

NO. 346-21Water Division No. 2

(blanks to be filled by the State Engineer.)

White RiverRECEIVED
8:15 A.M.
DEC 6 1949

APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

STATE ENGINEER
PIERRE, S. DAK.

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

1. Name of applicant Ex. F. Selon CLARA W. SELON Box 303
 Postoffice address Kadoka, County Jackson, State S. Dak.

I. If a corporation None

- (a) Name of same
 (b) Date and place of incorporation
 (c) Amount of capital stock
 (d) Amount paid in
 (e) Names and address 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) Direct Labor
 (b) Cash on hand, \$ 3400.00 (c) Treasury stock, \$
 (d) Bonds to be issued, \$ None (e) Other resources, \$
 2. Name of diversion work Solon Irrigation Project
 3. Quantity of water claimed 0.84 cubic feet per second.
 4. Source of water supply White River
 5. Location of point of diversion From the S. W. corner of Sec. 12, T. 4 S., R. 20 E., thence south 70 degrees and 42' E. 772.0 feet on Left bank.
 (Right or left bank looking down stream.)
 6. Annual periods during which water is to be used April 1 to November 1 annually
 7. To be used for:

I. Irrigation or domestic use:

- (a) Number of acres to be irrigated 89.16 acres.

- (b) Legal subdivisions to be irrigated See list attached

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

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

II. Mining, power, manufacturing, transportation, or other purposes:

- (a) Nature of use None
 (b) Amount of power to be generated horse power
 (c) Location of plant
 (d) Method of developing power
 (e) Point where water will be returned to stream

8. Estimated cost of works:

(a) Head gate, \$ 150.00..... (b) Pumping plant, \$ 1500.00.....
 (c) Fluming, \$..... (d) Canal-earth, \$..... Rock, \$.....
 (e) Other structures Sprinkler Pipe \$..... Total, \$ 3400.00

9. Description of diversion works:

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

Pumping Plant, 1560 feet of sprinkler pipe and water meter

II. Dimensions of works:

(a) Dam: Height None feet; length at bottom feet; length at top feet; thickness at bottom feet; thickness at top feet; slope of front (water) face; slope of back face; material used in construction
 (b) Reservoir: Capacity when filled acre feet. Surface area at highwater mark acres.

DEPTH AT OUTLET-Feet	SURFACE AREA AT EACH DEPTH AT OUTLET-ACRES	FEET OF	CAPACITY ACRE-Feet

(c) Head gate: Width 6" Water Meter feet; height feet; Material Metal

(d) Canal: Total length None miles.

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER LINE	GRADE PER MILE
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
At Mile	 feet	 feet	 feet	 feet

(Give dimensions where reductions in size are made.)

10. Time required for completion of work 3 years.

11. Time required for complete application of water to the proposed beneficial use 2 years.

12. Choice of newspaper for publication of notice of intention to appropriate Kidoka Press, Kadoka, S. Dak.

STATE OF SOUTH DAKOTA

County of Jackson ss.

I, E.P. Solon

being first duly sworn on my oath depose and say: That my relation to the above described, undertaking is that of Owner

(Owner, manager, engineer.)

that I have read the above and foregoing statement, and examined the map accompanying the same, and that I know of my own personal knowledge that the matters herein stated and shown are true.

Signed

E.P. Solon

Subscribed and sworn to before me this 3

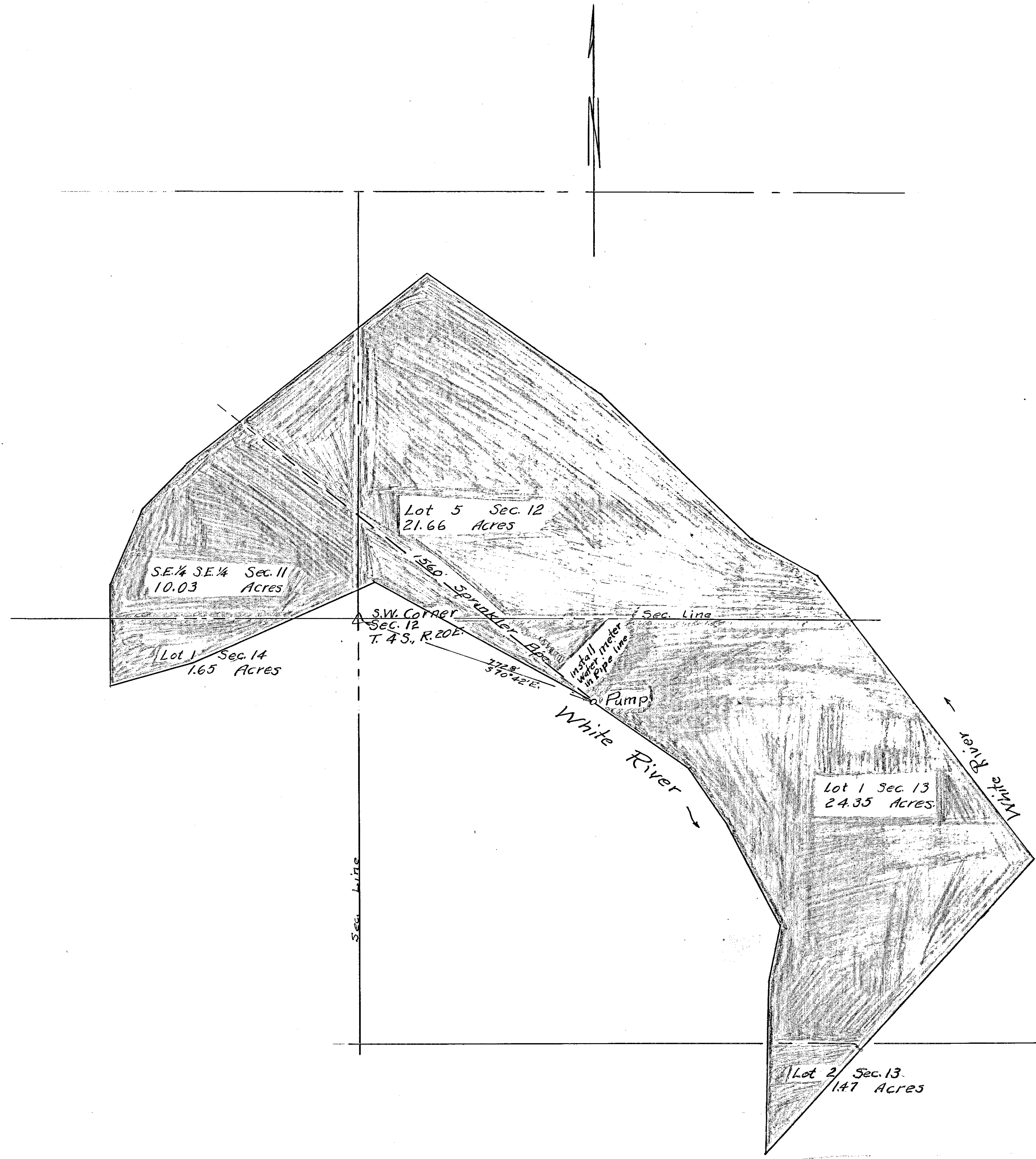
day of

December

1944

Edna F. Richardson

Notary Public (or other qualified officer.)



Surveyor's Certificate:-

I J.R. Richardson, Registered Professional Engineer and Land Surveyor No. 219, State of South Dakota, do hereby certify that I have made a careful survey of the Solon Irrigation Project and that the map hereon is a true and correct representation of the same.

Witness my hand and seal this 1st day of December, 1949 A.D.

J.R. Richardson
Registered Professional Engineer and Land Surveyor

Subscribed and sworn to before a Notary Public this 1st day of December 1949, - A.D.

Olus F. Richardson
Notary Public

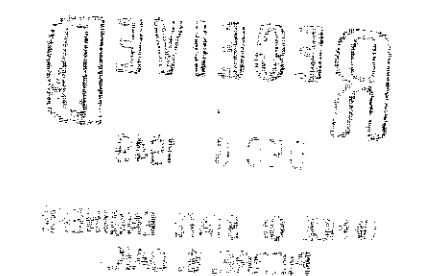
SOLON IRRIGATION PROJECT

Jackson County South Dakota.

Scale:- 1" = 200'

Location of land to be irrigated				
Location	Sec.	Trp	Range	Acres
SE 1/4 SE 1/4	11	4 S.	20 E.	10.03
Lot 5	12	4 S.	20 E.	21.66
Lot 1	14	4 S.	20 E.	1.65
Lot 1	13	4 S.	20 E.	24.35
Lot 2	13	4 S.	20 E.	1.47
Total				59.16

346-2
379-2



Remarks by State Engineer:

STATE OF SOUTH DAKOTA

County of HUGHES

ss.

Pierre, South Dakota, January 31, 1950

This is to certify that the foregoing application was received at this office at 8:05 o'clock a. m. upon the 6th day of December, 1949 and that after examination it was found to comply with the State Water Code, a notice was duly advertised as required by law and no protests or objections were received.

Number of permit 346-2

Dean W. Loucks
DEAN W. LOUCKS,

State Engineer.

Date of first receipt of application December 6, 1949

Date of return to applicant for correction - - - -, 19

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

Date from which applicant may claim right December 6, 1949

Approved January 31, 1950, Recorded in Book 2 Page 666-667

This is to certify that I have examined the foregoing application for a permit to appropriate water of the state of South Dakota, and I 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 July 31, 1951

2nd. The whole of said work is to be completed on or before January 31, 1953

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is January 31, 1955

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 0.8 cubic feet of water per second of time; 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 January 31, 1955; said water to be used during the following described annual period:

April 1 to November 1, Inclusive

Witness my hand this 31st day of January, 1950

Dean W. Loucks
DEAN W. LOUCKS,

State Engineer.

RICHARDSON ENGINEERING CO
CONSULTANT ENGINEERS
V
KADOKA - SOUTH DAKOTA

List of Lands to be Irrigated
by the Solon Irrigation Project.

		Acres
SE 1/4, SE 1/4,	Sec. 11,	10.03
Lot 1	Sec. 14,	1.65
Lot 5	Sec. 12,	21.66
Lot 1	Sec. 13,	24.35
Lot 2	Sec. 13,	1.47
Total		59.16

All the above lands
situated in Twp. 4 South
Range 20 East.

STATE OF SOUTH DAKOTA

WATER LICENSE No. 346-2

WHEREAS On the 6 day of December A. D. 19 49

P. P. SOLOW

of Kadoka County of Jackson and State of

South Dakota duly made application (No. 346-2) to me for a permit to use 0.84

cubic feet per second of the waters of the White River

County of Jackson, State of South Dakota, for sprinkle irrigation

purpose; and

WHEREAS, On the 31 day of January A. D., 19 50

Permit No. 346-2 was issued to said applicant for the diversion of 0.8 c.f.s. of

completion of the works of diversion therein described on or before the 31 day of

January

A. D. 19 53 and for the application to beneficial use of said

water on or before the 31 day of January A. D. 19 55

and,

WHEREAS, On the 1 day of October A. D. 19 52

the holder of said permit duly made proof of the completion of adequate works for the diversion of 0.84

cubic feet per second of said waters, as evidenced by my Certificate No. 346-2

dated October 11, 1952 confirming the completion of works of sufficient capacity for

diverting and conveying to the place of intended use 0.84 cubic feet per second of water, with date of

priority December 6, 1949 and ~~WHEREAS~~

WHEREAS, On the 20 day of November A. D. 19 52

proof was duly made of the application to beneficial use of 0.8 cubic feet per second of said water;

NOW, THEREFORE, By the virtue of the authority vested in me by the laws of the State of South Dakota,

I hereby grant and confirm to F. P. SOLON
of Kadoka, South Dakota the holder and owner of said permit No. 346-2
a water right, dating from December 6, 1949 to the use of C.8
cubic feet per second of the waters of the White River
in the County of Jackson and State of South Dakota, or so much thereof as may be
necessary for the purposes hereinbelow mentioned, to be diverted at a point 772.0 ft, S 70 degrees
42' E of the S.W. corner of Section 12, T. 4, S., R. 20E,
and conducted to and upon SE 1/4, SW 1/4 Section 11, Lot 1 Section 11, Lot 5 Section 12,
lots 1 & 2 Section 13, T. 4S, R. 20E.
for the purpose of providing sprinkler irrigation

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 the object the economical use of such
water.

WITNESS, My hand and seal of my office at Pierre, South Dakota,

this 25 day of November A. D. Nineteen

Hundred and 52

DEAN W. LOUCKS

State Engineer.

State of South Dakota	Water License No. <u>346-2</u>
To <u>F. P. SOLON</u>	
<u>KADOKA, SUTHERLAND</u>	
Source of Supply <u>White River</u>	
<u>Jackson</u> County	
Am't <u>0.8</u> Sec. Feet	
Point of Diversion <u>Section 11</u>	
<u>T. 4 S., R. 20E.</u>	
Place of Use <u>Sec. 11, 13 & 14</u>	
<u>T. 4 S., R. 20E.</u>	
Purpose <u>Sprinkler Irrigation</u>	
Date of Priority <u>December 6, 1949</u>	
Recorded <u>January 1, 1950</u>	
In Book <u>2</u> of <u>1</u> Page <u>667</u>	

Permit No. 346-2Water Division No. 2 White River Water District

Certificate of Construction of Works.

TO ALL WHOM IT MAY CONCERN:

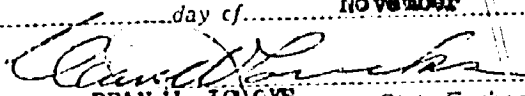
This is to Certify, That F. P. SOLONof Kadoka, County of Jackson, and State ofSouth Dakotathe holder... of Permit No. 346-2, issued upon ApplicationNo. 346-2, bearing date of priority of December 6, 1949, authorizing the diversion of0.8second-feet of the waters of the White RiverCounty of Jackson, State of South Dakota, at a point 772.8 ft.S 70 Degrees 42' E. of the S.W. corner of Section 12, T. 4 S., R. 20E.for Sprinkler Irrigation

purposes, 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 adequate for divert-

ing and conveying to the place of intended use 0.84

second-feet of water; and that the lands proposed to be irrigated by the use of said water are described as follows.

to-wit: SE 1/4, NE 1/4 Section 11, T. 4 S., R. 20 ELot 1 Section 11, " "Lot 5 Section 12, " "Lot 1 & 2 Section 13, " "Witness my hand this 25 day of November A. D. 19 52
DEAN W. LOUCKS,

State Engineer of South Dakota.

(First Publication December 15, 1942)

APPROPRIATION OF WATER

Office of State Engineer,

Pierre, So. Dak., December 3, 1942

Notice is hereby given that E. F. Solon whose postoffice address is Kadoka, So. 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 0.34 cubic feet of water per second of time from the White River through the Solon Irrigation Project, the point of diversion of which is to be located on the left bank of said stream in ~~Sec. 10, Twp. 45 N., R. 20 E.~~ Section 13 Twp. 45 Range 20E. Said water to be used for the purpose of providing irrigation to 59.16 acres in Sections 11, 12, 13 & 14 all in T 45 R 20 E.

This application will be taken up by the State Engineer at his office at Pierre for consideration upon the 17th day of January, 1950, at 11:00 A.M. All persons who believe that their prior rights would be injuriously affected, or that the allowance of the permit would be detrimental to the public welfare shall file such protest with the State Engineer in writing prior to the above date and may appear on the day above mentioned in person for the purpose of discussing further, the information presented.

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

DEAN W. LOUGHS
State Engineer

RECEIVED

JAN 11 1950

PROOF OF PUBLICATION

PIERRE, S. DAK.

STATE OF SOUTH DAKOTA }
County of Jackson } ss.

Orville J. Rock being duly sworn, deposes and says the annexed printed copy of Notice of Intention to appropriate Water was taken from the
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
Town of Kadoka County of Jackson and State of South Dakota; that the said notice was published in said newspaper on the following dates:

December 15, 1949

December 22, 1949

December 29, 1949

January 5, 1950

in each and every issue of the full number thereof, the first publication being made on the 15 day of December 1949 and the last publication on the 5th day of January 1950, upon which days or times of publication aforesaid the newspaper was regularly published, and that during the whole time of said publication he was one of the printer and publisher of the said newspaper.

Subscribed and sworn to before me this 10 day of January A. D. 1950.

Notary Public Jackson County, S. D.

No. 346-2
APPROPRIATION OF WATER

Office of State Engineer,
Pierre, So. Dak. Dec. 8, 1949
Notice is hereby given that F. P. Solon whose postoffice address is Kadoka, So. 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 0.84 cubic feet of water per second of time from the White River through the Solon Irrigation Project, the point of diversion of which is to be located on the left bank of said stream in Lot 1 Section 13 Twp. 4S Range 20E. Said water to be used for the purpose of providing irrigation to 59.16 acres in Sections 11, 12, 13, and 14 all in T. 4S R. 20E.

This application will be taken up by the State Engineer in his office at Pierre for consideration upon the 17th day of January, 1950, at 11:00 A. M. All persons who believe that their prior rights would be injuriously affected, or that the allowance of the permit would be detrimental to the public welfare shall file such protest with the State Engineer in writing prior to the above date and may appear on the day above mentioned in person for the purpose of discussing further the information presented.

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

DEAN W. LOUCKS

State Engineer

Publish Dec. 15, 22, 29, Jan. 5

Name of Applicant F. P. Sdon

Number of Permit 346-2

STATE OF SOUTH DAKOTA

County of Husker } ss.

Pierre, South Dakota, January 31 1950.

This is to certify that the foregoing application was received at this office at 8:05 o'clock a. m. upon the 6th day of December, 1950 and that after examination it was found to comply with the State Water Code,
was duly notice was duly advertised as required by law
and no protests or objections were received.

Number of Permit 346-2

Dean W. Loefer, State Engineer.

Date of first receipt of application December 6 1949

Date of return to applicant for correction _____ 19____

Date of receipt of corrected application _____ 19____

Date from which applicant may claim right December 6 1949

Approved January 31 1950, Recorded in Book 2 Page 666-667

This is to certify that I have examined the foregoing application for a permit to appropriate water of the state of South Dakota, and I 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 July 31 1951.

2nd. The whole of said work is to be completed on or before Jan. 31 1953

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is Jan. 31 1955.

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 0.8 cubic feet of water per second of time; 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 A. of land to which water is actually and beneficially applied for irrigation on or before Jan. 31 1955 said water to be used during the following described annual period: April 1 to Nov. 1 P.M.

Witness my hand this 31st day of January 1950.

Dean W. Loefer, State Engineer

Permit No. 346-2

Water Division No. White River Water District

OCT 8 1952

Notice of Completion of Works

OFFICE OF STATE ENGINEER
PIERRE, S. DAK.

(This blank must be filled out by the holder of permit and forwarded to the State Engineer at least 60 days before the time set for completion of works.)

(P. O.) Kadoka, South Dakota

(Date) October 1, 1952

TO THE STATE ENGINEER OF SOUTH DAKOTA, PIERRE:

DEAR SIR: Notice is hereby given of the completion of the works for the diversion of

0.34 second feet of the waters of the state from White River
through the Solon Irrigation Project
for Irrigation purposes

in accordance with the terms and conditions of a certain permit heretofore issued by the State Engineer of the State of South Dakota.

1. The name of the person or corporation holding said permit is F.P. Solon

2. The postoffice address of such person or the place of business of such corporation is Kadoka

County of Jackson State of South Dakota

3. The number of such permit is 346-2 and the date set for the completion of such work is
October 1st, 1952

4. Said water to be used for Irrigation purposes.

5. Said works of diversion will be fully completed on the date set for such completion, and the amount of water which said works are capable of conducting to the place of intended use, in accordance with the plans accompanying the application for such permit, is 0.34 cubic feet per second.

6. The amount of land for which said water is available is 59.16 acres,
particularly described as follows: SESE 1/4 Sec. 11, T. 4 S., R. 20 E., 10.03, Lot 5, Sec. 12, 21.60
Lot 1, Sec. 14, 1.65, Lot 1, Sec. 13, 24.35, Lot 2, Sec. 13, 1.47, All in T. 4 S. R. 20 E
BHM.

(In case of all canals or other works designed to divert or carry more than 50 cubic feet of water per second, the following certificate must be signed by a well known and competent engineer.)

I hereby certify that the facts set forth in the above notice are true.

(Signature.)

Engineer.

Permit No. 346-2Water Division No. White River Water District

CERTIFICATE OF EXAMINATION OF WORKS

Report of Examining Engineer

1952

To the State Engineer, Pierre, South Dakota:

OFFICE OF STATE ENGINEER

PIERRE, S. DAK.

Dear Sir: I hereby certify that in accordance with your letter of authorization dated Oct. 11952, I have this day made a thorough examination of the diversion works constructed byF. P. SELON, of KadokaJackson County, South Dakota, holder of permit No. 346-2, issuedupon application No. 346-2, bearing date of priority of Dec. 16, 1949, authorizing thediversion of 0.84 second feet of the waters of White River for Irrigation

purpose. I have to report on the condition of the same as follows:

The diversion works comprise: A complete pumping plant, main line pipe, sprinkler pipe, sprinkler heads and nozzles equipped with a pressure gauge

and the system is in the following condition: Excellent

The point of diversion is located From the SW Corner of Sec. 12, T. 4 S., R. 20 E., B. 70
degrees and 02' for a distance of 772.1 feet to point No. 1.

The works are capable of diverting and conveying to the place of use 0.84 second-feet of water,
 which is to be used for Irrigation.

The legal sub-divisions to be irrigated are: SESE 1/4 Sec. 11, 10.03, Lot 5, Sec. 12, 21.56, Lot 1
Sec. 14, 1.65, Lot 1, sec. 13, 24.35, Lot 2, Sec. 13, 1.47, all in T. 4 S. R. 20 E.
RHM in Jackson County, South Dakota

The domestic use intended comprises None comprising a total 59.16 acres of land.

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

Witness my hand, this 11th day of October, A. D. 1952

J. R. Richardson
 Examining Engineer.

Permit No. 346-2

21 1952

Water Division No. White River Water District

OFFICE OF STATE ENGINEER
PIERRE S. OAK

Certificate of Application of Water to Beneficial Use.

Deposition of Holder

Ques. 1. State your name, residence, occupation and postoffice address.

Ans. F.P. Solon, Kadoka, S.Dak. Rancher

Ques. 2. If acting in behalf of a corporation, state its name, principal place of business (if a foreign corporation, give name and postoffice of statutory agent), your position with reference to same, and your authority for appearing in its behalf.

Ans. Myself

Ques. 3. State number and date of permit, and date of priority you propose to establish under the permit.

Ans. Permit No. 346-2, Dated 6 December, 1949, Dec. 6, 1949 priority

Ques. 4. State source of water supply and give exact location of point of diversion.

Ans. White River, From the SW Corner of Sec. 12, T. 4 S., R. 20 E., S. 70 degrees and 42° E., for a distance of 772.8 feet to point No. 1.

Ques. 5. Describe your works of diversion, and state amount of water they are capable of conveying from point of diversion to place of use, and give name of canal or ditch or other works by which water is conducted to such place of use.

Ans. Pumping plant, Main Line and Sprinkler pipe equipped with a pressure gauge and sized nozzles.

Ques. 6. State for what purpose water is used and describe place of use. (If for irrigation, name each subdivision in which used, and number of acres in each subdivision that have ACTUALLY been irrigated with said water.)

Ans. Irrigation of SESE 1/4 Sec. 11, 10.03, Lot 5, Sec. 12, 21.66, Lot 1, Sec. 14, 1.65, Lot 1, Sec. 13, 24.35, Lot 2, Sec. 13, 1.47, All in T. 4 S., R. 20 E., BHM. comprising a total of 59.16 acres

Ques. 7. If for other than irrigation purpose, state how applied, amount of horse power generated, etc.

Ans. None

Ques. 8. What is the minimum amount of water required for the use specified above?

Ans. 0.84 CFS

Ques. 9. If you are not the person or representative of the corporation to whom above mentioned permit was originally issued, please state how ownership was acquired by present holder.

Ans. Original Applicant

Ques. 10. State when, how, in what amount and to what extent the water diverted under above mentioned permit has been used.

Ans. Water has been applied to the above described land to beneficially irrigate during the seasons of 1951 and 1952.

XXX (Sign)

J.P. Salow

I hereby certify that the foregoing testimony was read to the above subscriber before its signing, that I believe him to be the person he represents himself to be, and that said testimony was subscribed and sworn to before me, at my office in City of Kadoka, County of Jackson

State of South Dakota, on this 20 day of November 1 A. D., 1952

Harold P. Gickert
Notary Public

Permit No.
Proof of Application of Waters to

Beneficial Use

DEPOSITION OF HOLDER.

Amount of water..... second feet

Source.....

County.....

Purpose.....

Place of Use.....

Date of priority.....

Received and filed.....

NOTICE OF TRANSFER OF WATER PERMIT

TO: Water Resources Commission
State Office Building No. 2
Pierre, South Dakota 57501

Date January 5, 1972

This is to notify you that title to the lands described as follows:

Portions of Sections 11, 12, 13 and 14, T4S, R20E, described in

Water Permit No. 346-2

formerly owned by F.P. Solon

has been transferred to Clara W. Solon

together with any rights to the beneficial use of water thereon as evidenced by Water Right Permit No. 346-2 as provided for in Section 61.0127 of the 1960 Supplement to the South Dakota Code of 1939.

You are therefore hereby requested to file this "Notice of Transfer of Water Permit" in its appropriate file at the Office of Water Resources Commission as evidence of the change of ownership.

A fee of one dollar is hereto attached to cover filing fees as required under Section 61.0159 of the 1960 Supplement to the South Dakota Code of 1939.

STATE OF SOUTH DAKOTA)
County of Jackson) ss.

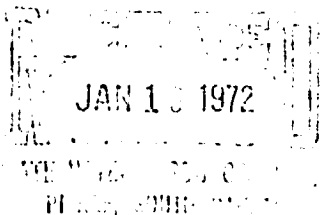
I, Clara W. Solon being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of Owner, that I have read the above foregoing statement, and I know of my own personal knowledge that the information herein stated is true.

Clara W. Solon
(Signed)

Suscribed and sworn to before me this 12 day of January, 1972

Edith P. Hagen
(Notary Public)

REGISTER OF DEEDS





Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

WATER RIGHTS DIVISION
(605) 773-3352

346-2

361-2

362-2

November 6, 1987

John Solon
Box 512
Kadoka, South Dakota 57543

Dear Mr. Solon:

Please find enclosed copies of Notice of Transfer of Water Permit forms. These forms must be signed by the owner before a notary and returned to this office with a filing fee of \$2.50 each, total of \$7.50 for three transfers.

Upon receipt of the enclosed forms and the \$2.50 filing fee for each transfer the permits will be transferred to the proper name. 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.

Please advise if you have any questions.

Sincerely,

Maxine Stirling
Secretary

ms/
Enc.

NOTICE OF TRANSFER OF WATER PERMIT

TO: Water Rights
Foss Building
Pierre, SD 57501

Date: 11/16/87

This is to notify you that the title to the lands described as follows:

59.16 acres SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 11, Lot 5 Section 12, Lots 1 & 2 Section 13,

Lot 1 Section 14, T4S, R20E

formerly owned by Clara W. Solon

has been transferred to John Solon, Box 512, Kadoka, SD 57343

(please include complete mailing address)

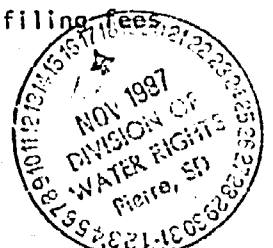
together with any rights to the beneficial use of water thereon as evidenced by

Water Right Permit No. 346-2 as provided for in SDCL 46-5-32 and 46-5-33.

You are therefore hereby requested to file this "Notice of Transfer of Water Permit" in its appropriate file at the Div. of Water Rights, Water Management Board as evidence of the change of ownership.

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

STATE OF SOUTH DAKOTA)
County of Sioux) ss.



I, John Solon 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 I know of my own personal knowledge that the information herein stated is true.

John Solon
(Signed)

Subscribed and sworn to before me this 16 Day of Nov., 1987.

My Comm. expires: 12/31/90 P. J. Fournier
(Notary Public)

RECEIPT

Division of Water Rights
South Dakota Department of Water and Natural Resources

411055

Pierre, _____ November 17, 1987

RECEIVED OF John Solon, Box 512, Kadoka, SD 57343

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct works and to put water to beneficial use _____		
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form <u>346-2</u>		2 50
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	2 50

By John Hatch
Chief Engineer JOHN HATCH (NS)



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3161

WATER RIGHTS DIVISION
(605) 773-3352

346-2
361-2
362-2

November 23, 1987

John Solon
Box 512
Kadoka, South Dakota 57343

Dear Mr. Solon:

Enclosed are receipt Nos. 411055, 411056, and 411057 in the amount of \$2.50 each which you paid for the transfer of Water Right Nos. 346-2, 361-2 and 362-2.

Our records now show you as the owner of these Water Rights.

Sincerely,

Maxine Stirling
Secretary

ms/
Enc.3

 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

October 30, 1990

346-2
361-2
362-2

John Solon
Box 512
Kadoka, SD 57543

Dear Mr. Solon:

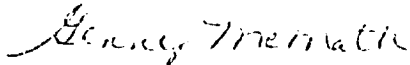
Enclosed are your 1990 irrigation questionnaires. You indicated when you submitted them on October 26th that you irrigated 25 acres. As we discussed on the telephone, you need to complete the remainder of the form. The following information is required:

1. Which months irrigation took place,
2. Number of days pumped in each month,
3. Average number of hours per day pumped,
4. Pump rate (gallons per minute; and
5. Whether or not you apply chemicals through your irrigation system.

I have included a copy of each of your water rights. This will enable you to specify which acreage you irrigated and the specific form it pertains to. Please complete the forms and return them prior to DECEMBER 14, 1990.

If you have any questions, please contact me.

Sincerely,



Genny McMath
Natural Resources Analyst
(605) 773-3352

enclosures



346-2

DEPARTMENT OF WATER & NATURAL RESOURCES

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

February 1, 1991

JOHN SOLON
BOX 512
KADOKA SD 57543

NOTICE

RE: Violation of Requirement to Submit 1990 Irrigation Questionnaire

Our records indicate that the 1990 Irrigation Questionnaire has not been submitted for Permit No(s) 346-2, 361-2, 362-2. The request for the Questionnaire was dated October 12, 1990. The Water Management Board has directed that owners of water permits who have not submitted the 1990 Irrigation Questionnaire be given notice of hearing(s) to be held by the Board to determine if any action is to be taken concerning the violation.

The hearings will be held at 9:15 am, February 27, 1991, at the Governor's Inn in the meeting room, 700 West Sioux Avenue, Pierre SD.

The hearing will be conducted pursuant to the provisions of SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to procedures contained in SDCL 1-26. Following the hearing(s), the Water Management Board can:

1. Amend Permit No(s) 346-2, 361-2, 362-2 to require the Irrigation Water Use Questionnaire to be submitted each year;
2. Postpone any action;
3. Take no action.

The hearing(s) 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 received in this office before the February 27th hearing date, your name will be deleted from the agenda for the hearing.

Very truly yours,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division
605 773-3352



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

346-2

March 6, 1991

NOTICE OF AMENDMENT OF WATER PERMIT

TO: JOHN SOLON
BOX 512
KADOKA, SD 57543

FROM: Ron Duvall, Natural Resources Engineer IV
Water Rights Division
(605) 773-3352 *Ron Duvall*

SUBJECT: Amendment to Water Permit No(s) 346-2,
361-2, 362-2

Pursuant to the provisions of the notice dated February 1, 1991, and following the Hearing February 27, 1991, the Water Management Board has amended Water Permit No(s) 346-2, 361-2, 362-2 to add the following qualification:

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

The addition of this qualification to your Permit means that failure to submit the required irrigation questionnaire in the future could result in suspension of the water permit and no use of water for up to one year for the first violation.

Please contact Genny McMath (605) 773-3352, if you have any questions.



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

JOHN SOLON
BOX 512
KADOKA SD 57543

NOTICE

RE: Violation of Water Permit No(s) 346-2, 361-2 & 362-2

Our records indicate that the 1991 Irrigation Questionnaire has not been submitted for Permit No(s) 346-2, 361-2 & 362-2. The request for the Questionnaire was dated October 18, 1991. The Water Management Board has directed that owners of water permits who have not submitted the 1991 Irrigation Questionnaire be given notice of permit violation and a hearing to be held by the Board. The hearing held by the Board will determine the action to be taken for violation of Water Permit No(s) 346-2, 361-2 & 362-2 qualification:

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

The hearing will be held at 9:15 am, March 4, 1992, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-3, 46-2-11 and 46-2-17. These are contested case hearings pursuant to SDCL 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 346-2, 361-2 & 362-2 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is(are) received in this office before the March 4th hearing date, you will no longer be in violation of your permit and your name will be deleted from the Board agenda.

Very truly yours,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division
605 773-3352



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 12, 1992

346-2
361-2
362-2

John Solon
Box 512
Kadoka, SD 57543

Dear Mr. Solon:

I am writing to acknowledge receipt of your 1991 irrigation questionnaires for Water Right Nos. 346-2, 361-2 and 362-2. You may disregard the January 27, 1992, Notice of failure to submit the 1991 irrigation questionnaire. The questionnaires were received prior to the Water Management Board meeting and your name was deleted from the agenda.

If you have any questions, please contact me at (605) 773-3352.

Sincerely,

Genny McMath
Natural Resources Analyst
Water Rights Division

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

JOHN SOLOH
BOX 512
KADOKA, SD 57543

4a. Article Number

P 906 557 778

4b. Service Type

- | | |
|---|---|
| ☐ Registered | ☐ Insured |
| ☒ Certified | ☐ COD |
| ☐ Express Mail | ☐ Return Receipt for Merchandise |

7. Date of Delivery

1/31/92

5. Signature (Addressee)

John Soloh

6. Signature (Agent)**8. Addressee's Address (Only if requested and fee is paid)**



346-2.

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 7, 1995

JOHN SOLON
BOX 512
KADOKA SD 57543

NOTICE

RE: Violation of Water Permit No(s) 346-2, 361-2 & 362-2.

Our records indicate that the 1994 Irrigation Questionnaire has not been submitted for Permit No(s) 346-2, 361-2 & 362-2. The request for the Questionnaire was dated November 3, 1994. The Water Management Board has directed that owners of water permits who have not submitted the 1994 Irrigation Questionnaire be given notice of permit violation and a hearing to be held by the Board. The hearing held by the Board will determine the action to be taken for violation of Water Permit No(s) 346-2, 361-2 & 362-2 qualification:

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

The hearing will be held at 9:30 am, March 8, 1995 in the Crown Room, 3rd Floor, Kings Inn Best Western Convention Center, 200 S 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 SDCL 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 346-2, 361-2 & 362-2 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is(are) received in this office on/or before March 3, 1995, you will no longer be in violation of your permit and your name will be deleted from the Board agenda.

Very truly yours,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division
605 773-3352

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

346-2

JOHN SOLON
BOX 512
KADOKA, SD 57543

4. Article Number

P757566324

4b. Service Type

☐ Registered ☐ Insured

☒ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

3-10-95

5. Signature (Addressee)

6. Signature (Agent)

Carol B. Solon

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 • U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.



346-2

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 15, 1995

346-2

361-2

362-2

John Solon
Box 512
Kadoka, SD 57543

Dear Mr. Solon:

I am writing to acknowledge receipt of your 1994 irrigation questionnaires. You may disregard the February 7, 1995, Notice of Violation of Water Permit Nos. 346-2, 361-2 & 362-2.

The questionnaires were 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 Division
(605) 773-3352



346-2

January 30, 1996

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

TO: JOHN SOLON, BOX 512, KADOKA, SD 57543
FROM: Ron Duvall, Natural Resources Engineer
for John Hatch, Chief Engineer
Water Rights Program

SUBJECT: Violation of Water Permit No(s) 361-2, 346-2 & 362-2.

Our records indicate that the 1995 Irrigation Questionnaire has not been submitted for Permit No(s) 361-2, 346-2 & 362-2. The request for the Questionnaire was dated October 20, 1995. The Water Management Board has directed that owners of water permits who have not submitted the 1995 Irrigation Questionnaire be given notice of permit violation and a hearing to be held by the Board. The hearing held by the Board will determine the action to be taken for violation of Water Permit No(s) 361-2, 346-2 & 362-2 qualification:

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

The hearing will be held at 9:45 am, March 6, 1996 in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 361-2, 346-2 & 362-2 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

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

If the questionnaire(s) is(are) received in this office on/or before March 1, 1996, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in 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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 7, 1996

346-2

361-2

362-2

John Solon
Box 512
Kadoka, SD 57543

Dear Mr. Solon:

Enclosed, as we discussed, are copies of Water Right Nos. 346-2, 361-2 and 362-2. I have also included a set of 1995 irrigation questionnaires pertaining to these water rights.

You indicated during our phone conversation that some of your land is solely flood irrigated and no pumping equipment is used. Please review the water rights and let me know if your irrigation methods have changed from what is described in the water rights.

Please complete the questionnaires and return them to our office prior to March 1, 1996. You may keep the copies of the water rights for your records. If you have any questions, please contact me.

Sincerely,

Genny McMath

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

enclosures



346-2

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

February 14, 1996

346-2
361-2
362-2

John Solon
Box 512
Kadoka, SD 57543

Dear Mr. Solon:

I am writing to acknowledge receipt of your 1995 irrigation questionnaires. You may disregard the January 30, 1996, **Notice of Violation of Water Permit Nos. 346-2, 361-2 and 362-2.** The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

You indicated on your questionnaires that you utilize only water spreading systems. Under Water Management Board Rules, water permit or right holders with spreader type systems are exempt from yearly reporting requirements. You will no longer be receiving questionnaires from our office.

As long as you beneficially use the water authorized under Nos. 346-2, 361-2 and 362-2, you have a continuing right to the use of the water. If you have any questions, please contact me.

Sincerely,

Genny McMath

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.

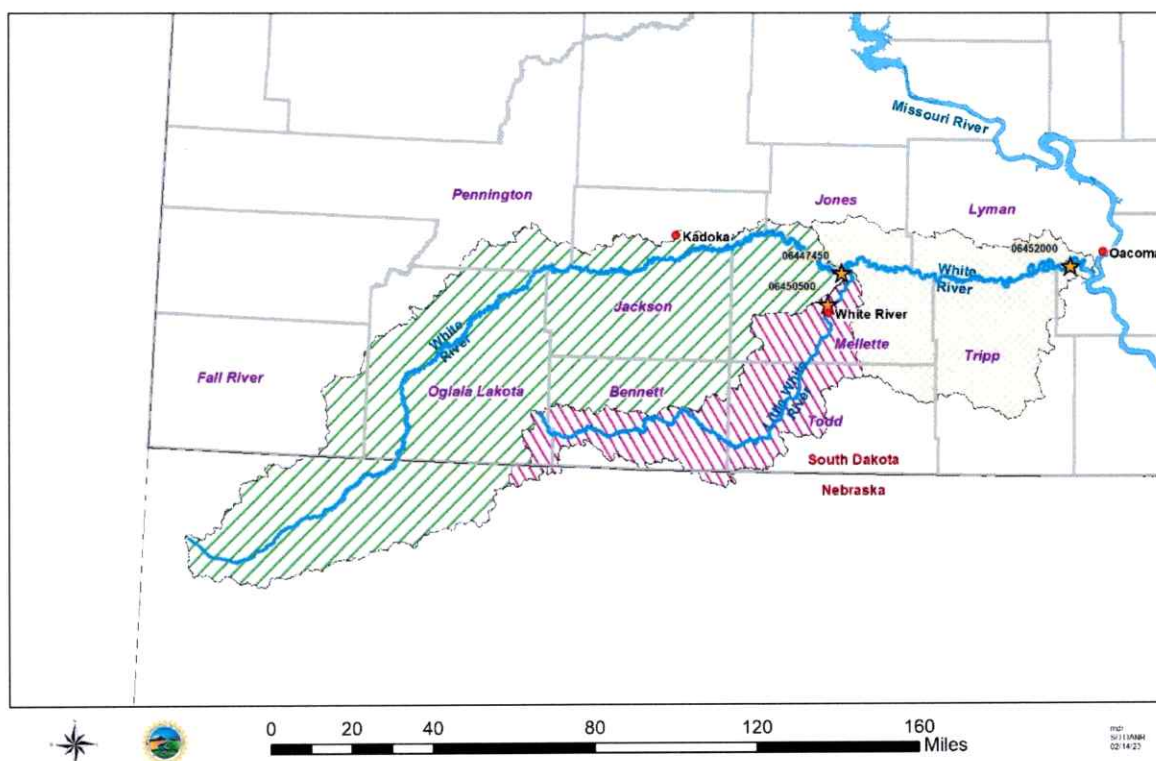


Figure 1. White River Watershed Map.

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.

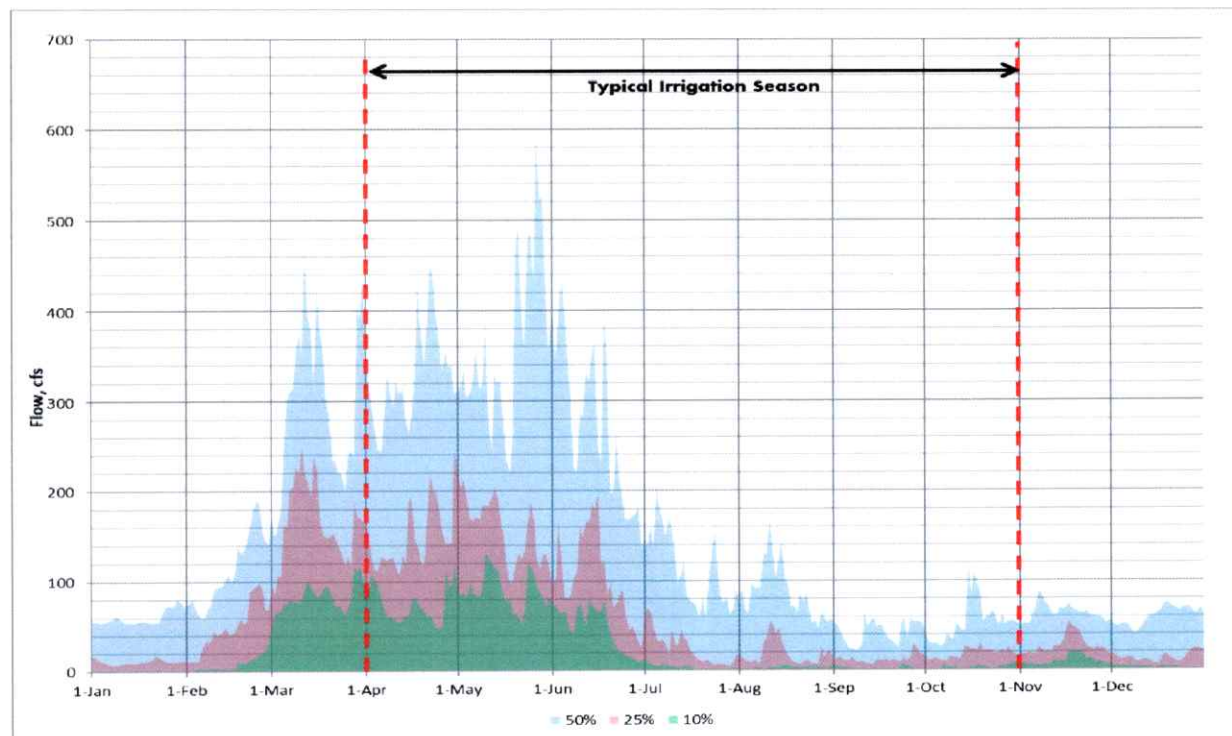


Figure 2. Daily percentile flow hydrographs for the USGS White River near White River 2001-2022, contributing drainage area 6202 mi² (USGS, 2023).

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.

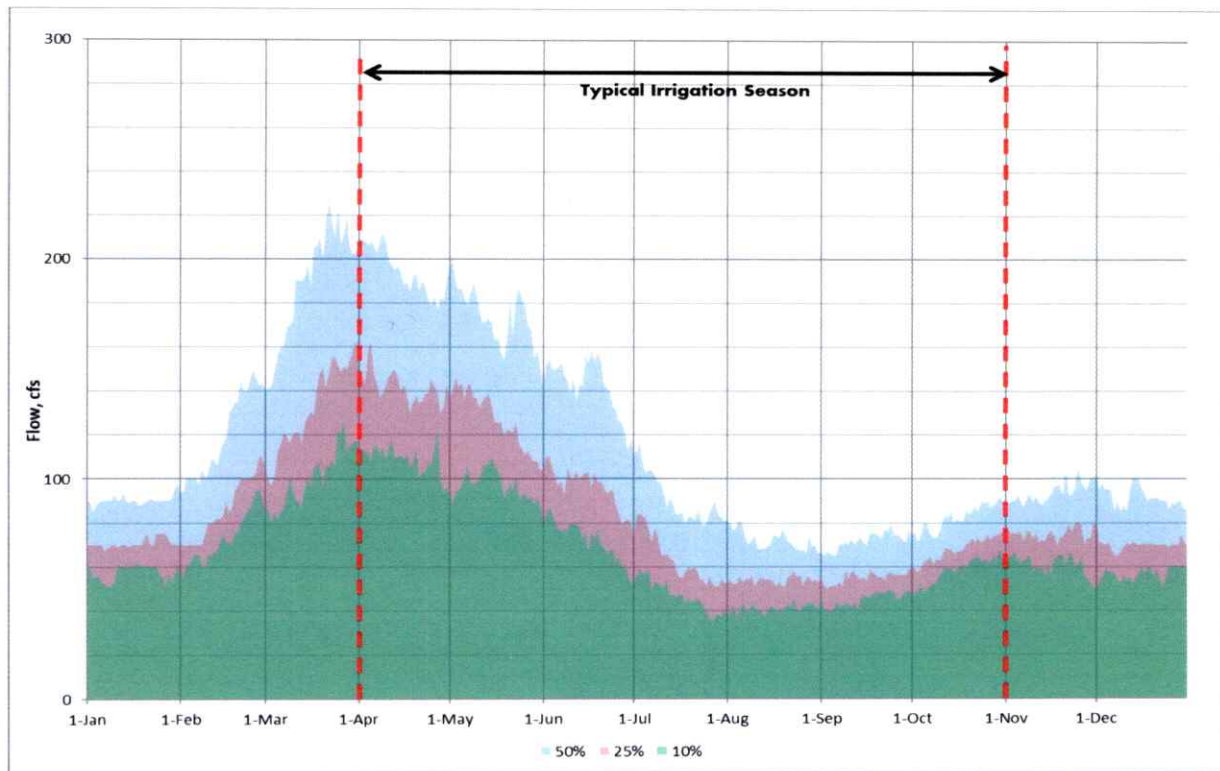


Figure 3. Daily percentile flow hydrographs for the USGS Little White River near White River, 1949-2022, contributing drainage area 1,495 mi² (USGS, 2023).

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.

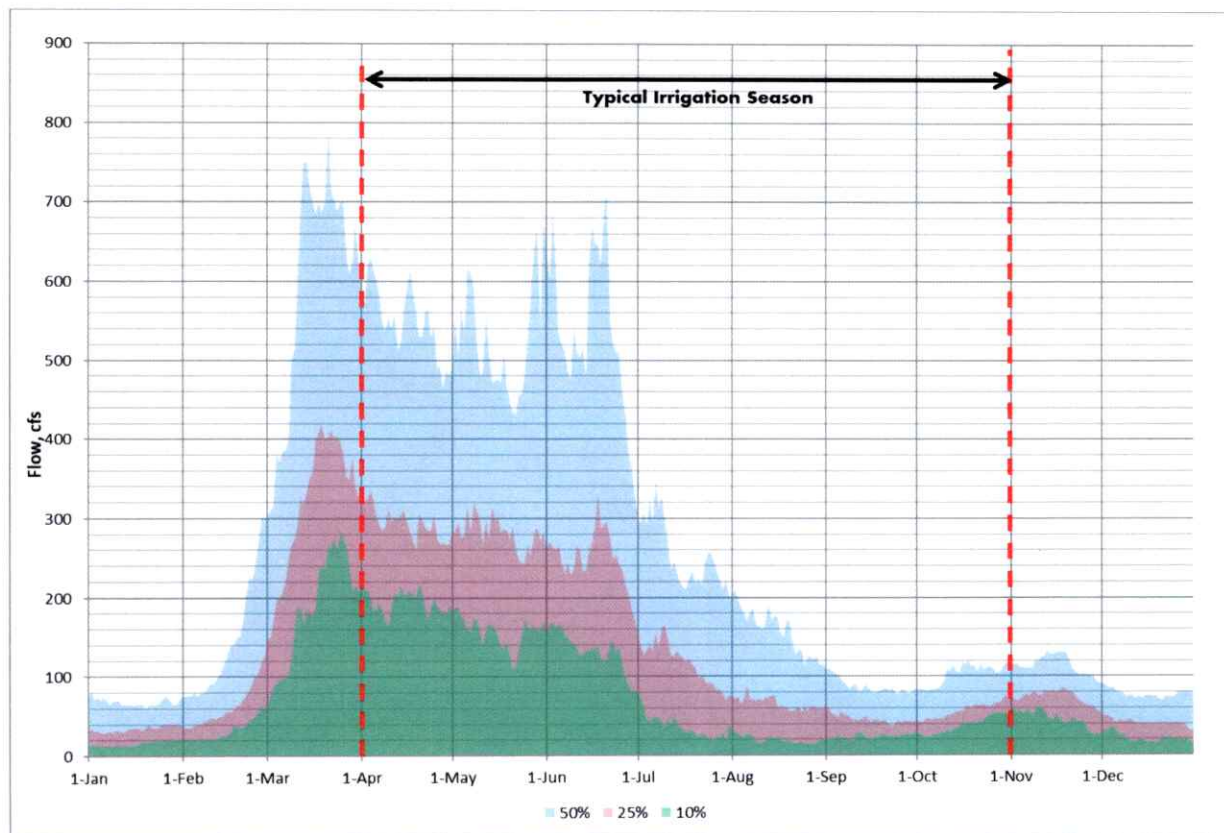


Figure 4. Daily percentile flow hydrographs for the USGS White River near Oacoma, 1928-2022, contributing drainage area 7,697 mi² (USGS, 2023).

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).

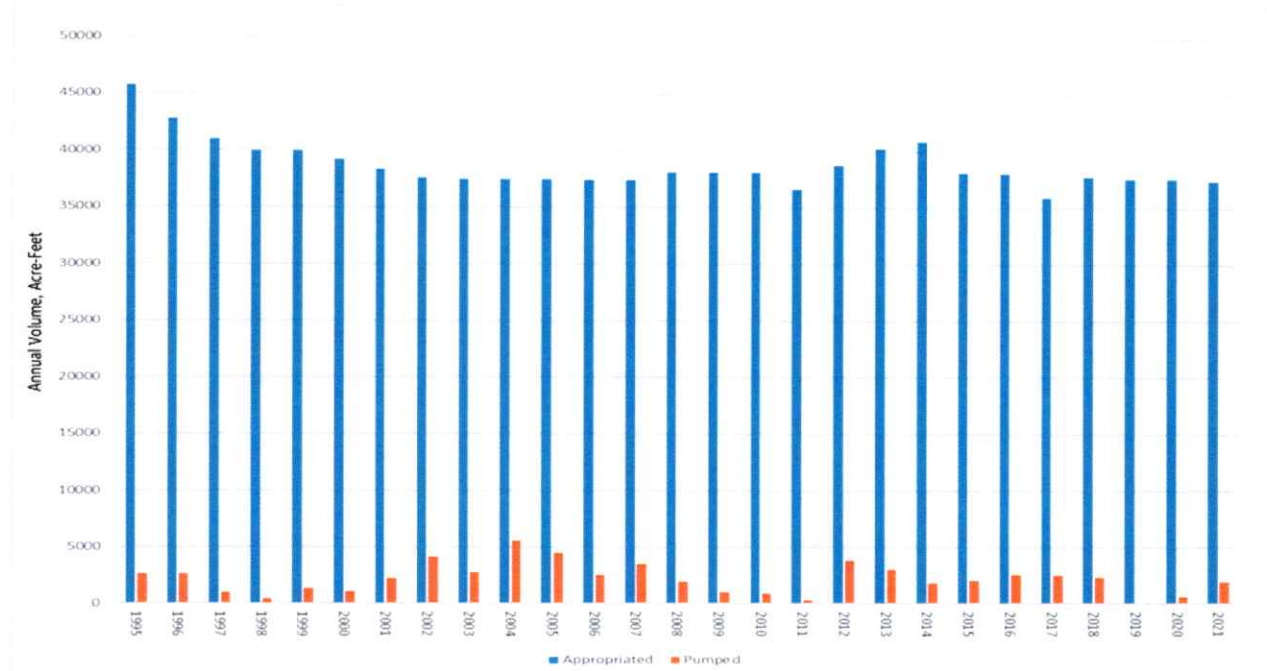


Figure 5. Total irrigation allocation and reported use from the White River (Water Rights, 2023).

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

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



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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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