

Water Right Number 1464-2

1. Considered 1-26, 19 79
2. Name of Applicant NORMAN AMIOTTE
3. Post Office Address INTERIOR
4. Amount of water claimed 1.0
5. Source of water supply WHITE RIVER & FRY DRAW
6. Water to be used for _____
Acres to be irrigated 70.50
7. Water to be diverted and used in WASHA BAUGH County
about 35, 7E Miles 1 of INTERIOR
8. Proof of Publication Received 1ST 1-26-77
Not received _____
9. Application Approved _____
Subject to _____
Not approved _____
Action deferred _____
10. Remarks:

Map No. 1243-2 Water Division No. 2 WHITE RIVER District _____
 (Blanks to be Filled by the Engineer for the W. R. C.)



APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

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

1. Name of Applicant Norman A. Amiotte
 Postoffice address Interior, State South Dakota
 If a corporation show date and place of incorporation -0-
2. Method of accomplishing work (contract, employment of others, or by direct labor) Contract & Direct Labor
3. Name of diversion work Amiotte Irrigation Project No. 1
4. Amount of water claimed (cubic feet per second) 1.0 cfs
5. Source of water supply White River & Dry Creek during flood stages
6. Location of point of diversion See attached sheet: Water will be diverted out of White River only when there is excessive amount during spring snow melts & torrential rains County Washnagaugh Jackson
7. Annual period or periods during which water is to be used February 1 to November 31
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Irrigation
9. For irrigation use, Total number of acres to be irrigated 70.5

List below each forty acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.	Land Description	No. Acres Irr.
<u>See attached sheet</u>			

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 5 years. Additional time required to complete application of water to the proposed beneficial use 4 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Kadoka Press
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

Pump & Gravity

B. Works proposed to transport water to place of use.

Pipe & Gravity

C. Works proposed to apply water to beneficial use.

Pipe & Gravity

Estimated Total Cost \$ 17,000

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.
 (See instructions concerning preparation.)

STATE OF SOUTH DAKOTA)

County of Jackson) ss.

I, Norman A. Amiotte the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction

Signed Norman A. AmiotteSubscribed and sworn to before me this 5th day of April 1976

James J. Magister
 Notary Public (or other qualified officer)
 My Commission Expires 6-18-81

AMIOTTE IRRIGATION PROJECT NO. 1

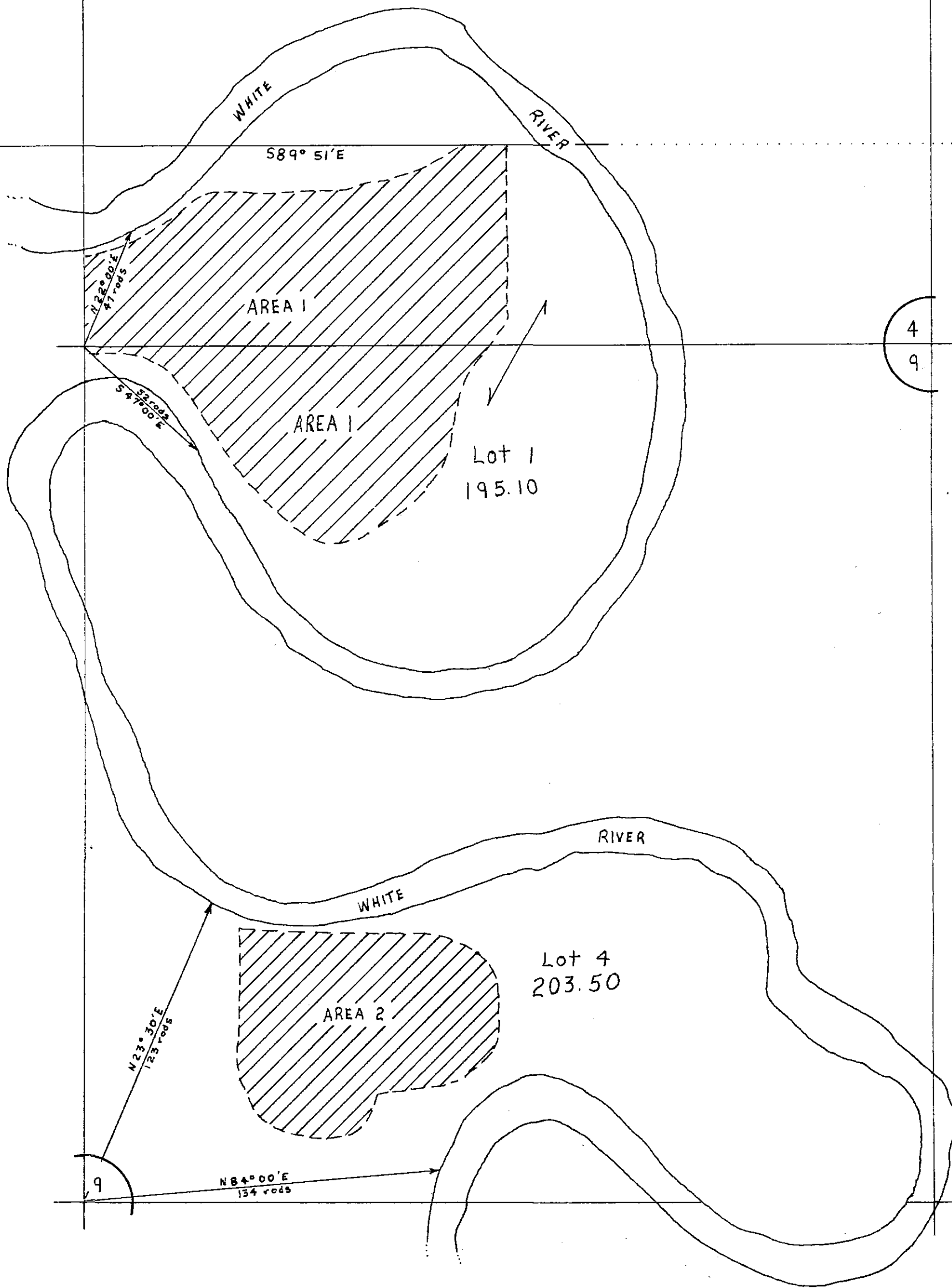
AREA	LOCATION	SECTION	TOWNSHIP	RANGE	ACRES
1	Lot 2-37.20	15	4S	19E	35.0
2	Lot 4-36.20	15	4S	19E	32.0
3	Lot 5-23.20	15	4S	19E	3.5
TOTAL					70.5

DIVERSION POINTS:

On Dry Draw: 47 rods S44°00'W of the NE corner of Sec. 16, T4S, R19E; and on White River: 138 rods N35°00'W and 174 rods N46°00'E of the SE corner of Sec. 16, T4S, R19E.

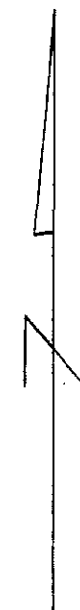
R-30-W

T-44-N



All lands described are owned by "Daum Bros"

LOCATION OF LAND TO BE IRRIGATED					
AREA	LOCATION	SECTION	TOWNSHIP	RANGE	ACRES
1	Lot 1 - 195.10	4	44N	30W	94.5
2	Lot 4 - 203.50	9	44N	30W	38.2
Total					132.7



Scale : 1" = 660'

DAUM BROS IRRIGATION PROJECT

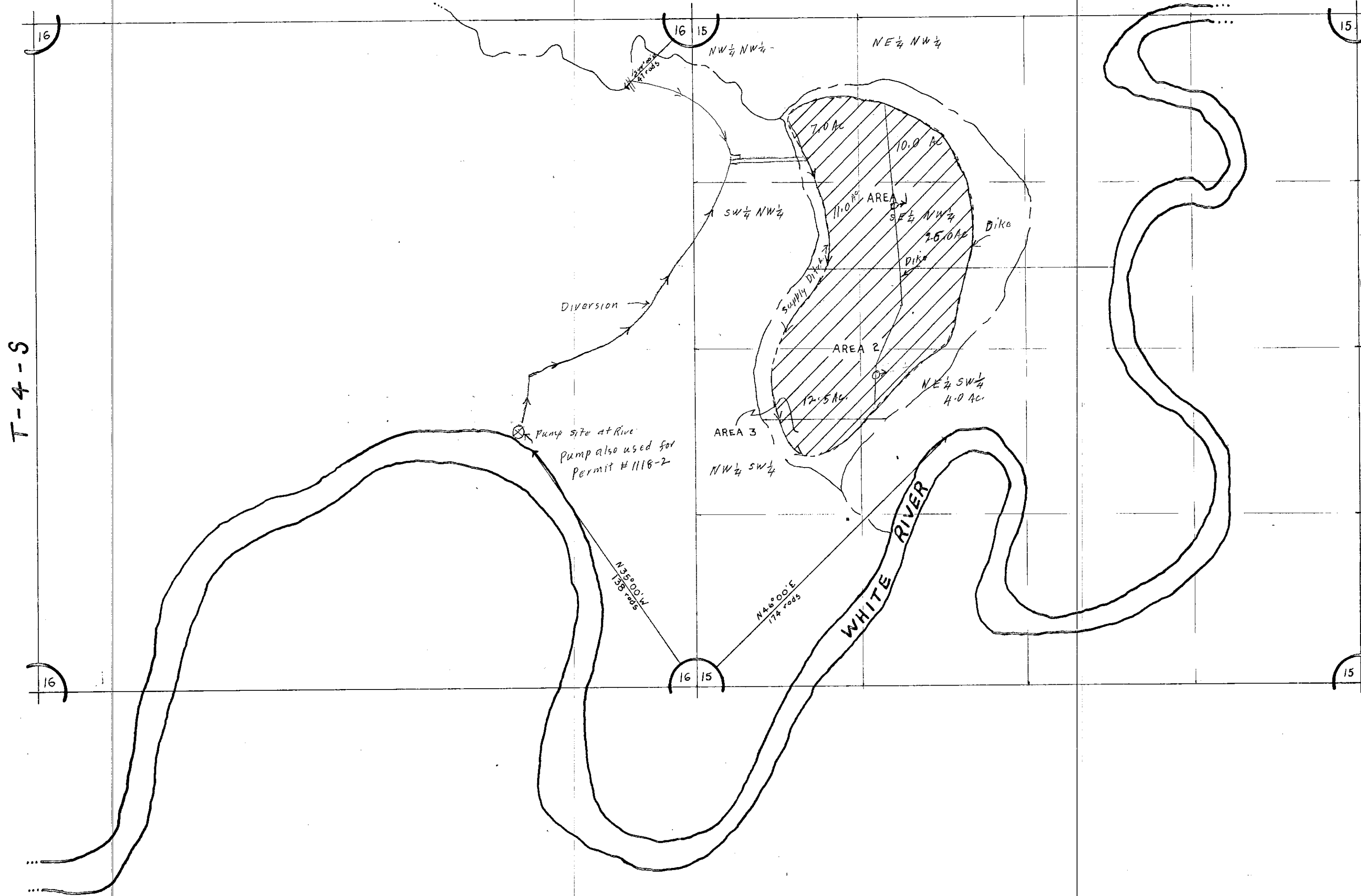
No. 3

Pellet County, South Dakota

Keith Kuchenbecker, Manager
West River Conservancy Sub-District

MAP NO. 1242-2 (APP. NO. 1463-2)

R-19-E



All lands described are owned by "Norman A. Amiotte"

LOCATION OF LAND TO BE IRRIGATED					
AREA	LOCATION	SECTION	TOWNSHIP	RANGE	ACRES
1	Lot 2 - 37.20	15	4S	19E	35.0
2	Lot 4 - 36.20	15	4	19	32.0
3	Lot 5 - 23.20	15	4	19	3.5
TOTAL					10.5



Scale: 1" = 660'

AMIOTTE IRRIGATION PROJECT

NO. 1

"NORMAN A. AMIOTTE"

Washabaugh County, South Dakota

Keith Kuckenberg, Manager

West River Conservancy Sub-District

MAP NO. 1243-2 (APPL. NO. 1464-2)

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 1464-2

NORMAN A. AMIOTTE
(Applicant)

INTERIOR
(Post Office Address)

SOUTH DAKOTA 5750
(State)

With the following modifications:

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~~ irrigation to the land directly ~~adjacent to the 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 Water Rights Commission or its legally appointed Representative. Diversions under this permit shall be in accordance with any written orders issued by the Commission or its Representative.

Date of first receipt of application APRIL 27 19 76

Date of return to applicant for correction, amendments or changes required --- 19 ---

Date of receipt of corrected application --- 19 ---

Approved JANUARY 26 19 77 Recorded in Book 162 pg. 326

WATER RIGHT PERMIT NO. 1464-2

The Water Rights Commission hereby grants and issues this Water Right Permit No. 1464-2 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as modified in the Water Right Application approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is APRIL 27 19 76
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before JULY 26 19 77
3. The whole of said work is to be completed on or before JANUARY 26 19 82
4. The limit of time from onset of beneficial use of water appropriated in accordance herewith is JANUARY 26 19 86
5. The water appropriated shall be used for the purpose of IRRIGATION

6. 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.

7. The amount of the appropriation herein granted shall not exceed 1.0 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and if for the irrigation purposes said appropriation must be limited to not more than 3 acre feet per acre per year and 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 JANUARY 26 19 86; said water to be used during the following described annual period: FEBRUARY 1 - JUNE 1

Witness my hand this 31ST day of MARCH 19 77

WATER RIGHTS COMMISSION

By:

John H. Hald
Chief Engineer, Executive Officer

Certificate of Construction Issued DECEMBER 27 19 78

Water License Issued DECEMBER 27 19 78

Form 6 - Notice of Intent to Appropriate Water

No. 1464-2

Publish first publication, on or before January 13, 19 77

NOTICE
INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

January 5, 1977

Notice is hereby given that Norman A. Amiotte
whose post office address is Interior, South Dakota, has made an application in accordance
with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use
1.0 cubic feet of water per second of time from the White R. & a dry/draw through the
Amiotte # 1, the point of diversion of which is to be located in the
between points in the NE $\frac{1}{4}$ NE $\frac{1}{4}$, and in the NW $\frac{1}{4}$ SE $\frac{1}{4}$
of Section 16, Twp. 4S, Range 19E. Said water to be used for the purpose
of providing irrigation on the following described land:

Lots 2, 4 & 5, Section 15, T4S, R19E

This application No. 1464-2 will be considered by the Water Rights Commission at their office at
Pierre upon the 26th day of January, 19 77, at 10:00 A. M. All interested
persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

BURTON F. JONES
Water Rights Specialist

BFJ/bw

cc: Norman A. Amiotte, Interior, South Dakota 57750

No. 1464-2



PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Jackson) ss.

I, L. G. Parkinson hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the Kadoka Press

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 Kadoka

County of Jackson and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

Thursday, January 13, 1977

Thursday, January 20, 1977

L. G. Parkinson
(Signature)

Publisher
(Title)

January 20, 1977
(Date Signed)

NOTICE
INTENT TO
APPROPRIATE WATER

Pierre, South Dakota 57501
January 5, 1977

Notice is hereby given that
Norman A. Amlotte whose post
office address is Interior, South
Dakota, has made an application
in accordance with the provisions
of the water laws of South Dakota
for a permit to appropriate for
beneficial use 1.0 cubic feet of
water per second of time from the
White River and a dry draw
through the Amlotte #1, the point
of diversion of which is to be
located in the between points in
the NE 1/4 NE 1/4, and in the NW 1/4
SE 1/4 of Section 16, Twp. 4S,
Range 19E. Said water to be used
for the purpose of providing
irrigation on portions of the
following described land: Lots 2,
4 and 5, Section 15, T4S, R19E.

This application No. 1464-2 will
be considered by the Water
Rights Commission at their office
at Pierre upon the 26th day of
January, 1977, at 10:00 a.m. All
interested persons may appear
and be heard.

WATER RIGHTS COMMISSION
By: Burton F. Jones
Water Rights Specialist
Pub. January 13-20

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1464-2

(1) WHEREAS, On the 27th day of April A. D. 19 76

made Water Right Application No. 1464-2 for a permit to use 1.0 cubic feet per second of the waters of White River or Dry Creek of Jackson County of Irrigation State of South Dakota, for

purposes and
(2) WHEREAS, On the 26th day of January A. D. 19 77
1464-2 Permit No. April 27, 1976 with a date of priority of

was issued to said applicant for the diversion of said water, and provided for the completion or construction of the water supply system therein described on or before the 26th day of January A. D. 19 82 and for the application to beneficial use of said water on or before the 26th day of January A. D. 19 86

and:

(3) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to completion of the construction of the water supply system and is entitled to divert 1.0 cubic feet per second of water for beneficial use and.

(4) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to the application of water to beneficial use of the following extent.

to irrigate the following lands all in Section 15, T4S, R19E

Description	Acres
NW $\frac{1}{4}$ NW $\frac{1}{4}$	7.0
NE $\frac{1}{4}$ NW $\frac{1}{4}$	10.0
SW $\frac{1}{4}$ NW $\frac{1}{4}$	11.0
SE $\frac{1}{4}$ NW $\frac{1}{4}$	26.0
NW $\frac{1}{4}$ SW $\frac{1}{4}$	12.5
NE $\frac{1}{4}$ SW $\frac{1}{4}$	4.0
TOTAL	70.5 acres

(5) 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 Norman A. Amlotta

_____ of Interior
the holder _____ and owner _____ of said permit No. 1464-2 a water right, dating from April 27, 1978
_____ to use of 1.0 cubic feet per second of the waters
of the White River and Dry Creek
in the County of Jackson and State of South Dakota, or so much thereof as may be necessary for the
purposes hereinafter mentioned, to be diverted at on Dry Creek: 47 rods south 44°00' West of NE corner,
Section 16, T4S, 19E and on White River: 138 rods North 35°00' West and 174 rods North
46°00' East, SE corner, Section 16, T4S, 19E

and conduct to and upon portions of Section 15-T4S-19E, more fully described on the face of
this license

for the purpose of Irrigation

Subject to any limitations listed in Water Right Permit No. 1464-2 and subject to the laws of the State of South Dakota.

WITNESS, My hand and seal of our office at Pierre, South Dakota
this 27th day of December A. D.
Nineteen Hundred and Seventy-eight

WATER RESOURCES COMMISSION

By:

John Hatch
Chief Engineer, Executive Officer, JOHN HATCH

Permit No. 1464-2

Water Diversion No. 2 White River Water District

CERTIFICATE OF CONSTRUCTION

This is to Certify, That Norman A. Amiotte

the holder of
Permit No. 1464-2, issued upon Application No. 1464-2, bearing date of priority of April 27, 1976
authorizing the diversion of 1.0 cu. ft. per second of the waters of
White River & Dry Creek County of Jackson, State of South Dakota ~~on~~
Dry Creek: 47 rods south 44°00' west of NE corner, Sec. 16, T4S, 19E and on White
River: 138 rods north 35°00' west and 174 rods north 46°00' east, SE corner Sec.
16, T4S, R19E, for Irrigation

purposes, has 5 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 10.0 cu. ft. per second of water.

Date December 27, 1978

By: WATER RIGHTS COMMISSION
John Hatch
JOHN HATCH, Chief Engineer

1464-2 Mower Amelle by J. M. Mays
4-3-78 Pumps from river into des. can to irrig
also in WR- 1118-7 and

1464-2

See map for 1118-2 for, like, etc
for this applic.

120ft 16" dia. head. line
2000 ft - Right up

Gravelled pumps - 10,000 gpm

at New No. 1000 - 1
New 15 ft lift. est 10 cts. pump
4000 ft at an 1118-2

Waterworks to 36" dia. in river
pump to operate 16" dia. outlet
100 HP Tractor

" addition in Dry Creek also 1118-2
for this point - 2-3000 gpm

NOTICE OF COMPLETION OF WORKS AND/OR
APPLICATION OF WATER TO BENEFICIAL USEPost Office P.O. Box 7, Interior, S.D.

Date _____

TO: Water Rights Commission
Joe Foss Building
Pierre, South Dakota 57501

Dear Sirs:

This is to inform you that I have completed the construction of the water diversion system and/or that I have put the water to beneficial use to the maximum extent it is going to be used, not exceeding the amounts as specified in Water Right Permit No. 1464-2

Water Right Permit No. 1464-2 states that the diversion system is to be constructed by Sept, 19 78 and that the water is to be put to beneficial use by May, 19 79.

The diversion system was completed on Sept, 19 78.
Applying the water to beneficial use was completed on Sept. 1978,
19 ____.

You may schedule an inspection so that the Certificate of Construction and/or the Water License may be issued, thus completing my acquisition of a water right.

Reverman A. Remette
(Signature)



1464-2
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 16, 2002

NOTICE

TO: NORMAN A AMIOTTE, BOX 7, INTERIOR, SD 57750

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2001 Irrigation Questionnaire(s)

Our records indicate that the 2001 Irrigation Questionnaire has not been submitted for Permit No(s) 1464-2 & 1465-2. The request for the Questionnaire was dated October 12, 2001. The Water Management Board has directed that owners of water permits who have not submitted the 2001 Irrigation Questionnaire be given notice of hearing to determine if any Board action is to be taken concerning this issue.

The hearing will be held at 10:00 am, March 13, 2002, in the Visitor Center (west bank of Capitol Lake), 650 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. Following the hearing, the Water Management Board can:

1. Amend Permit No(s) 1464-2 & 1465-2 to require the Irrigation Water Use Questionnaire to be submitted each year;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is(are) received in this office on/or before March 8, 2002, your name will be deleted from the Board agenda. If you have any questions or need assistance with completion of the irrigation questionnaire(s), please contact Genny McMath at (605) 773-3352.

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

1464-2

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

NORMAN A AMIOTTE
BOX 7
INTERIOR SD 57750

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

Norman Amiotte

☐ Agent
☐ Addressee

D. Is delivery address different from item 1?

☒ Yes
☐ No

If YES, enter delivery address below

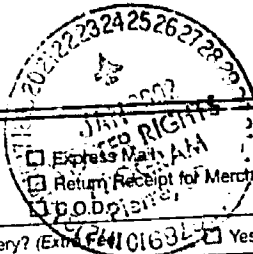
3. Service Type

☒ Certified Mail
☐ Registered
☐ Insured Mail

☐ Express Mail
☒ Return Receipt for Merchandise
☐ P.O. Delivery

4. Restricted Delivery? (Extra)

☒ Yes



7001 2510 0004 4797 5569

PS Form 3811, July 1999

Domestic Return Receipt

502595 99-M-1789



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/deur

January 23, 2002

1464-2
1465-2

Norman A Amiotte
Box 7
Interior, SD 57750

Dear Mr. Amiotte:

I am writing to acknowledge receipt of your 2001 irrigation questionnaires. You may disregard the January 16, 2002, "Notice" concerning reporting requirements for Water Permit Nos. 1464-2 and 1465-2.

The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

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



**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

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.

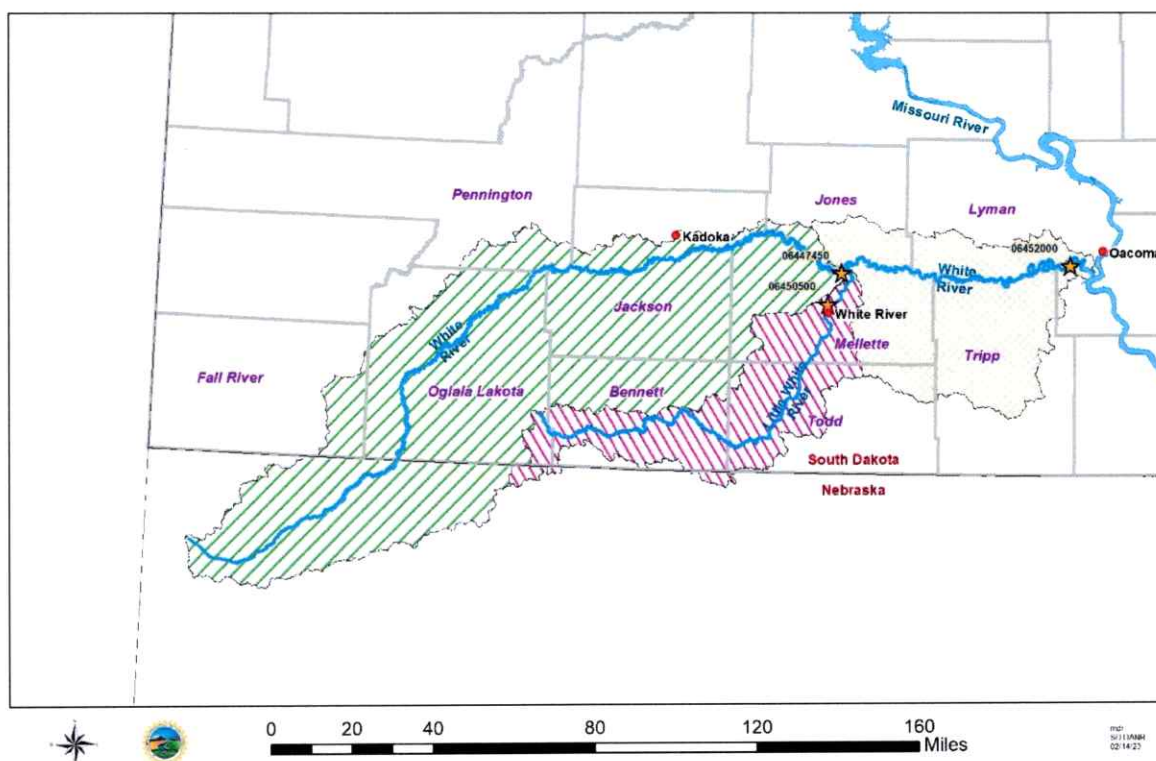


Figure 1. White River Watershed Map.

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.

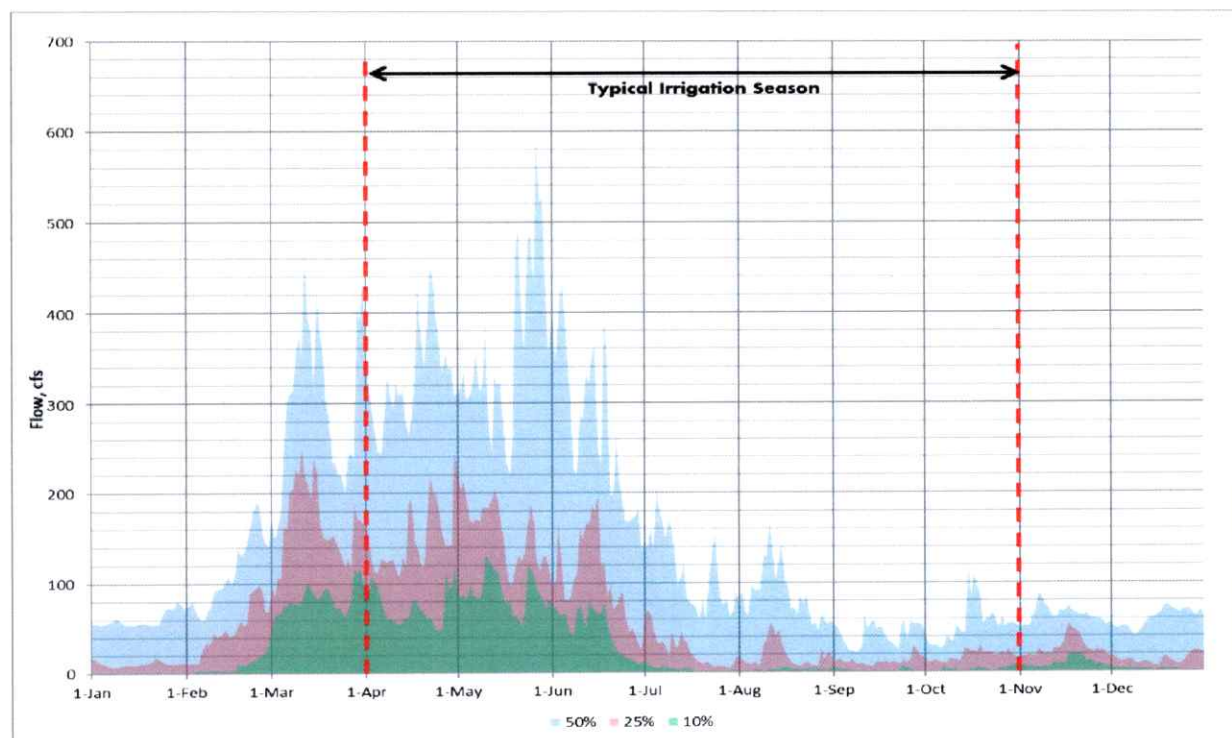


Figure 2. Daily percentile flow hydrographs for the USGS White River near White River 2001-2022, contributing drainage area 6202 mi² (USGS, 2023).

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.

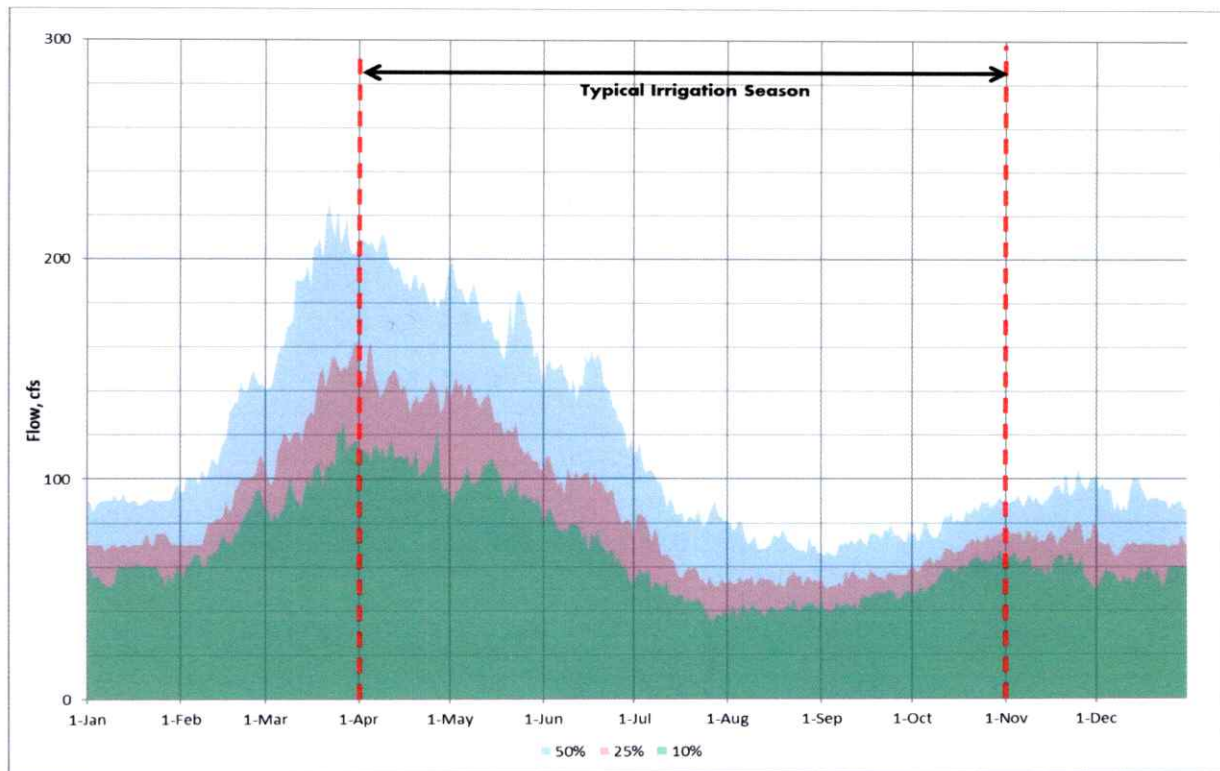


Figure 3. Daily percentile flow hydrographs for the USGS Little White River near White River, 1949-2022, contributing drainage area 1,495 mi² (USGS, 2023).

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.

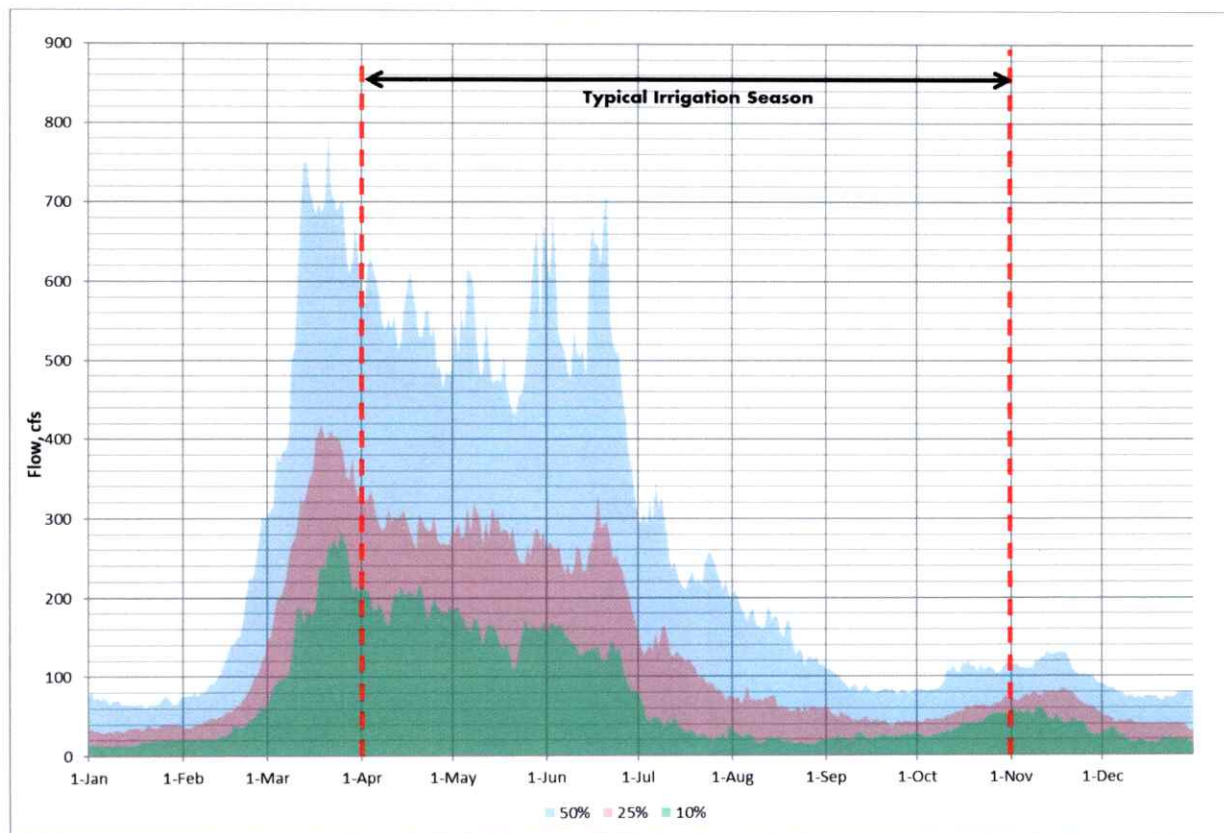


Figure 4. Daily percentile flow hydrographs for the USGS White River near Oacoma, 1928-2022, contributing drainage area 7,697 mi² (USGS, 2023).

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).

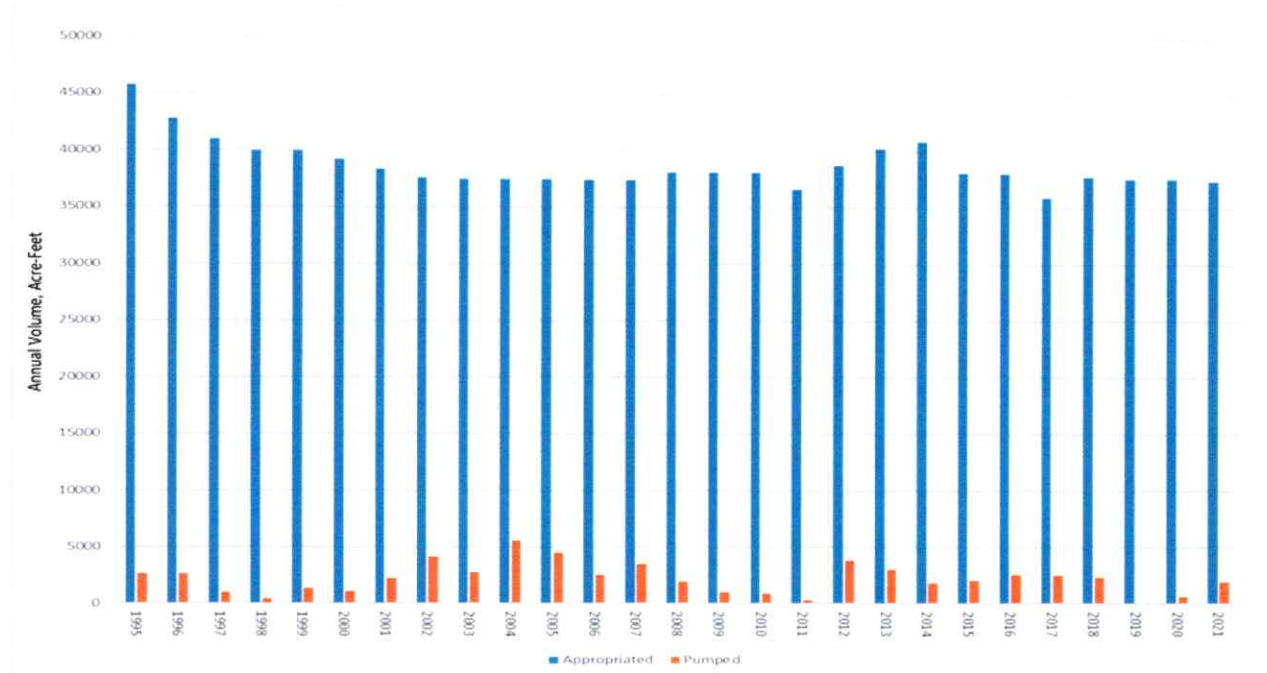


Figure 5. Total irrigation allocation and reported use from the White River (Water Rights, 2023).

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 1st 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 1st 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 1st of each calendar year. After June 1st, 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 1st of each calendar year. After June 1st, 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 1st of each calendar year. After June 1st, 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 1st 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

Ellis, M. J. and D.G. Adolphson. 1971. Hydrologic Atlas 357, Hydrogeology of the Pine Ridge Indian Reservation, South Dakota. United States Geologic Survey Publication Warehouse.

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. If you have questions; please call. DANR is willing to work to answer any questions.

Sincerely,

Chief Engineer

Water Rights Program, DANR