGAL NOTICE

NOTICE OF APPLICATION NO. 8882-3 TO APPROPRIATE WATER

Notice is given that Arling E. Gretschnann II, PO Box 212, Avon SD 57315, has filed an application for a water permit to appropriate 0.89 cubic feet of water per second (cfs) from the Choteau Creek at points in the NW 1/4 NE 1/4, NE 1/4 SW 1/4 Section 13, and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek in the SE 1/4 NE 1/4 Section 13, for irrigation of 30 acres located in the W 1/2 SW 1/4 Section 13; all in T93N-R62W.

Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage. Water Right No. 7408-3 authorizes irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately eleven and one-half miles west northwest of Springfield SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8882-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both.

Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by September 9, 2024.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by September 9, 2024.

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 cost of \$45.09 and may be viewed free of charge at www.sdpublicnotices.com.

(Aug. 29, 2024)

Affidavit of Publication

State of South Dakota }
County of Bon Homme } SS

Rebecca Tip Being first duly sworn says that the **Tyndall Tribune & Register** is a legal weekly newspaper for publication of legal and other official notices as required by Chapter 298 of the Session Laws of South Dakota, 1939; that it has bona fide paid circulation of more than two hundred copies weekly; that it is published in English language in the City of Tyndall, Bon Homme County, South Dakota, and has been admitted to the United States mail under second class mailing privilege for more than one year prior to the first publication of the notice herein mentioned, and that it is printed in an office maintained at the place of publication at Tyndall, South Dakota, and that dependent is the publisher in charge of the advertising department of said newspaper; that the advertisement headed

Gretschmann Not. of Appl. 8882-3
129 @ 399

a printed copy of which is hereto attached, was printed and published in said newspaper for one successive weeks, upon the following dates:

<u>Aug 28</u> 20 <u>24</u>	20.....
.....20.....	20.....
.....20.....	20.....
.....20.....	20.....

That the full amount of the fee charged for the publication of said notice, \$51.47, inures to the benefit of the publisher of said newspaper, that no agreement or understanding for the division thereof has been made with any other person, and that no part has been agreed to be paid to any person whomsoever.

Rebecca Tip, publisher
Subscribed and sworn to before me this

28 day of Aug 2024

Peggy Schelske
Notary Public
South Dakota

Notary Public, South Dakota

My Commission expires: 10-24-2027

RECEIVED

SEP 03 2024

OFFICE OF
WATER

NOTICE OF APPLICATION

NO. 8882-3 to Appropriate Water

Notice is given that Arling E. Gretschmann II, PO Box 212, Avon SD 57315, has filed an application for a water permit to appropriate 0.89 cubic feet of water per second (cfs) from the Choteau Creek at points in the NW 1/4 NE 1/4, NE 1/4 SW 1/4 Section 13, and an existing dam (32 acre-feet storage capacity at the primary spillway) located on a side tributary to Choteau Creek in the SE 1/4 NE 1/4 Section 13, for irrigation of 30 acres located in the W 1/2 SW 1/4 Section 13; all in T93N-R62W. Water may be diverted directly from the creek to the acreage to be irrigated or to the existing dam (authorized by Water Right No. 7408-3) to maintain the water level at the spillway elevation and then from the dam to irrigate the acreage. Water Right No. 7408-3 authorizes irrigation of 78 acres from Choteau Creek and the dam at a diversion rate of 1.11 cfs. Under No. 7408-3, no pumping may occur from Choteau Creek after June 30 each year without permission from the Chief Engineer and water may be diverted to the dam only when flows are obviously sufficient to meet downstream domestic uses and prior water rights. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. This site is located approximately eleven and one-half miles west northwest of Springfield SD.

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Any person interested in opposing this

application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by September 9, 2024.

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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.

Published once at an approximate cost of \$51.47 and can be viewed free of charge at www.sdpublicnotices.com

(August 28)



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

SEP 27 2024

Arlingh E. Gretschrnann
PO Box 212
Avon SD 57315

Dear Mr. Gretschrnann:

Enclosed is Water Permit No. 8882-3 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,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8882-3

Name of Applicant: Arlingh E Gretschrann II

Date of Posting: 8/26/2024

Date of Removal: 9/27/2024



Ron Duvall, Engineer III

9/27/2024

Date

Subscribed and sworn to before me, a notary public, this 27th day of Sept, 2024.



Notary Public - South Dakota
My commission expires:

Rachel Rodriguez
My Commission Expires
May 16, 2029

(SEAL)

