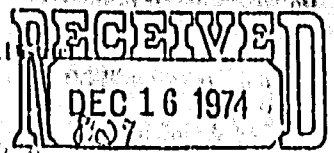


2173-3

1. Considered 3-19, 1975
2. Name of Applicant ROY BUSHBY
3. Post Office Address HECLA
4. Amount of water claimed 4.5
5. Source of water supply GROUNDWATER
6. Water to be used for IRRIGATION
- Acres to be irrigated 316
7. Water to be diverted and used in BROWN county
about 1/2 E miles of HECLA
8. Proof of Publication Received 3-5-75
9. Application Not Received
Approved
Subject to _____
Not Approved
Action deferred
10. Remarks:

meyer

Glow

No. 2173-3
 Map No. 1565-3 Water Division No. 3 JAMES RIVER
 (Blanks to be Filled by the Engineer for the W. R. C.)

 APPLICATION FOR PERMIT STATE WATER RIGHTS COMM.
 PIERRE, SOUTH DAKOTA

To Appropriate Water within the State of South Dakota

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

1. Name of Applicant Roy Bushby
 Postoffice address Heceta, State South Dakota
 If a corporation show date and place of incorporation _____
2. Method of accomplishing work (contract, employment of others, or by direct labor) Direct Labor
3. Name of diversion work Roy Bushby Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 4.5
5. Source of water supply 2 wells Chadwick
6. Location of point of diversion Well #1 - 2640' N of SW corner of sec 25 - 128-61
Well #2 - 2960' N 152° E of NW corner of sec 25 - 128-61
 County Brown
7. Annual period or periods during which water is to be used April through October
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 316
 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.
NW 1/4 of NW 1/4 of sec 25 - 128-61	39	NW 1/4 SW 1/4 sec 25 - 128-61	40
NE 1/4 of NW 1/4	39	NE 1/4 SW 1/4	40
SW 1/4 of NW 1/4	40	SW 1/4 of SW 1/4	39
SE 1/4 of NW 1/4	40	SE 1/4 of SW 1/4	39

Attach sheet if more space is needed

10. Time required to complete construction of water supply system Five years. Additional time required to complete application of water to the proposed beneficial use three years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Heceta Independent
12. Principal Features of the Proposed Water Supply System.
- A. Works proposed to divert water from its natural source. 2 wells with deep well turbines electrically driven
- B. Works proposed to transport water to place of use. closed conduit
- C. Works proposed to apply water to beneficial use. center pivot irrigation

Estimated Total Cost \$ 50000
 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 _____

I, _____, 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 _____

Subscribed and sworn to before me this 6 day of Dec 1974

Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Resources Commission hereby approves Water Right Application No. 2173-3
ROY BUSHBY HECLA
 (Applicant) (Post Office Address)

SOUTH DAKOTA 57446 With the following modifications:
 (State)

The irrigation well approved under this Permit is located near domestic wells which may obtain water from the same aquifer. The irrigation well owner, under this Permit, shall control his irrigation withdrawals so there is not a reduction of needed water supplies in existing domestic wells.

Date of first receipt of application DECEMBER 16, 19 74
 Date of return to applicant for correction, amendments or changes required _____, 19 ____
 Date of receipt of corrected application FEBRUARY 24, 19 75
 Approved MARCH 20, 19 75 Recorded in Book 13 Page 208
19 WATER RIGHT PERMIT NO. 2173-3

The Water Resources Commission hereby grants and issues this Water Right Permit No. 2173-3 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 FEBRUARY 24, 19 75
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before SEPTEMBER 19, 19 77
3. The whole of said work is to be completed on or before MARCH 19, 19 80
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MARCH 19, 19 83
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 4.5 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 MARCH 19, 19 83; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 26TH day of MARCH, 19 75

WATER RESOURCES COMMISSION

By:

Donnell Dinsell
 Chief Engineer, Executive Officer

Certificate of Construction Issued _____, 19 ____

Water License Issued _____, 19 ____

Well # 2

12. Principal Features of the Proposed Water Supply System (continued.)

D. Well Information or Estimates

- (1) Drill Hole, Diameter 2.2", Depth 77'
- (2) Casing, Type Steel Diameter 12" Thickness 1/4"
(wood, concrete, steel, etc)
- (3) Perforated Screen.
Type Johnson, tri-plier, Diameter 12", Length 10'
- (4) Gravel Pack. Thickness _____, Length of gravel pack 20'

E. Dugout Information or Estimates.

- (1) Surface dimensions _____, Depth _____

F. Fill out for Either a Well or a Dugout.

- (1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials See attached log

Depth to top of water bearing material 62'

Depth to bottom of water bearing material 77'

Thickness of water bearing material 15'

Depth to water (ground surface to water level) 5'

- (2) Distance to nearest existing household or livestock watering wells.

On same owner's property No Existing Well rds. On property owned by other 180 rds.

G. Water Storage Dams.

If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

Robert B. B. B.
Signature of Applicant

Well # 1

12. Principal Features of the Proposed Water Supply System (continued.)

D. Well Information or Estimates

(1) Drill Hole, Diameter 22" Depth 96'
 (2) Casing, Type Steel Diameter 12" Thickness 1/4"
 (wood, concrete, steel, etc)
 (3) Perforated Screen.
 Type Johnson Eccentric, Diameter 12", Length 10'
 (4) Gravel Pack, Thickness 3", Length of gravel pack 20'

E. Dugout Information or Estimates.

(1) Surface dimensions —, Depth —

F. Fill out for Either a Well or a Dugout.

(1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials See attached log

Depth to top of water bearing material 87'

Depth to bottom of water bearing material 96'

Thickness of water bearing material 9'

Depth to water (ground surface to water level) 5'

(2) Distance to nearest existing household or livestock watering wells.

On same owner's property No Existing well rds. On property owned by others 190 rds.

G. Water Storage Dams.

If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

Rob Bailey
 Signature of Applicant

Form 6 - Notice of Intent to Appropriate Water

No. 2173-3

Publish first publication, on or before March 6, 1975

NOTICE
INTENT TO APPROPRIATE WATER

Pierre, South Dakota 57501

February 25, 1975

Notice is hereby given that Roy Bushby

whose post office address is Hecla, 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

4.5 cubic feet of water per second of time from the ground water through the Bushby Irrigation Project #1, the point of diversion of which is to be located in the

Center of the W $\frac{1}{2}$ and near the W $\frac{1}{2}$ Corner,

of Section 25, Twp. 128N, Range 61W. Said water to be used for the purpose of providing irrigation on the following described land:

W $\frac{1}{2}$, Section 25, T128N, R61W

This application No. 2173-3 will be considered by the Water Rights Commission at its office at Pierre upon the 10th day of March, 1975, at 2:30 P. M. All interested persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

BURTON P. JONES
Water Rights Specialist

BFJ/bw
cc: Roy Bushby, Hecla, S.D. 57440

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Brown) ss.

I, Ruth E. Smith hereby

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

Water was taken from the Nick's Independent

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the Nick's

Independent of Nick S. Bell

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

March 5, 1975

March 11, 1975

Ruth E. Smith
(Signature)

Editor of Newspaper
(Title)

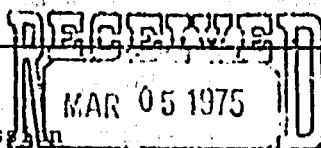
March 12, 1975
(Date Signed)

NOTICE OF INTENT TO
APPROPRIATE WATER

PIERRE, SOUTH DAKOTA,
February 25, 1975
Notice is hereby given
that Roy Bushby, whose
post office address is
Hecla, South Dakota, has
made an application in
accordance with the
provisions of the water
laws of South Dakota
for a permit to appro-
priate for beneficial
use 4.5 cubic feet of
water per second of
time from ground water
through the Bushby Ir-
rigation Project, the
point of diversion of
which is to be located
in the center of the
J-2 and near the W-2 Cor-
ner of Section 25, Twp
128N, Range 61W. Said
water to be used for
the purpose of provid-
ing irrigation on the
following described
land: W-1/2 Section 25,
T128N, R61W. This application No.
2173-3 will be consid-
ered by the Water Rights
Commission at its of-
fice at Pierre upon the
19th day of March, 1975,
at 2:30 PM.

All interested per-
sons may appear and be
heard.
WATER RIGHTS COMMISSION
on F. Jones, Water

No. 2173-3



Date March 12 1975

TO: Water Rights Commission
State Office Building No. 2
Pierre, South Dakota 57501
STATE WATER RIGHTS COMM.
PIERRE, SOUTH DAKOTA

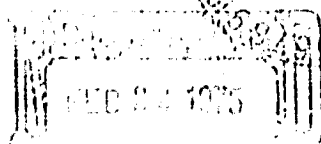
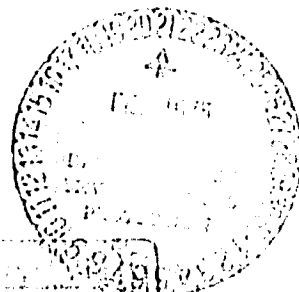
Dear Sirs:

We are in receipt of your letter of Feb 25 1975 enclosing Notice of Proposed
Appropriation of Water, as proposed in Application No. 2173-3 which was first published in our issue of
March 5 1975
Enclosed is a copy of this first publication.

Sincerely,

Ruth E. Smith

February 19, 1975



Mr. Roy Bushby
Hecla, SD 57446

Dear Mr. Bushby:

Enclosed please find the report of analysis of sample #75-055 which is now completed and represents your well in Sec 25 T128N R61W.

This water has the quality of being moderately high in total salt but low in sodium as indicated by an electrical conductivity of 927 and a sodium adsorption ratio of only 1.65.

On the sandy loam soils (Valentine loamy very fine sand according to the 1925 Brown County Survey) there should be no difficulty with salt accumulation. Thus I am recommending that you be issued a water use permit and I wish you success in your irrigation venture.

A copy of this letter and the WI-1 form and a copy of the water analysis are being forwarded to the State Conservation Commission.

There is enclosed for your use Extension Circular 654 which gives some of the interactions of soil and water as pertain to irrigation and you will find on the outside back cover of that circular an encircled red cross which indicates the approximate quality of your water for irrigation purposes.

Sincerely yours,

L. O. Fine

L. O. Fine
Water Quality Lab

LOP:MRB

Enclosures

cc: State Conservation Commission
Mr. Marvin DeHoogh, Brown County Agent
Darrel Pahl

STATE CONSERVATION COMMISSION
SUPPORTING INFORMATION
FOR APPROPRIATION OF GROUND WATER IN ACCORDANCE
WITH SDCL 46-6-3 AS AMENDED
(This Form Required for Proposed Well Irrigation Only)

FOR COMMISSION USE OF:
Irrigation System: _____
Water Quality: _____
Soils Capability: _____
Approved: M. S. Dittus
Disapproved: _____

NAME: Roy B. Ashby

ADDRESS: Neola, Mo. 64646

COUNTY: Brown

LEGAL DESCRIPTION

1. WELL LOCATION: near section - 1/2 - 25-128-61
2. AREA TO BE IRRIGATED: W - 1/2 25-128-61

TYPE OF IRRIGATION

3. GRAVITY SPRINKLER (Indicate Type): center pivot
4. CROPS TO BE IRRIGATED: corn & alf.

LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE: 0-3 (gently undulating)
6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION: sandy, loamy
Very fine sandy loam - 1925 survey - 2.0 fine

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NO.: 75-055
8. SALINITY: EC = 927 micromhos/cm (med-high)
9. SODIUM: Sodium Adsorption Ratio = 1.65 (low)

I do hereby certify that a chemical analysis of the ground water to be acquired for irrigation from South Dakota State University and:

the land capability for irrigation information has been acquired from

Center W-1, -25-128-61

and:

that the legal description for the location of the well and land to be irrigated is true and correct.

Ray Beckley

Subscribed and sworn before me this

4th day of Feb. 1975.

L. M. Elsen

L. M. ELSEN
Notary Public, BROWN COUNTY, S. DAK.
My Commission Expires JUNE 22, 1982

(Title)

REPORT OF ANALYSIS
Water Quality Laboratory
Water Resources Research Institute
South Dakota State University
Brookings, South Dakota 57006

Submitted by: Roy Bushby
 Address: Heola, SD 57446

Date Rec'd January 28, 1975
 Sample No. 75-055
 Identification Well -
NW 1, Sec. 25, T 128N, R 61W

WATER ANALYSIS

Calcium (Ca)	110	ppm*	5.50	me/l**
Magnesium (Mg)	28	ppm	2.30	me/l
Sodium (Na)	75	ppm	3.26	me/l
Potassium (K)	10	ppm	0.25	me/l
Sulfate (SO ₄)	112	ppm	2.33	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	22	ppm	0.62	me/l
Bicarbonate (HCO ₃)	444	ppm	7.28	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		me/l
Hardness (EDTA as CaCO ₃)		ppm		g.p.g.***
Alkalinity (Methyl Orange)	364	ppm (as CaCO ₃)		
Alkalinity (Penolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	927	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	1.65			
Sodium	28.82	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.25			
Others:				

*ppm=parts per million
 **me/l=milliequivalents per liter

***g.p.g.=grains per gallon

COMMENTS: Total cations 11.31 me/l
 Total anions 10.23 me/l

By: Shirley Litten

Service Performed	Amount Due
Irrigation analysis	\$6.00

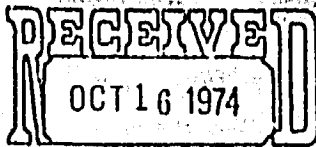
Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 75-055

Amount Enclosed \$

Signed



STATE WATER RIGHTS COMMISSION
PIERRE, SOUTH DAKOTA

Mr. Roy Bushby
Hocla, SD 57446

Dear Mr. Bushby:

Enclosed please find the report of analysis of the water sample submitted here about ten days ago. Also, you will find enclosed Extension Circular 654 with the approximate quality of your water designated by a red encircled cross on the back cover.

The water which you have is of high salinity and medium in sodium hazard. These two statements are based upon the electrical conductivity (1120) and the sodium adsorption ratio (6.32). However, there is an additional factor about this water which is not generally accepted or measured in most of the waters of the western United States. This is the residual sodium carbonate, which you will find on the bottom portion of the analysis report. The value for your water is 3.79 milliequivalents per liter. This means that when the water you pump becomes a part of the soil water, there are good chances that the carbonate and bicarbonate present are sufficient to precipitate all the calcium and magnesium and leave this such sodium carbonate in solution. This occurs because the solubility of sodium carbonate is very much higher than that of calcium and magnesium carbonate and this kind of precipitation results in the water which could be 100% sodium and very hazardous to soil structure.

There are very good chances then that this water could result in the dispersion of your soil and the loss of desirable physical characteristics such as a good intake rate and good friability and tilth. Whether or not it occurs depends upon how much water you use, whether there is sufficient rain now and then to cause some leaching and dilution of the sodium, and the type of management you put on the land. I notice that you intend to raise corn and no mention is made of alfalfa. This is a further reason for hesitation in the use of this water. If alfalfa and grass were part of your cropping plans, chances are that the land would maintain a good physical structure for a long time.

In soils of excellent drainage and medium to coarse texture (lots of sand), this water probably wouldn't cause any problem for a few years. The texture which is indicated on the WI-1 form, fine sandy loam, and which is indicated on the 1925 soil survey of Brown County shows it to be a fairly medium to coarse soil. However, the south end of this half section consists of about 15-20 acres of Haple soil, which is characteristically poorly drained and often has free salts within the four or five foot zone, that is, the top

Mr. Bushby
September 30, 1974
Page 2

four or five feet of the soil. Under these circumstances internal drainage is not good and the effect of the sodium added in this kind of irrigation water could be very serious. Regardless, I would say that the sodium hazard of this water is going to be evident earlier on the south portion of the half section than on the other portions, if you irrigate all portions alike.

If you decide to go ahead and if a water use permit is granted by the State Conservation Commission and the Water Resources Commission, you should be fully advised that the time may come within five or ten years when the soil structure will deteriorate to the point that you may have to add gypsum or take other corrective measures for this water. The use of gypsum on soils which have dispersed is a relatively untried thing in South Dakota. We are experimenting with it to a certain extent down in Spink County but the soils were not essentially dispersed at the surface at the time we started. There are some other soils in the vicinity of Heron and Hitchcock which have dispersed after using waters similar to this or slightly worse. Our experience to this point does not enable us to make a definitive statement as to how long a soil will hold up or whether there will ever be a real serious problem with this kind of water. I'm sorry this is the situation but I have indicated the present status of our knowledge and could be misleading you to claim that we know definitely one way or another.

Sincerely,

L. O. Fine

L. O. Fine
Water Quality Unit

LOF:111

Enclosures

CC: State Conservation Commission
Marvin DeMoore, Brown County Agent
Darrel Pahl

STATE CONSERVATION COMMISSION
SUPPORTING INFORMATION
FOR APPROPRIATION OF GROUND WATER IN ACCORDANCE
WITH SDCL 46-6-3 AS AMENDED
(This Form Required for Proposed Well Irrigation Only)

FOR COMMISSION USE ONLY

Irrigation System: _____

Water Quality: _____

Soils Capability: _____

Approved _____

Disapproved _____
10/15/14 *[Signature]*

NAME: ROY BUSHBY

ADDRESS: HECLA, SOUTH DAKOTA

COUNTY: BROWN

LEGAL DESCRIPTION

1. WELL LOCATION: WEST 1/2 SECTION 25-128-61

2. AREA TO BE IRRIGATED: 320 acres

TYPE OF IRRIGATION

3. GRAVITY _____ SPRINKLER (Indicate Type): CENTER PIVOT

4. CROPS TO BE IRRIGATED: CORN

LAND CAPABILITY FOR IRRIGATION

✓ 5. PERCENTAGE OF SLOPE: 0-8%

✓ 6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION: _____

FINE SANDY LOAM

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NO.: 74-789

8. SALINITY: Electrical Conductivity = 1128 micromhos/cm (high)

9. SODIUM: Sodium Adsorption Ratio = 6.32 (medium)
Residual Sodium Carbonate = 3.79 milliequivalents per L.
~~Sodium Bicarbonate = 0.14 milliequivalents per L.~~

I do hereby certify that a chemical analysis of the ground water to be
acquired for irrigation from South Dakota State University and:
the land capability for irrigation information has been acquired from

and:

that the legal description for the location of the well and land to be
irrigated is true and correct.

Roy Busby

Subscribed and sworn before me this

23 day of Sept 1978.

Mar Rasmussen

(Title)

MARVIN RASMUSSEN, Notary Public
Brown County, S. Dak.
My Commission Expires September 2, 1977

REPORT OF ANALYSIS
Water Quality Laboratory
Water Resources Research Institute
South Dakota State University
Brookings, South Dakota 57006

Submitted by: Roy Lushby
 Address: Hocla, SD 57446

Date Rec'd: September 19, 1974
 Sample No. 74-789
 Identification Well-
NW1, Sec. 25, T 128N, R 61W

WATER ANALYSIS

Calcium (Ca)	58	ppm*	2.90	me/l**
Magnesium (Mg)	14	ppm	1.15	me/l
Sodium (Na)	207	ppm	9.00	me/l
Potassium (K)	16	ppm	0.43	me/l
Sulfate (SO ₄)	86	ppm	1.79	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	96	ppm	2.67	me/l
Bicarbonate (HCO ₃)	478	ppm	7.84	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		me/l
Hardness (EDTA as CaCO ₃)		ppm		g.p.g.***
Alkalinity (Methyl Orange)	392	ppm (as CaCO ₃)		
Alkalinity (Penolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1128	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	6.32			
Sodium	66.76	% of cations		
Residual sodium carbonate	3.79	me/l		
pH	8.20			
Others:				

*ppm=parts per million

**me/l=milliequivalents per liter

***g.p.g.=grains per gallon

COMMENTS: Total cations 13.48 me/l
 Total anions 12.30 me/l

By: Shirley Hitter

Service Performed	Amount Due
Irrigation analysis	\$6.00

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 74-789

Amount Enclosed \$

Signed

THIS APPLICATION WAS
DISAPPROVED BY THE
STATE CONSERVATION COMM.
& DATA & CHECK
RETURNED TO APPLICANT

A handwritten signature or set of initials, possibly "S. J.", written in dark ink.

December 27, 1974

Mr. Roy Bushby
Hecle,
South Dakota 57446

Dear Mr. Bushby:

The Water Rights Commission has received your water right application to irrigate the W $\frac{1}{2}$, Section 25, T128N, R61W (316 acres) using ground water from wells 96' and 77' deep. Also received was a copy of your report of water analysis by the Water Resources Research Institute and a copy of Mr. Fine's letter to you regarding this water analysis.

Based on the water analysis and Mr. Fine's letter, your proposed irrigation was disapproved by the State Conservation Commission. (See copy of the enclosed Form WI-1.)

Under State law, SDCL 46-6-3, the Water Rights Commission cannot consider a water right application which contains the disapproval of the State Conservation Commission. Therefore, returned herewith is one copy of your application, the Water Right map and your check in the amount of \$8.00.

Sincerely,

DONALD DRISCOLL
Chief Engineer
WATER RIGHTS COMMISSION

DJ/DD/bw
Encl: As stated

Hecla, So. Dak.
March 17, 1975

Water Rights Comm.,
Benton F. Jones
Water Rights Specialists

Dear Sir:

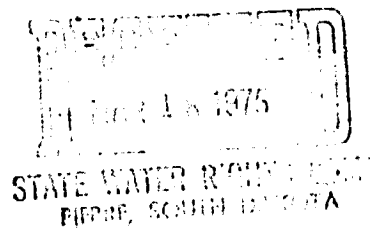
In regards to application #2125-3
by Roy Bushby.

I am concern of the reduction
of my water supply which is located
on SE 1/4-14-128-61. In the event
my supply is reduced I would want
the irrigation halted.

Sincerely

Stanley Scott
Hecla,

So. Dak. 57446



2173-3

August 4, 1980

Call from Ross Treeby (994-2308) of Hecla. Said his well on Permit 2504-3 was losing pressure and thought he was being interfered with by Roy Bushby's well on Permit 2984-3. Treeby thought his well was ~100 feet deep with the pump set at the top of a 12 foot screen.

August 5, 1980

Called Treeby and informed him that there was no way of telling who was interfering with whom without running a controlled pump test. It was suggested to him to work out an agreement with Bushby. Treeby asked the writer to talk to Bushby about such an agreement.

Called Roy Bushby (994-2144). He said that he has had his systems turned off periodically (2984-3, 2173-3, and 3147-3). The system for 2173-3 had been down for repairs from July 31 - August 4. He said that he would be willing to work things out with Treeby for the remainder of the irrigation season (both anticipated about 2 more weeks of pumping).

Treeby called to see what the situation was and informed this office that he would contact Bushby to arrange some kind of pumping schedule.

Jeanne Goodman
Water Resources Engineer

August 12, 1980

Stopped to visit with Roy Bushby of Hecla. He said that he and Ross Treeby had worked out an agreement to alternate pumping. Bushby waters one quarter on Permit No. 2984-3 and then Treeby waters his quarter under Permit No. 2504-3. Bushby told the writer that he has cut the pressure on the system under Permit No. 2173-3 from 80 psi to 60 psi. This arrangement is satisfactory to Bushby.

The writer also talked with Ross Treeby. Treeby is satisfied with this arrangement but is concerned with the possibility of such a situation occurring earlier in the growing season. The writer informed that a pump test should be run to determine the possible effects of the pumping of the production wells.

JEANNE GOODMAN

Water Rights Division - DWR
Conversation or File Documentation

2504-3
File No. 2173-3
2984-3

NAME OF PERSON OR FILE: S. Treeby

ADDRESS: Hecla COUNTY Brown

DATE: 31 July 84 TELEPHONE _____

RE: Complaint on water availability between 2504-3 & 2984-3

COMMENTS:

Received a complaint from S. Treeby. Complaint was that permit 2984-3 was taking needed water from Mr. Treeby's permit 2504-3. This has been an on going complaint between Mr. Busby and Mr. Treeby since 1977. The following is a listing of permit numbers, owner and priority for the area:

- | | | | |
|-----|--------|--------|------------|
| 1. | 2173-3 | Bushby | 02-24-1975 |
| 2. | 2504-3 | Treeby | 12-24-1975 |
| 3. | 2984-3 | Bushby | 08-16-1976 |
| 4. | 2990-3 | Treeby | 09-01-1976 |
| 5. | 3006-3 | Treeby | 09-03-1976 |
| 6. | 3043-3 | Treeby | 09-08-1976 |
| 7. | 3148-3 | Bushby | 09-29-1976 |
| 8. | 3147-3 | Bushby | 09-29-1976 |
| 9. | 3150-3 | Bushby | 09-29-1976 |
| 10. | 3121-3 | Treeby | 10-13-1976 |
| 11. | 2640-3 | Treeby | 12-09-1976 |

Six of the observation wells were updated and plotted to the 7-18-84 readings. These plots did not indicate a problem with water levels.

The problem is that the aquifer is only 10-15

File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

NAME: _____

Water Rights Division - DWR
Conversation or File Documentation

File No.

2504-3

2173-3

2984-3

NAME OF PERSON OR FILE: S. Treeby

ADDRESS: _____ COUNTY _____

DATE: _____ TELEPHONE _____

RE: _____

COMMENTS:

feet thick with 70 to 90 feet of head pressure.
Any withdrawals causes a fluctuation of the head.
Another problem is the apparent dislike that
Mr. Bushby and Mr. Treeby have for each other.
Mr. Treeby said he would call A.M. of 1 Aug 84 after
I had a chance to review water rights and observation
well records.

11:10 AM 1 Aug 1984

Mr. Treeby called. Explained priorities of the
permits again and explained water levels. Told
Mr. Treeby that either he and Mr. Bushby work
out a pumping schedule as they have in the past
or it would start shutting off permits by priority
until the problem was resolved. With the priorities
alternating between various permits between Mr. Bushby
and Mr. Treeby this would mean shutting off
most of their systems. Mr. Treeby said they would
try to work something out and that he was only
looking for information.

File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

NAME:

Sal N. Nelson

4/82

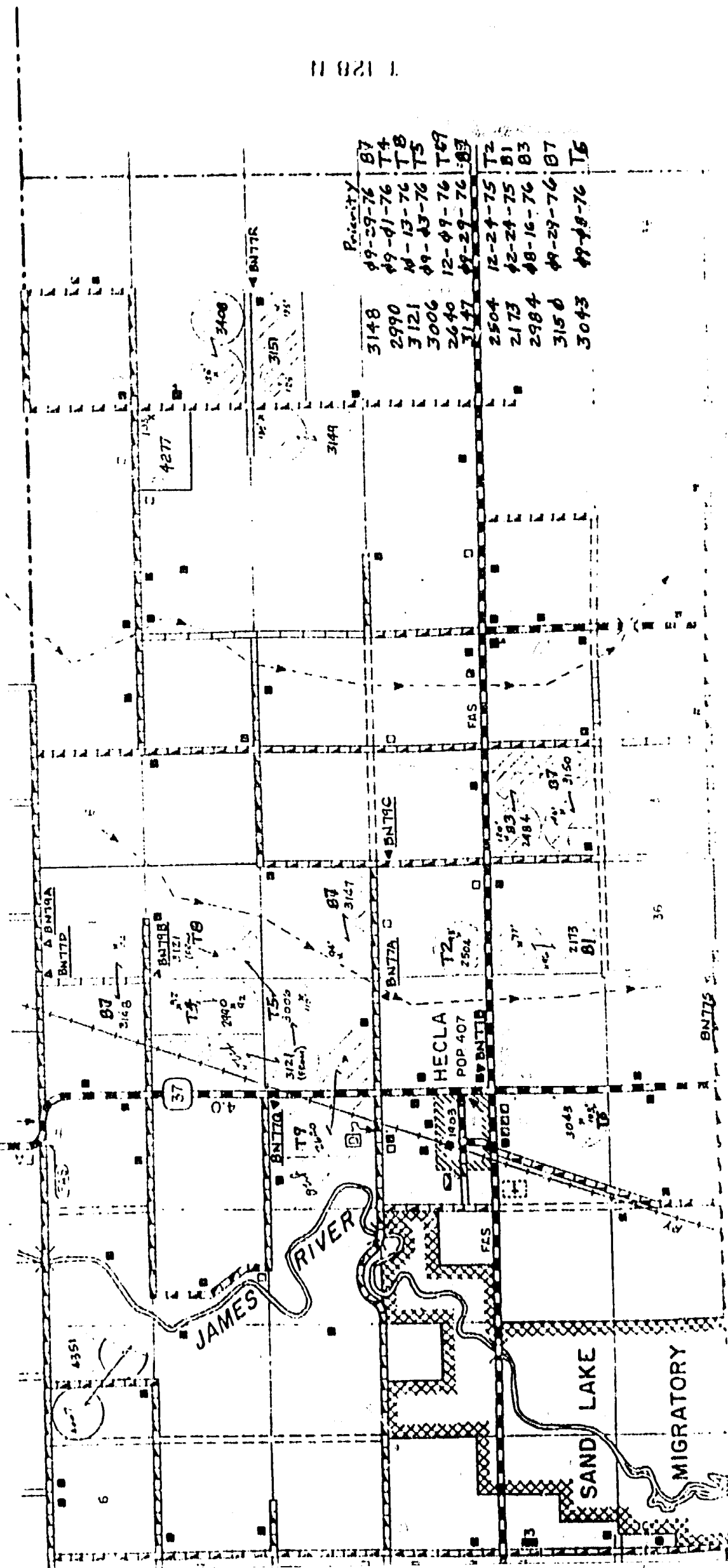
1 Aug 1984

page 2

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MR 61 W

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

MAR 24 1992

2173A-3

Roy Bushby
Box 6
Hecla, SD 57446

Dear Mr. Bushby:

Enclosed is Water License No. 2173A-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 412880 in the amount of \$50.00 which you paid for the inspection and issuance of the Water License.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 2173A-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

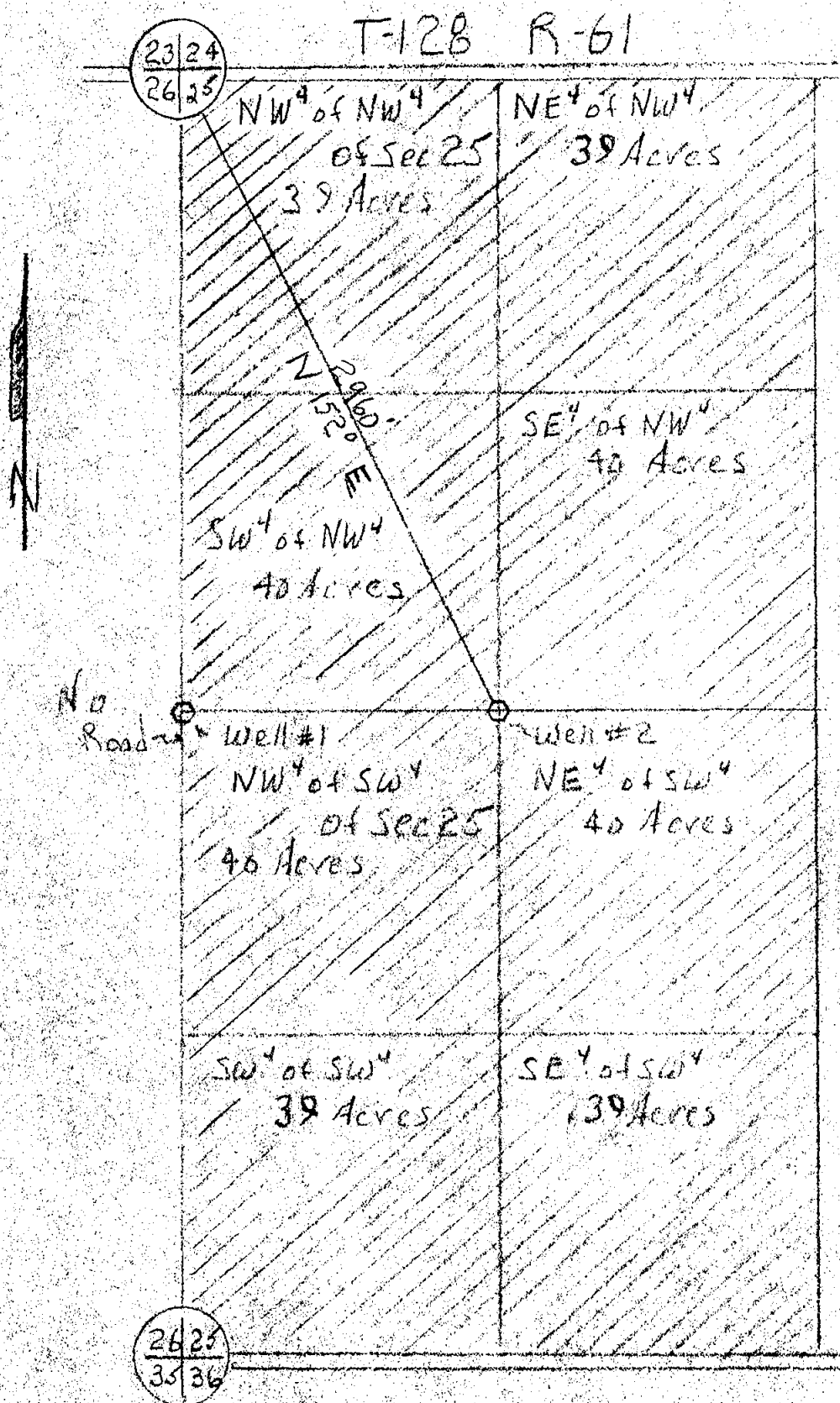
As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,


JOHN HATCH, Chief Engineer
Water Rights Division
(605) 773-3352

enclosures

NOTE: The applicable portions of Water Permit No. (2173-3) are incorporated into this Water License No. 2173A-3.



Cross hatch indicates
Irrigated area

Roy Bushby

IRRIGATION PROJECT # 1

Hecla, South Dakota Brown County

Land Description	Acres Irrigated
NW 1/4 of NW 1/4 Sec 25-128-61	39
NE 1/4 of NW 1/4	39
SW 1/4 of NW 1/4	40
SE 1/4 of NW 1/4	40
NW 1/4 of SW 1/4 Sec 25-128-61	40
NE 1/4 of SW 1/4	40
SW 1/4 of SW 1/4	39
SE 1/4 of SW 1/4	39

Total Acres 316

Point of Diversion - 2 Wells

Well #1 - 2640' N of SW corner

Well #2 - 2960' N 152° E of NW corner
of Sec. 25 - 128 - 61

Water Capacity 4.5 cfs

SURVEYOR'S Certificate

I, John L. Wiersma, do hereby certify that
this map identifies a reasonably accurate
record of the land of:

Roy Bushby

Hecla South Dakota

Brown County

Drawn by J.L.W.

12-9-74

John L. Wiersma

P.E. # 1916

Brookings S.D.

Scale - 8" = 1 Mile

MAP NO 25-3 (APPLN # 2173-3)