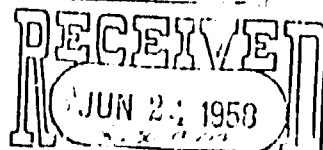


1. Considered March 17, 1908 Appl. No. 5000
2. Name of Applicant W. H. Jones
3. Post Office Address Butler
4. Amount of water claimed 3.1 cfs 2.5 cfs max
5. Source of water supply White River
6. Water to be used for irrigation  
Acres to be irrigated 2000
7. Water to be diverted and used in Benning County about  
1 miles of the river.
8. Proof of Publication Received ✓  
Not Received \_\_\_\_\_
9. Application Approved ✓  
Subject to \_\_\_\_\_  
Not approved \_\_\_\_\_  
Action deferred \_\_\_\_\_
10. Remarks:

No. 490-2Water Division No. 2 White River District  
(Blanks to be filled by the Engineer for the W. R. C.)STATE WATER RESOURCES COMM.  
PIERRE, SOUTH DAKOTA

# APPLICATION FOR PERMIT To Appropriato Water within the State of South Dakota

(NOTE--Draw a line through items not applicable.)

1. Name of applicant Walter Kruse  
Postoffice address Box Interior, County Jackson, State S.D.

I. If a corporation XXXXXXXXXXXX

- (a) Name of same \_\_\_\_\_  
(b) Date and place of incorporation \_\_\_\_\_  
(c) Amount of capital stock \_\_\_\_\_  
(d) Amount paid in \_\_\_\_\_  
(e) Names and addresses of directors \_\_\_\_\_

(NOTE--A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant:

(a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)

(b) Cash on hand, \$ \_\_\_\_\_ (c) Treasury stock, \$ \_\_\_\_\_

(d) Bonds to be issued, \$ \_\_\_\_\_ (e) Other resources, \$ \_\_\_\_\_

2. Name of diversion work Kruse Number One3. Amount of water claimed 3.1 gals per minute available cubic feet per second4. Source of water supply White River5. Location of point of diversion 270 rods S. 16 - 30' W. of N.E. corner Sec. 16T- 4S, R- 17E, B.H.M. on North bank Pennington County.6. Annual period or periods during which water is to be used May 1st. to Oct. 1st.

7. To be used for:

I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? Gravity Irr.(a) Number of acres to be irrigated 214.4 acres.(b) Legal subdivisions to be irrigated See Tabulation

(NOTE--A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Some must also be shown on accompanying map.)

(c) Statement as to domestic use (giving location, etc.) None

II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation.

(a) Nature of use \_\_\_\_\_  
Name any of the above uses claimed

(b) Amount of power to be generated \_\_\_\_\_ horse power.

Amount claimed for engine cooling \_\_\_\_\_

(c) Location of plant \_\_\_\_\_

(d) Method of developing power \_\_\_\_\_

(e) Point where water will be returned to stream \_\_\_\_\_

Map No. 487-2

8. Estimated cost of work:

(a) Head Gates, \$-----

(b) Pumping plant, \$2,501.00

(c) Fluming, \$-----

(d) Canal-earth, \$1,000.00

Rock, \$-----

(e) Other structures Drops, Drainage, etc. \$1,000.00

Total, \$-----

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

Perm. Water Lifter

II. Dimensions of works:

(a) Dam: Height-----feet; length at bottom-----feet; length at top-----feet; thickness at bottom-----feet; thickness at top-----feet; slope at front water face-----; slope at back face-----

material used in construction-----

(b) Reservoir: Capacity when filled-----acre feet. Surface area at highwater mark-----acres.

| DEPTH AT<br>OUTLET-Feet | SURFACE AREA AT EACH<br>DEPTH AT OUTLET--ACRES | ACRE-Feet<br>CAPACITY |
|-------------------------|------------------------------------------------|-----------------------|
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |
|                         |                                                |                       |

(c) Head gate: Width-----feet; height-----feet;

Material-----

(d) Canal: Total length-----miles.

| LOCATION BELOW<br>HEADGATE | DEPTH     | BOTTOM<br>WIDTH | WIDTH AT<br>WATER-LINE | GRADE<br>PER MILE |
|----------------------------|-----------|-----------------|------------------------|-------------------|
| At-----Mile                | 1.4 feet  | 1.5 feet        | 5.7 feet               | 5.3 feet          |
| At-----Mile                | -----feet | -----feet       | -----feet              | -----feet         |
| At-----Mile                | -----feet | -----feet       | -----feet              | -----feet         |
| At-----Mile                | -----feet | -----feet       | -----feet              | -----feet         |
| At-----Mile                | -----feet | -----feet       | -----feet              | -----feet         |
| At-----Mile                | -----feet | -----feet       | -----feet              | -----feet         |

(Give dimensions where reductions in size are made.)

10. Time required for completion of work Five years.

11. Time required for complete application of water to the proposed beneficial use-----years.

12. Choice of newspaper for publication of notice of intention to appropriate Penn. Co. Courant

Wall, South Dakota

STATE OF SOUTH DAKOTA

County of Deuel

ss.

I, Walter W. Kause, being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of owner, that I have read the above foregoing statement, examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed

Walter W. Kause

Subscribed and sworn to before me this

21

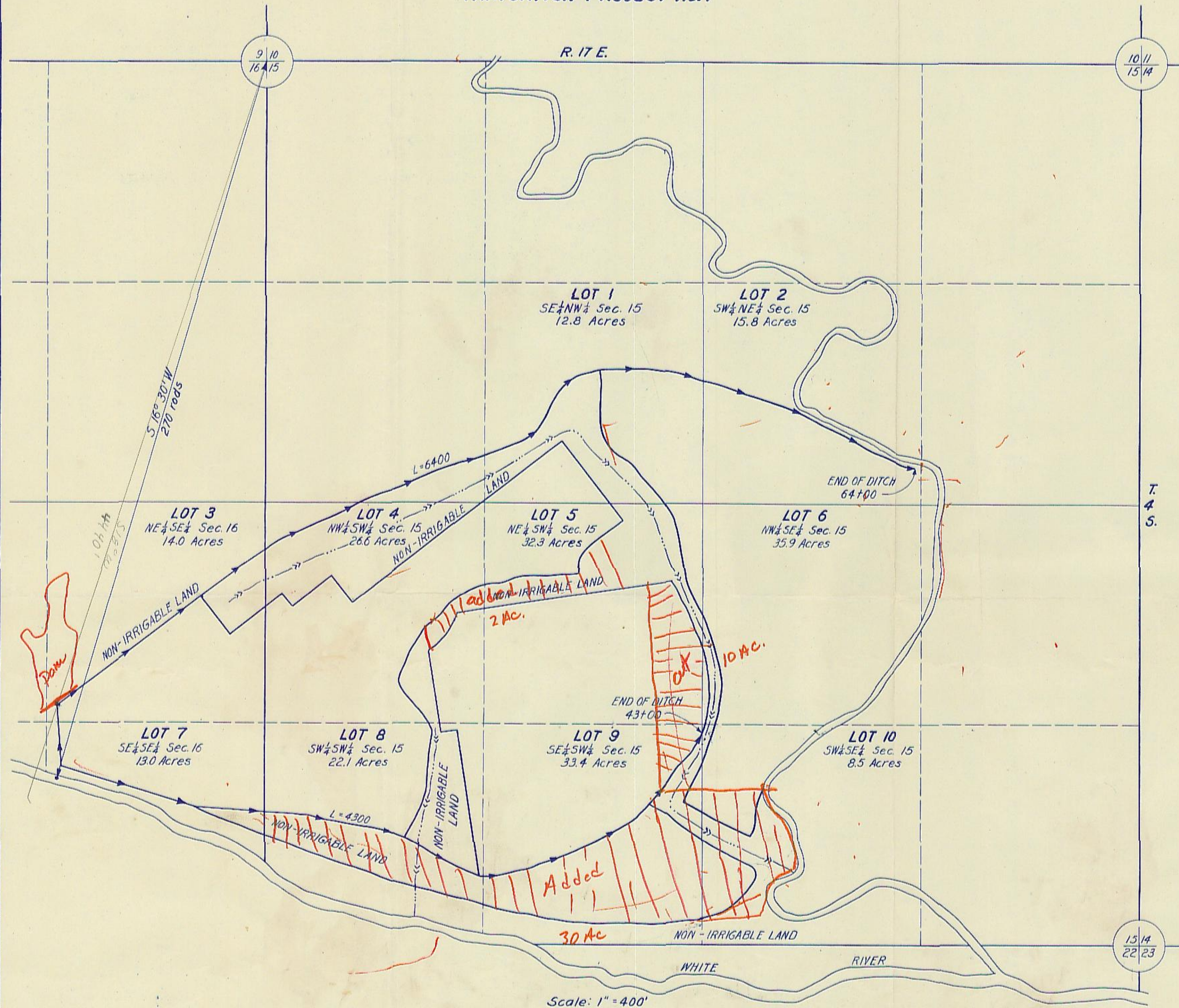
day of August

1958

Walter W. Kause  
Notary Public (or other qualified officer.)

\* Each diversion must have a headgate or measuring device.

# WALTER W. KRUSE IRRIGATION PROJECT NO. 1



## LOCATION OF LAND TO BE IRRIGATED

| LOCATION | SEC. | TOWNSHIP | RANGE | ACRES |
|----------|------|----------|-------|-------|
| LOT 1    | 15   | 4S       | 17E   | 12.8  |
| LOT 2    | 15   | 4S       | 17E   | 15.8  |
| LOT 3    | 16   | 4S       | 17E   | 14.0  |
| LOT 4    | 15   | 4S       | 17E   | 26.6  |
| LOT 5    | 15   | 4S       | 17E   | 32.3  |
| LOT 6    | 15   | 4S       | 17E   | 35.9  |
| LOT 7    | 16   | 4S       | 17E   | 13.0  |
| LOT 8    | 15   | 4S       | 17E   | 22.1  |
| LOT 9    | 15   | 4S       | 17E   | 33.4  |
| LOT 10   | 15   | 4S       | 17E   | 8.5   |
| TOTAL    |      |          |       | 214.4 |

## SURVEYOR'S CERTIFICATE

I, HARLAN G. COLLINS, do hereby certify that this map identifies the Land of the WALTER W. KRUSE IRRIGATION PROJECT NUMBER 1

SIGNATURE: *Harlan G. Collins*  
TITLE: Civil Engineer  
Soil Conservation Service  
U. S. Department of Agriculture

Subscribed and sworn to before me this 6 day of June, 1958 A.D.

*Josephine S. Sagan*  
NOTARY PUBLIC

Map No. 490-2  
Appl. No. 490-2

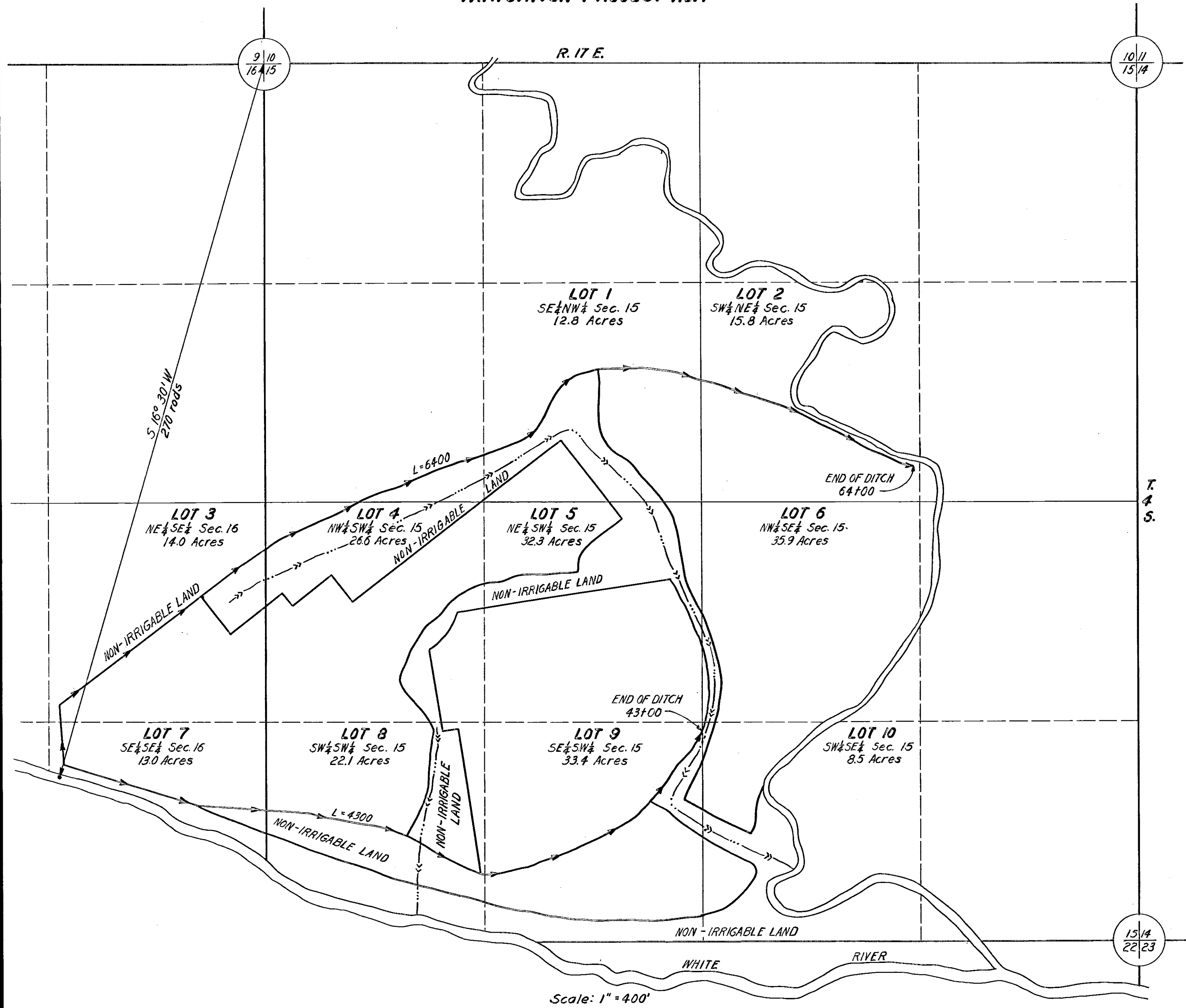
## WALTER W. KRUSE IRRIGATION PROJECT NO. 1

Pennington County, South Dakota  
Scale: 1" = 400'

## U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

|                            |                    |                                      |
|----------------------------|--------------------|--------------------------------------|
| Designed <i>Ed Budluff</i> | Date <i>5-2-58</i> | Approved by <i>Harlan G. Collins</i> |
| Drawn                      |                    | Title <i>Civil Engineer</i>          |
| Traced                     |                    | Title                                |
| Checked                    |                    | Sheet No. <i>1</i> of <i>1</i>       |

# WALTER W. KRUSE IRRIGATION PROJECT NO. 1



## LOCATION OF LAND TO BE IRRIGATED

| LOCATION | SEC. | TOWNSHIP | RANGE | ACRES |
|----------|------|----------|-------|-------|
| LOT 1    | 15   | 4S       | 17E   | 12.8  |
| LOT 2    | 15   | 4S       | 17E   | 15.8  |
| LOT 3    | 16   | 4S       | 17E   | 14.0  |
| LOT 4    | 15   | 4S       | 17E   | 26.6  |
| LOT 5    | 15   | 4S       | 17E   | 32.3  |
| LOT 6    | 15   | 4S       | 17E   | 35.9  |
| LOT 7    | 16   | 4S       | 17E   | 13.0  |
| LOT 8    | 15   | 4S       | 17E   | 22.1  |
| LOT 9    | 15   | 4S       | 17E   | 33.4  |
| LOT 10   | 15   | 4S       | 17E   | 8.5   |
| TOTAL    |      |          |       | 214.4 |

SURVEYOR'S CERTIFICATE  
I, HARLAN G. COLLINS, Do Hereby Certify that  
this map identifies the Land of the WALTER W. KRUSE  
IRRIGATION PROJECT NUMBER 1

SIGNATURE: *Harlan G. Collins*  
TITLE: Civil Engineer,  
Soil Conservation Service  
U. S. Department of Agriculture

Subscribed and sworn to before me this 6 day of  
June, 1958 A.D.

*Joseph S. Suggs*  
NOTARY PUBLIC

Map No. 487-2  
(Appl. No. 490-2)

WALTER W. KRUSE  
IRRIGATION PROJECT NO. 1  
Pennington County, South Dakota  
Scale: 1" = 400'

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

|          |             |       |        |             |                          |
|----------|-------------|-------|--------|-------------|--------------------------|
| Designed | Ed. Budluff | Date  | 5-2-58 | Approved by | <i>Harlan G. Collins</i> |
| Drawn    |             | Title |        |             | Civil Engineer           |
| Traced   |             | Sheet | No. 1  | Drawing No. |                          |
| Checked  |             | of    | 1      |             |                          |

Remarks by State Water Resources Commission:

STATE OF SOUTH DAKOTA  
County of Hughes } ss.

Pierre, South Dakota, July 16, 1958

This is to certify that the foregoing application was received by the Commission at 8:30 o'clock  
9 m. upon the 24 day of June, 1958

State Water Resources Commission

By:

J. J. J. J.

Chief Engineer, Executive Officer

Number of permit 490-2

Date of first receipt of application June 24, 1958

Date of return to applicant for correction, amendments or changes required as follows: June 27, 1958

Date of receipt of corrected application July 3, 1958

Date from which applicant may claim right June 24, 1958

Approved September 17, 1958, Recorded in Book 5 Page 30

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before

March 17, 1961

2nd. The whole of said work is to be completed on or before September 17, 1963

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is

September 17, 1964

4th. The water appropriated shall be used for the purpose of irrigation

5th. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of the appropriation herein granted shall not exceed 306 cubic feet per second; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for irrigation on or before September 17, 1964, said water to be used during the following described annual period:

May to October inclusive

Witness my hand this 10 day of October, 1958

State Water Resources Commission

By:

J. J. J. J.

Chief Engineer, Executive Officer

Certificate of Construction issued AUGUST 7, 1967

Water License issued AUGUST 7, 1967

Permit No. 490-2Water Division No. 2 WHITE RIVER Water District**Certificate of Completion of Works**

TO ALL WHOM IT MAY CONCERN:

This is to Certify, That Walter Kruseof Interior, County of Jackson, and State of South Dakotathe holder of Permit No. 490-2, issued upon Application No. 490-2, bearing date of priority of June 24, 1958, authorizing the diversion of3.06 cu. ft. per second of the waters of the White RiverCounty of Pennington, State of South Dakota, at a point S-16°30'W, 270 rods from the NE Corner, Section 16, T4S, R17Efor irrigationpurposes, has fully complied with the provisions of the laws of the State of South Dakota relating to proof of completion of the works of diversion set out and described in said Permit; that said works are found in satisfactory condition for diverting and conveying to the place of intended use 9.0 cu. ft.

per second of water; and that the lands proposed to be irrigated by the use of said water are described as follows,

to-wit: all in T4S, R17ESection 15 SE $\frac{1}{4}$  NW $\frac{1}{4}$  12.8 AcresSW $\frac{1}{4}$  NE $\frac{1}{4}$  15.8 AcresNW $\frac{1}{4}$  SW $\frac{1}{4}$  26.6 AcresNE $\frac{1}{4}$  SW $\frac{1}{4}$  32.3 AcresSW $\frac{1}{4}$  SW $\frac{1}{4}$  22.1 AcresSE $\frac{1}{4}$  SW $\frac{1}{4}$  33.4 AcresNW $\frac{1}{4}$  SE $\frac{1}{4}$  35.9 AcresSW $\frac{1}{4}$  SE $\frac{1}{4}$  8.5 AcresSection 16 NE $\frac{1}{4}$  SE $\frac{1}{4}$  14.0 AcresSE $\frac{1}{4}$  SE $\frac{1}{4}$  13.0 AcresTotal 214.4 AcresWitness my hand this 7th day of August A. D. 1967

State Water Resources Commission

By:

**J.W. GRIMES**  
Chief Engineer, Executive Officer

## STATE OF SOUTH DAKOTA

## WATER LICENSE No. 490-2

WHEREAS, On the 24th day of June A. D. 1958

Walter Kruse

of Interior County of Jackson and State of South Dakota duly made application (No. 490-2) to us for a permit to use 3.06 cubic feet per second of the waters of the White River County of Pennington, State of South Dakota, for irrigation purposes; and

WHEREAS, On the 10th day of October A. D. 1958 Permit No. 490-2 was issued to said applicant for the diversion of said water, and providing for the completion of the works of diversion therein described on or before the 17th day of September A. D. 1963 and for the application to beneficial use of said water on or before the 17th day of September A. D. 1964 and,

WHEREAS, On the 27th day of July A. D. 1967 the holder of said permit duly made proof of the completion of adequate works for the diversion of 9.0 cubic feet per second of said waters, as evidenced by our Certificate No. 490-2 dated August 7, 1967 confirming the completion of works of sufficient capacity for diverting and conveying to the place of intended use 9.0 cubic feet per second of water, with date of priority of June 24, 1958 and,

WHEREAS, On the 27th day of July A. D. 1967 proof was duly made of the application to beneficial use of 3.06 cubic feet per second of said water for irrigating 214.4 acres in portions of Sections 15 and 16, T4S, R17E

NOW, THEREFORE, By the virtue of the authority vested in us by the laws of the State of South Dakota,  
 We hereby grant and confirm to Walter Kruse  
 of Interior the holder and owner of said permit No. 490-2  
 a water right, dating from June 24, 1958 to the use of 3.06  
 cubic feet per second of the waters of the White River  
 in the County of Pennington and State of South Dakota, or so much thereof as may be  
 necessary for the purposes hereinbelow mentioned, to be diverted at a point S16<sup>c</sup> 30' W, 270 rods  
from the NE Corner, Section 16, T4S, R17E  
 and conducted to and upon portions of Sections 15 and 16, T4S, R17E; more  
specifically described in the Certificate of Completion of Works  
 for the purpose of irrigation, subject to any limitations listed in the  
permit to appropriate water.

subject, however, to the laws of the State of South Dakota applicable to a license for the use of the waters of the State, and subject, also to the local or community customs, rules and regulations which have been or may be adopted from time to time by a majority of the users from a common source of supply, canal or lateral from which such water may be taken, when such rules and regulations have for their object the economical use of such water.

WITNESS, My hand and seal of our office at Pierre, South Dakota  
 this 7th day of August A. D. Nineteen  
 Hundred and Sixty-seven

State Water Resources Commission

By:

J. W. GRIMES  
 Chief Engineer, Executive Officer

STATE OF SOUTH DAKOTA

Water License No. \_\_\_\_\_  
 To \_\_\_\_\_  
 \_\_\_\_\_  
 Source of Supply \_\_\_\_\_  
 \_\_\_\_\_  
 County \_\_\_\_\_  
 A.M't \_\_\_\_\_ C. F. S. \_\_\_\_\_  
 Point of Diversion \_\_\_\_\_  
 \_\_\_\_\_  
 Place of Use \_\_\_\_\_  
 \_\_\_\_\_  
 Purpose \_\_\_\_\_  
 \_\_\_\_\_  
 Date of Priority \_\_\_\_\_  
 Recorded \_\_\_\_\_  
 in Book \_\_\_\_\_ of \_\_\_\_\_ Page \_\_\_\_\_

LOCATION OF LAND TO BE IRRIGATED

|                                         | LOCATION | SEC. | TOWNSHIP | RANGE | ACRES |
|-----------------------------------------|----------|------|----------|-------|-------|
| (SE $\frac{1}{4}$ NW $\frac{1}{4}$ ) -- | Lot 1    | 15   | 4S       | 17E   | 12.8  |
| (SW $\frac{1}{4}$ NE $\frac{1}{4}$ )--  | Lot 2    | 15   | 4S       | 17E   | 15.8  |
| (NE $\frac{1}{4}$ SE $\frac{1}{4}$ )--  | Lot 3    | 16   | 4S       | 17E   | 14.0  |
| (NW $\frac{1}{4}$ SW $\frac{1}{4}$ ) -- | Lot 4    | 15   | 4S       | 17E   | 26.6  |
| (NE $\frac{1}{4}$ SW $\frac{1}{4}$ )--  | Lot 5    | 15   | 4S       | 17E   | 32.3  |
| (NW $\frac{1}{4}$ SE $\frac{1}{4}$ )--  | Lot 6    | 15   | 4S       | 17E   | 35.9  |
| (SE $\frac{1}{4}$ SE $\frac{1}{4}$ )--  | Lot 7    | 16   | 4S       | 17E   | 13.0  |
| (SW $\frac{1}{4}$ SW $\frac{1}{4}$ )--  | Lot 8    | 15   | 4S       | 17E   | 22.1  |
| (SE $\frac{1}{4}$ SW $\frac{1}{4}$ )--  | Lot 9    | 15   | 4S       | 17E   | 33.4  |
| (SW $\frac{1}{4}$ SE $\frac{1}{4}$ )--  | Lot 10   | 15   | 4S       | 17E   | 8.5   |
|                                         |          |      |          | TOTAL | 214.4 |

## PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA }  
County Penn. } ss.R. F. Lewis being duly sworn, deposes and says the annexed printed copy of Notice of Intention to Appropriate Water was taken from thePenn. Co. Current a newspaper which during the whole time of publication of said notice herein after stated, has been and is printed and published in the City of Wells County of Pennings and State of South Dakota; that the said notice was published in said newspaper on the following dates:July 24, 31, Aug 7, 14, 1958in each and every issue of the full number thereof, the first publication being made on the 24<sup>th</sup> day of July 1958 and the last publication on the 14<sup>th</sup> day of August 1958, upon which days or times of publication aforesaid the newspaper was regularly published, and that during the whole time of said publication he was Editor the printer and publisher of the said newspaper.No. 490-2  
APPROPRIATION FOR WATEROffice of State  
Water Resources Commission  
Pierre, S. Dak.July 18, 1958  
Notice is hereby given that Walter Kruse, whose postoffice address is Interior, S. Dak., has made application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 3.1 cubic feet of water per second of time from the White River through the Kruse Number One, the point of diversion of which is to be located on the northerly bank of said stream in the E $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 16, Twp. 4S, Range 17E, said Water to be used for the purpose of providing irrigation on the following described land:E $\frac{1}{4}$ , SE $\frac{1}{4}$ , Sec. 16, T. 4S, R. 17E,  $\frac{1}{4}$  SE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , SW $\frac{1}{4}$ , NE $\frac{1}{4}$ , W $\frac{1}{4}$ , SE $\frac{1}{4}$ , all in Sec. 16, T. 4S, R. 17E.

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 17th day of September, 1958, at 2:00 P. M. All interested persons may appear and be heard.

Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources  
Commission

By: Les Wylborny,

Water Rights Engineer

Pub. July 24, 31, Aug. 7, 14

Subscribed and sworn to before me this 27<sup>th</sup> day of August A. D. 1958RECEIVED  
AUG 29 1958STATE WATER RESOURCES COMM.  
PIERRE, SOUTH DAKOTANotary Public Pennings County, S. D.

(First Publication ~~Before~~ August 15, 1958..)

## APPROPRIATION OF WATER

Office of State Water Resources Commission.

Pierre, S. Dak., July 18, 1958

Notice is hereby given that Walter Kruse whose post-office address is Interior S. Dak., has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 3.1 cubic feet of water per second of time from the White River through the ~~Kruse Number One~~ the point of diversion of which is to be located on the northerly bank of said stream in the E $\frac{1}{2}$   $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 16 Twp. 1S Range 17E. Said water to be used for the purpose of providing irrigation on the following described land:

E $\frac{1}{2}$  SE $\frac{1}{4}$ , Sec 16, T 1S, R 17E; SE $\frac{1}{4}$  NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , NE $\frac{1}{4}$ , W $\frac{1}{2}$  SE $\frac{1}{4}$  all in Sec. 15, T 1S, R 17E

and for irrigation purposes.

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 17 day of September, 1958, at 2:00 P.M. All interested persons may appear and be heard.

Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources Commission

By:

Chief Engineer, Executive Officer  
~~XXXXXXXXXXXXXXXXXXXX~~

cc Form 8  
 R. F. Lewis, Publisher  
 The Pennington County Courant  
 Wall, South Dakota

LES WYBORNY  
 Water Rights Engineer

Permit No. 490-2Water Division No. 2 White River Water District

## Certificate of Examination of Works

## Report of Examining Engineer

To the State Water Resources Commission, Pierre, South Dakota:

Dear Sirs: I hereby certify that in accordance with your letter of authorization dated \_\_\_\_\_ 19\_\_\_\_, I have this day made a thorough examination of the diversion works constructed by Walter Kruse of Interior, Pennington County, South Dakota, holder of Permit No. 490-2, issued upon Application No. 490-2, bearing date of priority of June 24, 1958, authorizing the diversion of 306 cu. ft. per second of the waters of White River for irrigation purposes. I have to report on the condition of the same as follows:

The diversion works comprise: Parma Special 4 Submersible pump - no serial or model. Has 4" intake, 10" output, rated at 1750 gpm. A Parma Special 6 Submersible with 6" intake & 12" output. Rated at 3300 gpm. Both have lift of 9' & are powered by two 30 HP electric motors. 3.5 miles mainline ditch, 1/2 concrete lined. All fields leveled with borders. Entire area can be watered by pumps or dam.  
and the system is in the following condition: \_\_\_\_\_

Excellent

The point of diversion is located S 16° 30' W, 270 rods from NE corner Section 16, T4S, R12E

The works are capable of diverting and conveying to the place of use 306 cu. ft. per second of water, which is to be used for irrigation

The legal sub-divisions to be irrigated are: Lot 1, Lot 2, Lot 4, Lot 5, Lot 8, Lot 9, Lot 10, Section 15; Lot 3 and Lot 7, Section 16; all in T4S, R12E

comprising a total of 214.4 acres of land.

The domestic use intended comprises None

The utilization for power, mining, or other beneficial uses comprises: None

Witness my hand, this 27th day of July, A. D. 1960

—SEAL—

Richard D Schumacher  
Examining Engineer.

Water right specialist.



490-2

DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE SOUTH DAKOTA 57501-3181

November 16, 1993

No. 490-2

Billy P. Kruse  
Box 122  
Interior, SD 57750

Dear Ms. Kruse:

Enclosed is a partially completed "Notice of Transfer" form for use in filing an ownership change on Water Right No. 490-2. The water right is currently listed in the name of Walter Kruse.

The transfer form should be checked over for accuracy and signed by the new owner in the presence of a notary public. Upon completion, return the form to our office with a required filing fee of \$2.50.

South Dakota Water Law 46-5-30.3 requires Notice of any sale, grant, lease, conveyance or other transfer of a water permit or water right to appropriate water to be filed with this office within ninety days.

If you have any questions, please contact me.

Sincerely,

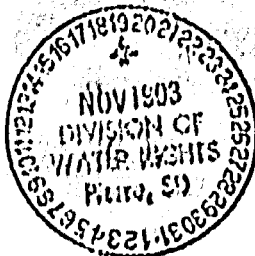
Cheryl F. Frost  
Secretary  
Water Rights Division  
(605) 773-3352

enclosure

490-2

# NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer,  
Water Rights Division, DENR  
523 E. Capitol  
Pierre, SD 57501-3181



No. 490-2

Date: Nov. 16, 1993

I/We request that Water Right No. 490-2

formerly owned by: Walter Kruse (deceased)

be transferred to: (name & address) Lily P. Kruse (wife)

Box 122, Interior SD 57750

(Telephone No) 605/433-5353

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

214.4 acres in Lots 1 - 10 in Sections 15 & 16, T49, R17E

I/We understand that the validity of Water Right No. 490-2 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

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

A fee of Two Dollars and Fifty Cents (\$2.50) is attached to cover the filing fees as required under SDCL 46-2-13.

STATE OF SOUTH DAKOTA )

County of Jackman )

I/We Lily Kruse being first duly sworn on my oath depose and say that my relation to the above described undertaking is that of owner, that I have read the above foregoing statement, and that I know of my own personal knowledge that the information herein stated is true.

Lily P. Kruse  
(Signed)

Subscribed and sworn to before me this 16th day of November, 19 93.

LaVONNE O. GREEN  
SEAL NOTARY PUBLIC SOUTH DAKOTA  
LaVonne O. Green  
(Notary Public)

NOTE: Water permits may be cancelled for nonconstruction within the five year construction period. 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.

# RECEIPT

Division of Water Rights

South Dakota Department of Environment and Natural Resources

490-2  
413945

Pierre, \_\_\_\_\_ November 19 \_\_\_\_\_, 19 93

RECEIVED OF Lily P Kruse, Box 122, Interior SD 57750

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 Water Right No. 490-2

Fee for Filing Extension Request \_\_\_\_\_

Fee for \_\_\_\_\_

(Any Other Work Provided by Law)

Total

2 50

2 50

By John W. H. [Signature]  
Chief Engineer



490-2

DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE SOUTH DAKOTA 57501-3181

December 2, 1993

Lily P. Kruse  
Box 122  
Interior, SD 57750

Dear Mrs. Kruse:

Enclosed is a receipt in the amount of \$2.50 which you paid for the transfer of Water Right No. 490-2.

Our records now show you as the owner of Water Right No. 490-2.

Sincerely,

*Cheryl F. Frost*

Cheryl F. Frost  
Secretary  
Water Rights Division  
(605) 773-3352

enclosure



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3181  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

July 29, 1998

490-2

Lily P Kruse  
Box 122  
Interior, SD 57750

Dear Mrs. Kruse:

I am writing in regard to your past irrigation questionnaires relating to Water Right No. 490-2. I noticed when reviewing last year's irrigation questionnaire, that you listed "flood irrigation" from a dry draw dam. I believe after reviewing the questionnaire, that you are reporting irrigation use as authorized under a separate water right.

Currently, we have two water rights in your name. Water Right No. 490-2 authorizes diversion of water from the White River to irrigate 214 acres. Water Right No. 923-2 authorizes diversion of water from a dry draw (dam) to irrigate 247 acres.

You are not required to submit annual irrigation questionnaires for the water spreading system authorized under No. 923-2. The questionnaire mailed to you each year is for reporting any water use from the White River as authorized by No. 490-2.

If your method of irrigation from the White River, as authorized under Water Right No. 490-2, has changed please get in touch with me.

Sincerely,

Genny McMath  
Environmental Scientist  
Water Rights Program  
(605) 773-3352



490-2  
DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3181  
www.state.sd.us/denr

October 16, 1998

490-2  
923-2

Lily P Kruse  
Box 122  
Interior, SD 57750

Dear Mrs. Kruse:

Enclosed, as you requested, are partially completed "Notice of Transfer of Ownership" forms for use in transferring the water rights from your name to Charles Kruse.

Please complete the portion titled "be transferred to: (name & address).....". Upon completion, Charles will need to sign the forms in the presence of a notary public and return them to our office with a required filing fee of \$2.50 each (total of \$5.00).

If you have any questions concerning the water rights or completion of the forms, please let me know.

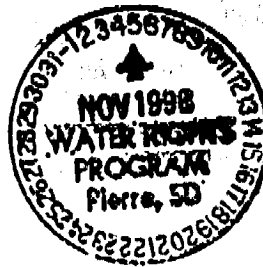
Sincerely,

Genny McMath  
Environmental Scientist  
Water Rights Program  
(605) 773-3352

encl

# NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer  
Water Rights Program, DENR  
523 E. Capitol  
Pierre, SD 57501-3181



No. 490-2

Date: Nov 3, 1998

I/We request that Water Right No. 490-2

formerly owned by: Lilly P Kruse, Box 122, Interior, SD 57750

be transferred to: (name & address) Charles Kruse, Box 100, Interior SD  
57750

Telephone No. 605/433-4332

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

214.4 acres in Lots 1 - 10 in Sections 15 & 16, T4S, R17E

I/We understand that the validity of Water Right No. 490-2 has not been determined by this transfer action. If I/We have any questions on validity. I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

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 Two Dollars and Fifty Cents (\$2.50) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

STATE OF SOUTH DAKOTA )

County of Pirbrighton )

I/We CHARLES A. KRUSE being first duly sworn on my oath depose and say that my relation to the above described undertaking is that of Owner, that I have read the above foregoing statement, and that I know of my own personal knowledge that the information herein stated is true.

Charles A. Kruse  
(Signer)

Subscribed and sworn to before me this 3rd day of November 19 98.

Carmen J. Nelson  
(Notary Public)

NOTE: Water permits may be cancelled for nonconstruction within the five year construction period. 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.

**RECEIPT**  
**Water Rights Program**  
South Dakota Department of Environment and Natural Resources

No 415910

RECEIVED OF Charles Kruse, Box 100, Interior, SD 57750  
the following amount in fees for services rendered as provided for by law:

Pierre, \_\_\_\_\_

November 5, 1998

|                                                                                                        |                                    |      |
|--------------------------------------------------------------------------------------------------------|------------------------------------|------|
| Fee for Application for Permit No. _____<br>and to put water to beneficial use _____                   | to Appropriate Water, to construct |      |
| Fee for Application for Permit No. _____<br>Use _____                                                  | to Appropriate Water, for Future   |      |
| Fee to retain Future Use Permit No. _____                                                              | after period of seven years.       |      |
| Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water<br>License No. _____ |                                    |      |
| Fee for Filing Transfer Form <u>Water Right No. 490-2</u>                                              |                                    | 2 50 |
| Fee for Filing Extension Request _____                                                                 |                                    |      |
| Fee for _____                                                                                          |                                    |      |
| _____                                                                                                  |                                    |      |
| _____                                                                                                  |                                    |      |
| (Any Other Work Provided by Law)                                                                       | Total                              | 2 50 |

By \_\_\_\_\_

CHA Engineer

*John Hatch*



490-2

DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3181  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

November 9, 1998

490-2  
923-2

Charles Kruse  
PO Box 100  
Interior, SD 57750-0100

Dear Mr. Kruse:

Thank you for submitting the "Notice of Transfer of Ownership" forms for Water Right Nos. 490-2 and 923-2. The water rights have been transferred from Lily P Kruse to your name.

Enclosed are Receipt Nos. 415910 and 4159111 in the amounts of \$2.50 each. These are for the fees you paid for filing ownership change.

If you have any questions concerning the water rights, please get in touch with me.

Sincerely,

Genny McMath  
Environmental Scientist  
Water Rights Program  
(605) 773-3352

encl



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
PMB 2020  
523 EAST CAPITOL  
PIERRE SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

October 26, 2009

490-2  
1261-2

Charles A Kruse  
19835 E SD Hwy 44  
Interior SD 57750 6700

Dear Mr. Kruse:

Enclosed is a "Notice" dated October 16, 2009 concerning your 2009 irrigation questionnaires.

The notice was originally mailed to PO Box 100, Interior SD. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

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

enclosures



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

denr.sd.gov

November 18, 2016

490-2

Reid Kruse  
19975 E Hwy 44  
Interior SD 57750

Dear Mr. Kruse:

I am writing in reference to ownership of land described in Water Right No. 490-2. A notation was made on the 2016 irrigation questionnaire for the water right indicating ownership should be listed in your name.

Enclosed is a partially completed Notice of Transfer of Ownership form for filing an ownership change. Please review the form and make any necessary corrections. Upon completion, please sign the form and return it to our office with a required filing fee of \$50.00. The check or money order for the fee can be made payable to the Water Rights Program.

I have included a copy of the water right for your records in the event you do not have one. If I can answer any questions for you, please let me know.

Sincerely,

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

enclosures



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

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

denr.sd.gov

September 11, 2017

490-2

Reid Kruse  
19975 E Hwy 44  
Interior SD 57750

Dear Mr. Kruse:

I am writing in reference to ownership of land described in Water Right No. 490-2, listed in the name of Charles Kruse. A notation was made on the 2016 irrigation questionnaire for the water right indicating ownership should be listed in your name. On November 18, 2016, I sent a form to you for transferring the water right. To date we have not received anything back from you.

In the event you do not have the original form, I am enclosing an additional partially completed Notice of Transfer of Ownership form for filing an ownership change. Please review the form and make any necessary corrections. Upon completion, please sign the form and return it to our office with a required filing fee of \$50.00. The check or money order for the fee can be made payable to the Water Rights Program.

If I can answer any questions for you, please let me know.

Sincerely,

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

enclosures

RECEIVED

SEP 18 2017

WATER RIGHTS  
PROGRAM

## NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer  
Water Rights Program, DENR  
523 E. Capitol  
Pierre, SD 57501-3181

No. 490-2

Date: 9/15/17

I/We request that Water Right No. 490-2

formerly owned by: Charles A Kruse

be transferred to: (name & address) Reid L Kruse 19975 E Hwy 44  
Interior SD, 57750

Telephone No. 605-441-1259

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

214.4 acres in Lots 1-10 Sections 15 and 16, T4S, R17E

I/We understand that the validity of Water Right No. 490-2 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

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 required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.**

I/We Reid Kruse, 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.

# RECEIPT

## WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date September 18, 20 17

RECEIVED OF Reid Kruse 19975 E HWY 44 Interior, SD 57750

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 | 50    | 00    |
| Fee for Application for Permit No. _____ to Appropriate Water for Future use                                   |       |       |
| Fee to retain Future Use Permit No. _____ after period of seven years.                                         |       |       |
| Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____            |       |       |
| Fee for Filing Transfer Form <u>490-2</u>                                                                      |       |       |
| 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 | 50 00 |

No. **08331**

By

Jeanne Goodman  
Chief Engineer

27m



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

[denr.sd.gov](http://denr.sd.gov)

September 18, 2017

490-2

Reid L Kruse  
19975 E Hwy 44  
Interior SD 57750

Dear Mr. Kruse:

I am writing to acknowledge receipt of the transfer form and filing fee you submitted for Water Right No. 490-2.

The ownership change has been completed. Water Right No. 490-2, formerly held by Charles A Kruse is now listed in your name.

Enclosed for your records is Receipt No. 08331 in the amount of \$50. If I can answer any questions for you, please let me know.

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

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

**Subject: Bypass Qualifications on the White River**

March 30, 2023

Dear White River Water Right Holder,

The SD Dept. of Agriculture and Natural Resources Water Rights Program is reviewing qualifications on White River water rights in order to update when pumping is authorized. Water Rights issued with priority dates junior to 1975 contained a qualification requiring a mandatory June 1 shutoff to cease pumping water from the river. The mandatory June 1 shutoff qualification was placed on these permits to protect domestic water users, which includes livestock watering. The review found, with the passage of time the United States Geological Survey (USGS) streamflow monitoring has expanded and realtime access to this information has improved. An analysis of long-term historical flow found that the lower White River, downstream of the Little White River confluence, receives significant flow from the Little White River relative to the flow contribution from the upstream portion of the White River. Consequently, it may be possible to remove the mandatory June 1 shutoff qualification for the junior water right permits in this lower section of the river and replace the qualification with a flow bypass limitation as measured at the USGS streamflow gaging station located near Oacoma.

The intent of this effort is to allow for more efficient use of water when it is available by utilizing a bypass requirement as measured at a USGS stream flow gaging station for those water users. This qualification change will also allow many lower White River junior priority water right holders to irrigate after June 1 without the need to request an extension from the Chief Engineer. Current real time river flow information can be easily accessed on-line at the following internet address:

**<https://waterdata.usgs.gov/sd/nwis/rt>**

In order to amend a qualification on an existing water right permit, formal action by the SD Water Management Board is needed. In the near future, you can expect to receive official notification scheduling a hearing before the Water Management Board. The notification will include if your water right is proposed to have the qualification amended. This hearing will also be public noticed in select county newspapers in which the White River flows through. If you wish to participate in the hearing, you can, but you are not required to. There will be instructions with the notification on how to participate in the hearing if you so choose.

If you have any questions concerning this effort, please contact Mark Rath of the Water Rights Program at (605) 773-3352 or [mark.rath@state.sd.us](mailto:mark.rath@state.sd.us)

Sincerely,

Eric Gronlund, Chief Engineer  
SD DANR – Water Rights Program

# Review of White River Water Rights and Report on Proposed Amendment

## February 14, 2023

### Introduction

An evaluation was made of the current qualifications that were placed on the existing White River water permits/rights to determine whether these qualifications are effectively managing the water source for the users.

### Review of the Water Source

The White River, a prairie stream, located in southwestern South Dakota and northwestern Nebraska, Figure 1. The White River headwaters originate in northwestern Nebraska and drains approximately 9,975 square miles before discharging into the Missouri River near Oacoma SD.

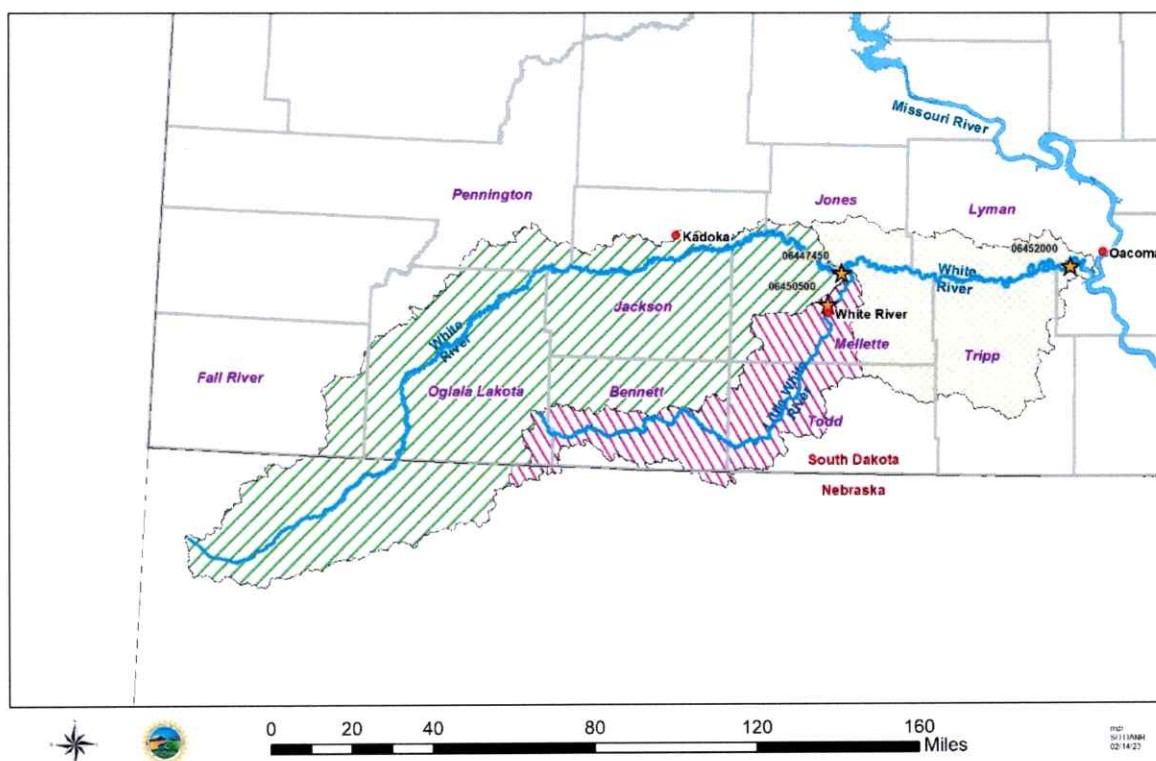


Figure 1. White River Watershed Map.

The entire watershed can be broken into three sections: upper White River, lower White River and Little White River. The upper White River watershed is the portion drained by the White River headwaters in northwestern Nebraska and drains portions of Oglala Lakota, Fall River, Bennett, Pennington, Jackson, Mellette, Jones, and Todd Counties located upstream of the Little White River confluence. The Little White River watershed is drained by the Little White River headwaters in Oglala Lakota County, draining portions of Nebraska, and Bennett, Todd, and Mellette Counties before merging with the White River approximately 12 miles southeast of the town of Murdo. The Little White River has more uniform flow than the White River due to a permeable sand formation allowing precipitation seeping into the ground to move laterally into the stream through springs and seeps (Ellis, et al. 1971). The lower White River section, after receiving contributing flow from the Little White and upper White rivers, also drains

portions of Mellette, Jones, Todd, Tripp, and Lyman Counties before discharging to the Missouri River just south of the town of Oacoma.

A percentile is a measure used in statistics to indicate the value below which a given percentage of observations in a group of observations fall, in this case daily flows. The percentiles shown correspond to flow scenarios during drier conditions when water would be in short supply. A percentile hydrograph can also give an indication of the time of year when water can be expected to be available at the gage location.

The USGS Stream Gaging No. 06447450 White River near White River, SD is located approximately 2 miles upstream from the confluence of the White and Little White rivers. Figure 2, shows three statistically derived flow levels consisting of the daily median (or 50 percentile), the 25 percentile, and the 10 percentile daily flow values for this stream gage. As this figure indicates, there is an increase in flow in the White River corresponding to spring snowmelt and spring rain events. The figure shows the median or 50 percentile hydrograph for this stream gage exhibits the daily flow values at or below this level on average one out of two years and also indicates flow curtailing in the mid-July to early September time frame before leveling off. It should be noted during any given year, flow in the river is not going to exactly mirror the median flow values. Since the median daily value is the center value with half the measured flow values greater and half less, what median values do provide is an overall indication of the historical flow characteristics for the stream at that location based upon the period of record. The hydrograph also shows there is a significant decline in available water corresponding with the 25 and 10 percentile levels from mid-to-late June.

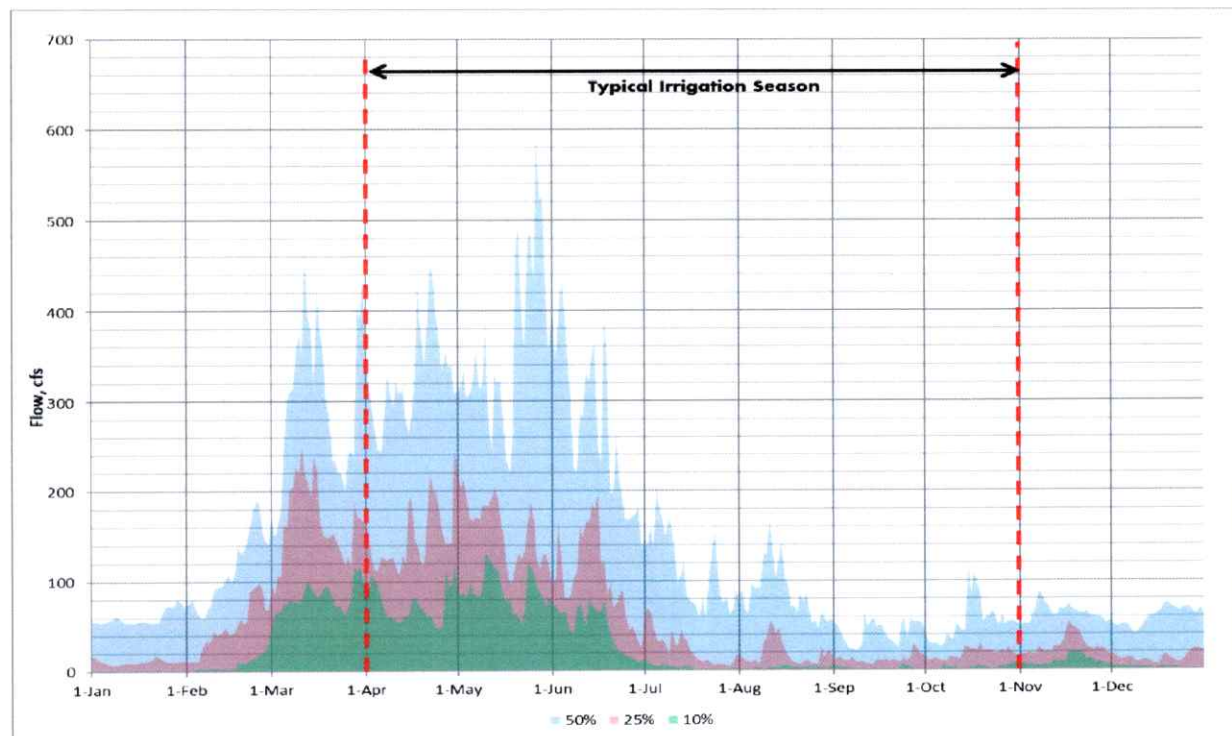


Figure 2. Daily percentile flow hydrographs for the USGS White River near White River 2001-2022, contributing drainage area 6202 mi<sup>2</sup> (USGS, 2023).

The USGS Stream Gaging No. 06450500 Little White River near White River, SD is located approximately 14.5 miles upstream from the confluence of the Little White River with the White River. Figure 3, indicates there is an increase in flow in the Little White River corresponding to spring snowmelt and rain events. The figure shows the median or 50, 25 and 10 percentile hydrograph levels for this stream and indicates flow at each of the three percentiles peaks in late March and steadily declines until the first of August. Flow then levels off for the remainder of the irrigation season but generally a base flow is maintained throughout the year.

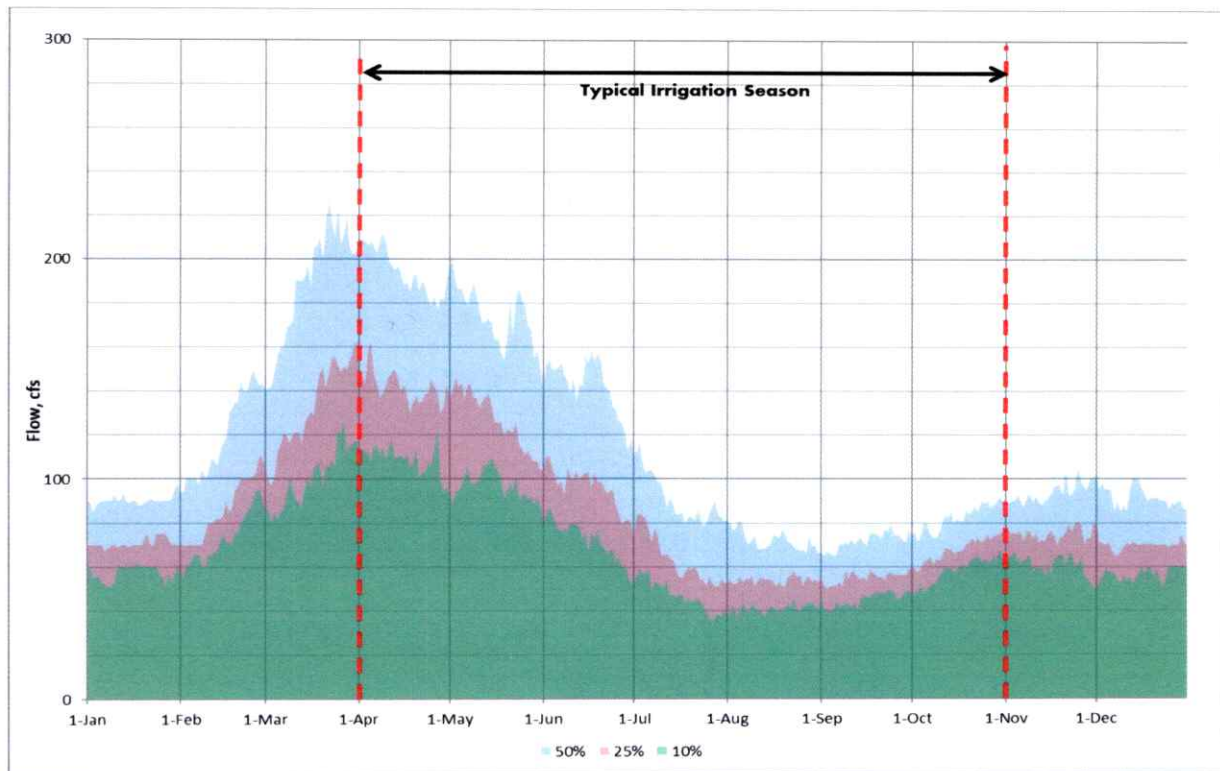


Figure 3. Daily percentile flow hydrographs for the USGS Little White River near White River, 1949-2022, contributing drainage area 1,495 mi<sup>2</sup> (USGS, 2023).

The USGS Stream Gaging No. 06452000 White River near Oacoma, SD is located approximately 55 river miles downstream from the confluence of the White and Little White rivers and approximately 16 miles upstream from the point where the White River flows into the Missouri River on Lake Francis Case. Figure 4 is a hydrograph showing the 50, 25 and 10 percentile levels similar to what was shown in the previous two figures. The median or 50 percentile hydrograph for this stream gage exhibits the daily flow values at or below this level on average one out of two years, and shows an increase in flow in the White River starting in early February corresponding to early spring runoff and maintains strong flows through most of June before tailing off through the remainder of the summer and fall months. At the 50 percentile level corresponding flow can be expected to be in excess of 40 cubic feet of water per second (cfs) throughout the year on average one out of two years. Looking at the hydrographs corresponding to the 25 and 10 percentiles, they show a similar trend to the 50 percentile curve with increased flows in February and tailing off in the latter part of June. The 25 percentile level shows the daily flow values at or below this level on average one out of four years, indicating flows remain above the 40 cfs level except for a period December through January. At the 10 percentile level, corresponding to the daily flow values

at or below this level on average one out of ten years, flows stay above 20 cfs except during the three week period from the first week of August through the first of September and the six week period in December and January, which is outside the irrigation season.

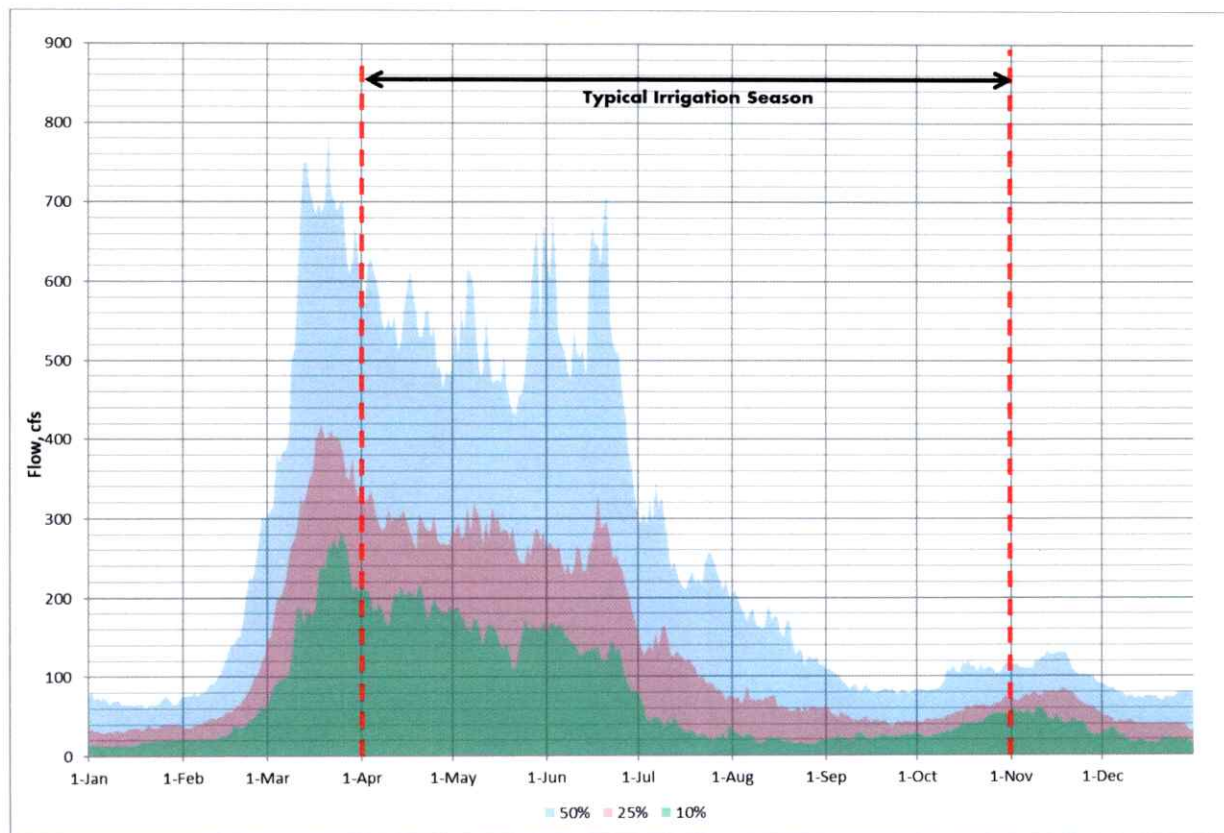


Figure 4. Daily percentile flow hydrographs for the USGS White River near Oacoma, 1928-2022, contributing drainage area 7,697 mi<sup>2</sup> (USGS, 2023).

### **The Water Management Board Authority**

SDCL 46-1-14 gives the Water Management Board the authority to amend water right permits. Water permits issued by the board may be amended by the board with priority retained upon amendment. The board may alter terms, conditions, restrictions, qualifications, or quantifications.

### **South Dakota Codified Law**

**46-1-14.** Terms and conditions of permits and licenses--Amendment. The Water Management Board may issue any permit or license subject to terms, conditions, restrictions, qualifications, quantifications, or limitations on perpetuity consistent with this chapter which it considers necessary to protect the public interest and which are related to matters within the jurisdiction of the board. Water rights issued pursuant to this section may be amended by the board and priority is retained upon amendment. Upon amendment the board may alter terms, conditions, restrictions, qualifications, or quantifications consistent with this chapter.

**46-2-3.1.** Delegation of authority to chief engineer--Restrictions. The Water Management Board may delegate to the chief engineer authority to act on its behalf concerning the quasi-judicial functions of interpreting,

applying, and enforcing existing rules and laws and ordering action or abatement of action. The board may not delegate any other quasi-judicial functions as defined in § 1-32-1, except as otherwise provided by law. The board may promulgate rules pursuant to chapter 1-26 to delegate to the chief engineer the authority to issue permits pursuant to § 46-1-14.

**46-2-17.** Chief engineer's general enforcement authority. The chief engineer may:

- 1) Investigate the use of the waters of the state and compliance with the provisions of water permits, licenses, rules, regulations, and laws relating to water rights.
- 2) Institute enforcement and other proceedings before the Water Management Board;
- 3) Enforce orders of the board; and
- 4) Perform other acts authorized by statute or regulation.

**46-2-18.** Chief engineer's authority to order discontinuance of water use. The provisions of chapter 1-26 notwithstanding, the chief engineer may, after appropriate investigation, issue an order to any person to shut off or limit the person's use of surface or groundwater, or to plug or otherwise control a well. The order may be issued only to protect another user who has higher or earlier priority or to cause a user of water to discontinue the use of water to which the user has no legal right. Upon a refusal to obey the order, the chief engineer may request a court of proper jurisdiction to issue a temporary restraining order or injunction to effectuate the provisions of the order.

### **Review of Existing Water Rights and Reported Use**

A review of Water Right Program files shows there have been 200 water permits/rights issued from either the White or Little White rivers, some with priority dates going back to 1901. Many of these have been cancelled due to abandonment or forfeiture, some have been incorporated into other water permits, and some remain active. Currently, there are 82 existing permits/rights appropriating 190.9 cfs from the White River. Eighty of the existing permits/rights are for irrigation use and the other two are for small dams used for domestic and recreation purposes. Figure 5 shows a comparison between the water appropriated for irrigation use and the annual reported use by these irrigators for the years 1995 to 2021. As this figure indicates except for three years in the early 2000's, less than 10% of the water appropriated annually for irrigation was reported to be used (Water Rights. 2023).

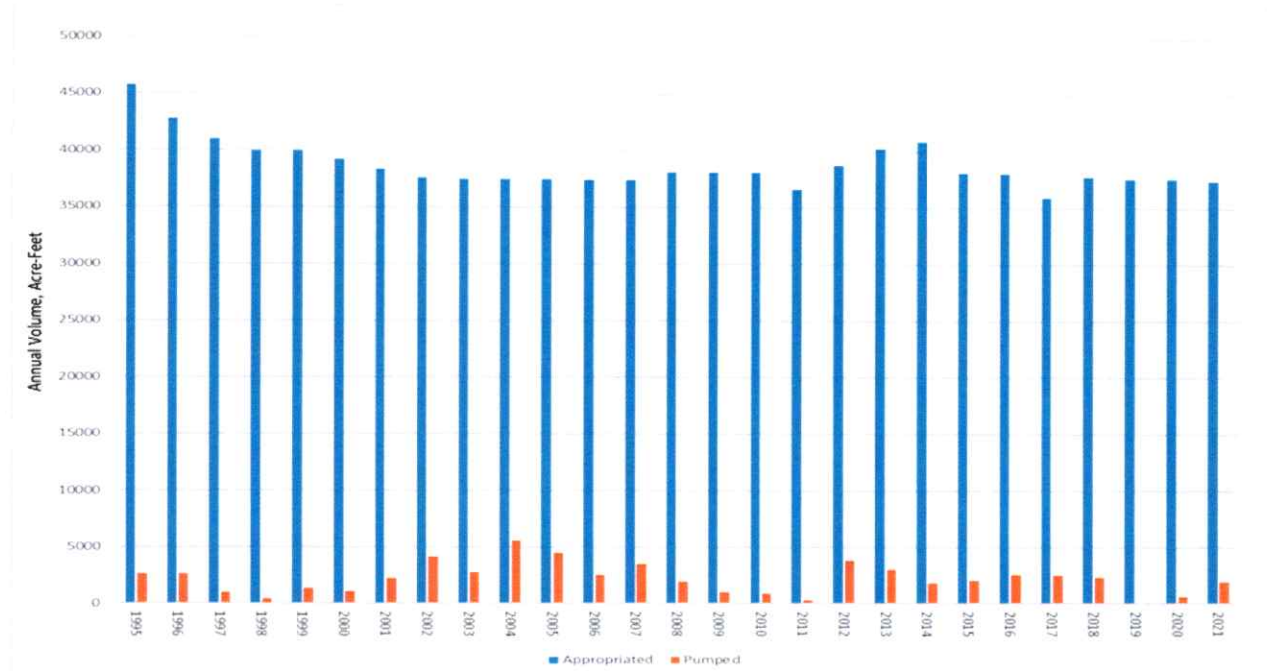


Figure 5. Total irrigation allocation and reported use from the White River (Water Rights, 2023).

### **Qualification Status**

An examination of water right files found the Water Resources Commission, a predecessor to the Water Management Board, placed the first low flow bypass qualification, on a White River water permits in Lyman and Jackson counties in 1964. (Water Rights, 2023). In January of 1977, the Water Rights Commission, another predecessor to the Water Management Board, approved several deferred White River applications with priority dates going back to April 12, 1976, and placed a June 1 cutoff qualification on them. This same qualification has been placed on all White River permits issued since then.

In 2012, the Water Rights Program received an application for a water permit to irrigate from the White River in the river reach downstream from the Little White confluence. The analysis for that application resulted in a qualification to the issued water permit that the permit holder may request written authorization from the Chief Engineer to allow the irrigator to continue irrigating after the June 1 shutoff date. Prior to issuing the written authorization, the Chief Engineer would determine whether an appropriate base flow level was present. A 20 cfs bypass has been used in on other major rivers in South Dakota to provide for a base flow to insure domestic/livestock water needs are satisfied. It was determined a minimum base flow of 20 cfs bypass after pumping, as measured at the USGS gaging station, White River near Oacoma, was needed to allow the Chief Engineer to provide written authorization to continue using water. The permit was issued with the following qualifications (Water Rights. 2023).

1. This Permit authorizes the diversion of water from the dugout adjacent to the White River until June 1 of each calendar year. After June 1, there shall be no diversions under this Permit unless written authorization is issued by the Chief Engineer. Diversion under this Permit shall be in accordance with any written orders issued by the Chief Engineer.

2. Diversions from the dugout adjacent to the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs while pumping under this Permit.

Since that water permit was issued in 2012, the 20 cfs bypass as measured at the Oacoma stream gage criteria has been utilized multiple times when issuing written authorization to allow pumping after the June 1 cutoff in this river reach. This criterion has worked well.

### **Analysis and Proposed Qualification Revisions**

The original cutoff date and the later adopted bypass requirement were analyzed to determine whether the 20 cfs bypass requirement would be a more effective means of managing active water rights going forward in the lower reach of the White River rather than a June 1 mandatory shutoff date. The review took into consideration the existing water rights, the qualifications, the authorized use, the location of the diversion points, the annual period of use, and historic stream flow data.

#### **Upper White River**

Water rights/permits with priority dates junior to April 11, 1976, located on the upper White River in the river reach upstream from the confluence with the Little White River contain the June 1 mandatory shutoff qualification.

The percentile hydrograph for USGS Stream Gaging No. 06447450 White River near White River, SD shown in Figure 2, indicates a decline in flow during the month of June at the three percentile levels shown (USGS. 2023). At the 10 and 25 percentile levels, corresponding to daily flow values at or below the indicated level on average one out of four years and one out of ten years respectively, show expected flow levels falling to a range of 20 cfs or below. At this time the current June 1 cutoff qualification appears to be working well, with irrigators requesting pumping variances when needed. A review of Water Rights Program files indicates this occurs sporadically with it most recently happening in the summer of 2022. An irrigator near Kadoka requested a temporary variance to pump runoff from a large upstream thunderstorm (Water Rights. 2023). At this time the recommendation is to leave the existing qualification requirements in place for current and future water rights/permits located in this river reach because the current qualification is working well.

#### **Lower White River**

Water rights/permits with priority dates junior to April 11, 1976, located on the lower White River in the river reach downstream from the confluence with the Little White River, contain the June 1 mandatory shutoff qualification.

In 2012, the Water Rights Program received Water Permit Application No. 2681-2, to divert water for irrigation from the lower White River reach. The analysis for that application determined that based upon historical flow data, there was a likelihood that water would be available many years in this reach after June 1 and there was a possibility the permit holder would be asking for a variance to allow pumping after the mandatory shutoff date. For the Chief Engineer to be able to grant written authorization to allow pumping and protect the base flow of the river, a new qualification was adopted (Water Rights. 2023).

- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.

Since 2012, the June 1 mandatory shutoff and the 20 cfs bypass qualifications have been placed on water permits issued in the lower White River reach. The Water Rights Program has received numerous requests from these permit holders over multiple years to allow diversions from the river after June 1. Based upon the experience the Water Rights Program has gained managing use based off the 20 cfs bypass qualification, we found this qualification to be an effective water management tool for this lower reach of the White River.

There are 32 water permits/rights appropriating 86.81 cfs from the White River reach downstream of the Little White River confluence. Of these, there are 11 water permits/rights appropriating 29.54 cfs containing the qualification requiring diversions cease after June 1<sup>st</sup> of each calendar year (Water Rights. 2023). Based upon the review of the stream gaging, reported water use, and our experience with using the White River stream gage near Oacoma to regulate water diversions, I recommend for the water permits/rights located in the lower White River reach, the June 1<sup>st</sup> mandatory shutoff qualification be removed and the qualification requiring a 20 cfs bypass as measured at the White River near Oacoma stream gage be added to those water permits/rights that do not already have it.

### **Specific Proposed Qualification Revisions by Water Permit**

To standardize the bypass qualifications for the existing water permits containing a June 1 mandatory shutoff qualification in the lower White River reach downstream from the Little White River confluence to Missouri River, the following changes are proposed:

#### **Amendment to the qualifications contained in Water Right No. 1474-2**

##### **Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for either to the land directly or off-stream storage until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

#### **Amendment to the qualifications contained in Water Right No. 1501-2**

##### **Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for either to the land directly or off-stream storage until June 1 of each calendar year. After June 1,

there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

**Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

**Amendment to the qualifications contained in Water Right No. 1504-2**

**Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for irrigation to the land directly until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

**Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

**Amendment to the qualifications contained in Water Right No. 1529-2**

**Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for irrigation to the land directly until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

**Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

#### **Amendment to the qualifications contained in Water Right No. 1557-2**

##### **Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for irrigation to the land directly until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

#### **Amendment to the qualifications contained in Water Right No. 1630-2**

##### **Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for off-stream storage until June 1<sup>st</sup> of each calendar year. After June 1<sup>st</sup>, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Management Board or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Board or its representative.

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.

- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

#### **Amendment to the qualifications contained in Water Right No. 1765-2**

##### **Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for either to the land directly or off-stream storage until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

#### **Amendment to the qualifications contained in Water Right No. 2312-2**

##### **Delete Qualification:**

Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed. This permit authorizes the diversion of water from the White River for irrigation to the land directly until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Water Rights Commission or its legally appointed representative. Diversion under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

The water rights/permits listed below were issued with a separate qualification that should be retained:

- Diversions from the White River are authorized only when flow at the USGS Gaging Station No. 06452000 – White River near Oacoma is at least 20 cfs while pumping under this water right.

#### **Amendment to the qualifications contained in Water Right No. 2681A-2**

##### **Delete Qualification:**

Water Permit No. 2681-2 authorizes the diversion of water from the White River for irrigation to the land directly or to two storage dams until June 1<sup>st</sup> of each calendar year. After June 1<sup>st</sup>, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Chief Engineer. Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.

#### **Amendment to the qualifications contained in Water Right No. 2701-2**

##### **Delete Qualifications:**

Water Permit No. 2701-2 authorizes the diversion of water from the White River for irrigation to the land directly or to the existing dugout and storage dam authorized by Water Right No. 1415A-2 and Water Permit No. 2647-2 until June 1<sup>st</sup> of each calendar year. After June 1<sup>st</sup>, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Chief Engineer. Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer. *(Water Right No. 1415A-2 and Water Permit No. 2647-2 have been incorporated and are now licensed under No. 2647-2.)*

Water from the White River may be diverted to the dugout and existing dam authorized by Water Right No. 1415A-2 and Water Permit No. 2647-2 subject to qualifications Nos. 1 and 2. Diversion of stored water from either the dugout or the dam for irrigation of the authorized land is not subject the June 1<sup>st</sup> shut-off. *(Water Right No. 1415A-2 and Water Permit No. 2647-2 have been incorporated and are now licensed under No. 2647-2.)*

##### **Add Qualifications:**

- Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be bypassed.
- Water Right No. 2701-2 authorizes the diversion of water from the White River for irrigation to the land directly or to the existing dugout and storage dam authorized by Water Right No. 2647-2
- Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board is retaining jurisdiction of this permit in the event additional information shows that adjustments need to be made to the bypass requirements.

## **Amendment to the qualifications contained in Water Permit No. 2835-2**

### **Delete Qualification:**

This permit authorizes the diversion of water from the dugout adjacent to the White River until June 1 of each calendar year. After June 1, there shall be no diversions from the White River under this Permit unless written authorization is issued by the Chief Engineer. Diversion under this permit shall be in accordance with any written orders issued by the Chief Engineer.

### **Add Qualifications:**

- This permit authorizes the diversion of water from the dugout adjacent and hydraulically connected to the White River. Diversion of water under this permit shall be in accordance with any written orders issued by the Chief Engineer.
- The Water Management Board retains jurisdiction of this water right in the event additional information shows that adjustments need to be made to the bypass requirements.



Mark D. Rath  
Natural Resources Engineer III

### References

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USGS. 2023. United States Geological Survey, National Water Information System – Stream Gaging Station Network for South Dakota.

Water Rights. 2023. Water Right/Permit Files. SD DANR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.



**DEPARTMENT of AGRICULTURE  
and NATURAL RESOURCES**

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

April 14, 2023

Subject: Amendment of the Mandatory Shutoff Qualification on White River Water Rights

Dear White River Water Right Holder,

The SD Department of Agriculture and Natural Resources has reviewed all White River water rights and the historical, United States Geological Survey (USGS) stream flow records. The Chief Engineer is recommending amending the mandatory June 1 shutoff qualification on 11 junior priority White River water rights located in the reach between the Little White River confluence and the Missouri River. The intent is to allow for more efficient use of water when it is available by utilizing a bypass requirement as measured at a USGS stream flow gaging station for those water users.

The proposed amendment to those water rights would replace the mandatory June 1 shutoff qualification with a 20 cfs of flow bypass measured at the USGS Oacoma streamflow gaging station. This amendment would not be expected adversely impact your use of the White River as authorized by your water right(s). The amendment designates a US Geological Survey streamflow gaging station as the measuring point to determine if pumping is allowed. The gaging station has real time flow information that can be accessed on-line at <https://waterdata.usgs.gov/sd/nwis/rt>.

A hearing before the Water Management Board is scheduled at 9:45 AM, Wednesday, May 3, 2023, in the Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre SD. Enclosed is the notice to be published on or before April 13, 2023, in one newspaper from each of the 9 counties that the White River flows through. This notice provides information on filing a petition in either support or opposition to the proposed amendment. The filing of a petition must be postmarked by April 24, 2023. Additionally filing a petition affords you the opportunity to participate in the May 3rd hearing before the Board if you choose.

The staff report including affected water rights and the proposed changes are available at <http://danr.sd.gov/public> or contact Mark Rath at 605 773-3352 or [mark.rath@state.sd.us](mailto:mark.rath@state.sd.us). If you have questions; please call. DANR is willing to work to answer any questions.

Sincerely,

Chief Engineer

Water Rights Program, DANR