

1090-1

1. Considered MAY 20 1976

2. Name of Applicant MERNE JUDSON

3. Post Office Address DENVER, COLORADO

4. Amount of water claimed .63

5. Source of water supply LASSARDS DRAW

6. Water to be used for IRRIGATION

Acres to be irrigated 44.0

7. Water to be diverted and used in MEADE county
about 5N, 2W miles of NEW UNDERWOOD

8. Proof of Publication Received 4-30-76
Not Received _____

9. Application Approved 5-24-79
Subject to _____
Not Approved _____
Action deferred _____

10. Remarks:

No. 1090-1Map No. 902-1Water Division No. 1ELK CREEK

(Blanks to be Filled by the Engineer for the W. R. C.)



APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

(NOTE-Draw a line through items not applicable)

1. Name of Applicant Merne Judson
 Postoffice address 2722 S. Zenobia St. Denver, 19, Colo State 80236
 If a corporation show date and place of incorporation. No.
2. Method of accomplishing work (cost, employment of others, or by direct labor) employment of others
3. Name of diversion work Diversion Project
4. Amount of water claimed (cubic feet per second) 0.63 CFS
5. Source of water supply Lessard's Draw
6. Location of point of diversion 400' S 67° E of NW Cor. Sec. 24, T 3 N, R 10 E, BHM.

County Meade

7. Annual period or periods during which water is to be used April 1st to November 1st
8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Irrigation
9. For irrigation use, Sec. 24, T3N, R10E Total number of acres to be irrigated 44

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

Land Description	No. Acres Irr.	Land Description	No. Acres Irr.
<u>NW1/4</u>	<u>16</u>	<u>SW1/4</u>	<u>3</u>
<u>NE1/4</u>	<u>2</u>		
<u>SW1/4</u>	<u>3</u>		
<u>SE1/4</u>	<u>20</u>		

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 5 years. Additional time required to complete application of water to the proposed beneficial use 8-1 years.
11. Choice of newspaper for Notice of Intent to Appropriate Water publication Sturgis Tribune
12. Principal Features of the Proposed Water Supply System.

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

Diversion Dike

B. Works proposed to transport water to place of use

Diversion Ditch

C. Works proposed to apply water to beneficial use.

Spreader DitchesEstimated Total Cost \$ 3,000.

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

STATE OF Colorado SOUTH DAKOTACounty of Jefferson

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

Subscribed and sworn to before me this 24

day of

February, 1976

Notary Public (or other qualified officer)

My Commission expires Sept. 9, 1979

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 1090-1
MERNE HUDSON 2722 S. ZENOBIA ST., DENVER,
 (Applicant) (Post Office Address)
COLORADO 80236 With the following modifications:
 (State)

76

Date of first receipt of application MARCH 9 19 79
 Date of return to applicant for correction, amendments or changes required _____ 19 ____
 Date of receipt of corrected application _____ 19 ____
 Approved MAY 24 19 79, Recorded in Book 20 Page 316

WATER RIGHT PERMIT NO. 1090-1

The Water Rights Commission hereby grants and issues this Water Right Permit No. 1090-1 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 MARCH 9 19 79 to correct error when written up
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 29 19 81
3. The whole of said work is to be completed on or before MAY 24 19 84
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 24 19 88
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 .63 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 " 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 MAY 24 19 88; said water to be used during the following described annual period: APRIL 1ST - NOVEMBER 1ST

Witness my hand this 31 ST day of MAY 19 79

WATER RIGHTS COMMISSION

By:

John H. Hetch
 Chief Engineer, Executive Officer

Certificate of Construction Issued _____ 19 ____
 Water License Issued _____ 19 ____

Form 6 - Notice of Intent to Appropriate Water

1090-1

Publish first publication, on or before May 6, 1978

**NOTICE
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

April 6, 1978

Merne Judson

Notice is hereby given that

whose post office address is Denver, Colorado, ~~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

.63 cubic feet of water per second of time from the Lessard's Draw through the Judson Diversion Project, the point of diversion of which is to be located in the

NW 1/4 NW 1

of Section 24, Twp. 3N, Range 10E. Said water to be used for the purpose of providing irrigation on ^{portions of} the following described land:

NW 1/4 and SW 1/4 NE 1/4, Section 24, T3N, R10E

This application No. 1090-1 will be considered by the Water Rights Commission at their office at Pierre upon the 20th day of May, 1978, at 1:00 P. M. All interested persons may appear and be heard.

WATER RIGHTS COMMISSION

By:

BURTON F. JONES
Water Rights Specialist

BFJ/bw
cc:

Merne Judson, 2722 S. Zenobia St., Denver, Colo. 80236

ELK Creek



Department of Natural Resource Development

WATER RIGHTS COMMISSION

Joe Foss Building, Pierre, South Dakota 57501
Phone 605/773-3151

May 9, 1979

TO: Persons Interested in Water Appropriations in the Elk Creek Drainage Area

FROM: John Hatch, Chief Engineer, Water Rights Commission

SUBJECT: Reconsideration of Deferred Applications, Cancellation Considerations, and Report on Elk Creek Area Studies

The Water Rights Commission will reconsider deferred water right applications in Meade County, Elk Creek Drainage Area, consider cancellation of water rights not being put to beneficial use due to abandonment or forfeiture, and report on the studies thusfar conducted on the Elk Creek drainage at 3:00 p.m. on May 24, 1979 at the Lincoln Room, Howard Johnson Motel, 2211 Lacrosse, Rapid City, South Dakota.

This hearing will be conducted in accordance with the provisions of SDCL 46-1-1 thru 46-1-10; 46-1-14; 46-2-9 thru 46-2-11; 46-2-13; 46-5-1 thru 46-5-8; 46-5-10 thru 46-5-22; 46-5-36 thru 46-5-37; 46-5-41; and Commission Rules ARSD 52:01:01:01 thru 52:01:01:13.

Those applications which were previously deferred by the Water Rights Commission can be approved, conditionally approved, deferred, or denied.

Those Water Rights to be considered by the Water Rights Commission for cancellation are advertised in the Sturgis Tribune. The Commission will make a decision on the water right as to abandonment or forfeiture for nonuse based on the testimony presented at this hearing. These water rights will then be cancelled or retained for additional investigation. In order to properly manage and regulate the waters in the Elk Creek area, the Water Rights Commission must have a record of all existing water appropriations, have them quantified, and limit the appropriations for the purposes for which they are intended. This, in effect, will integrate valid claims of appropriation into the state system for the management of water rights, based on priority.

This hearing is an adversary proceeding. Any person 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 at the hearing. Decisions of the Commission may be appealed to the Courts as provided by law.

Very truly yours,

A handwritten signature in dark ink, appearing to read "John Hatch". The signature is written in a cursive, flowing style.

JOHN HATCH, Chief Engineer
Water Rights Commission

JH:kjw

1090-1

EVALUATION OF THE STATUS OF WATER RIGHTS IN THE ELK CREEK DRAINAGE BASIN
IN MEADE COUNTY, SOUTH DAKOTA
APRIL, 1979

The Elk Creek Drainage Basin consists of 622 square miles and is a tributary of the Cheyenne River. The drainage extends from the Black Hills north of Rapid City in an easterly direction to the Cheyenne River. The major problem in the Elk Creek Basin is the great fluctuations of surface flows. Conflicts have arisen between the domestic users and irrigators during periods of short water supply.

In order to properly manage and regulate the waters in the Elk Creek area, the Water Rights Commission must have a record of all existing water appropriations, have them quantified, and limit the appropriations for the purposes for which they are intended. This in effect will integrate valid claims of appropriation into the state system for the management of water rights, based on priority of appropriation.

To determine water availability on Elk Creek, this office and U.S. Geological Survey entered into a cooperative agreement to acquire additional information on the flows of Elk Creek. A gaging station was established in the Fall of 1978 northeast of Rapid City. This station is to be monitored continuously along with the station located near Elm Springs. In addition, manual observations of flow readings will be conducted by the U.S. Geological Survey beginning in the spring of 1979 on a two-week basis at selected locations between two gaging stations. This information will be helpful in the future in determining the flows available for appropriation and in the management of water use on the stream.

The next step is to figure out actual appropriations and claims for the utilization of these waters. In the Elk Creek area, the State must deal with water right locations dating prior to 1907 as well as those established since the 1907 water law. In cases where an individual has made use of such water rights on a continuous basis since before the 1955 water law, he would be considered as having a "vested right".

In most cases, water rights established prior to the 1955 water law in the Elk Creek basin have been abandoned. Floods have destroyed the major diversion works and the ditches were not maintained. Over the years, these formerly irrigated lands went back to dry land farming and ranching operations. Those individuals who continued to irrigate made filings of "vested rights" and established current records with the Water Rights Commission retaining their original priority dates or made new applications for the appropriation of water.

In the investigations conducted of the water rights on Elk Creek, in order to determine the validity of a water right several items were considered such as:

- (1) The presence of a structure for the diversion of water from its natural source,
- (2) The works available to transport water to the place of use,
- (3) The presence of a system to apply the water to beneficial use, and
- (4) Talking to the landowner living in the area that had knowledge of its past history and usage.

From the studies thus far conducted on Elk Creek, it has been found that the water rights listed on the "Notice of Intent to Cancel Water Rights" have been abandoned or forfeited for nonuse. The Water Rights Commission should discuss them individually and make reasons known for either cancelling the water right or declaring the water right abandoned.

DISCUSSION ON ACTIONS RECOMMENDED TO THE WATER RIGHTS COMMISSION

According to the "Rules of the Water Rights Commission" Section 52:01:01:34, "As a part of its regular duties in the administration of water rights and water usage, The Commission may cancel a water right which has become invalid and cause a record of such cancellation to be filed in the water right record." Section 52:01:01:35 states that an invalid water right is a water right under which:

- (1) The necessary works were not constructed or the water put to beneficial use within the time limits specified in SDCL 46-5-21;
- (2) There has been abandonment of the use of water as specified in SDCL 46-5-37;
- (3) There has been a forfeiture for nonuse of water as specified in SDCL 46-5-37.

These Water Rights which are being considered for cancellation have been advertised in the Sturgis Tribune as required by the "Rules" of the Commission for two consecutive weeks and notices were sent to individuals who are known to have an interest in the water rights and/or the studies which have been thusfar conducted on the Elk Creek Basin in Meade County.

After this hearing, notices of cancellation must be sent to the holder of the cancelled water right and in cases where the water right holder is not known; the notice of cancellation must be published once a week for two consecutive weeks in the same newspaper in which the notice for the cancellation hearing was published.

RECOMMENDATION ON ELK CREEK

On Elk Creek, the staff recommends that the Water Rights Commission withdraw Elk Creek from further appropriation for a period of three years to allow time to acquire additional information on the flows. This information is being acquired by the U.S. Geological Survey with the newly established gauging station and the biweekly readings that are being taken at the three other selected locations.

DISCUSSION ON DEFERRED APPLICATIONS IN THE ELK CREEK WATERSHED

Application No. 1069-1 for Clair D. Hagan requests an appropriation of 7.06 cfs from Morris Creek to irrigate 494 acres. Mr. Hagan plans on using a Big Gun type system which would use approximately a maximum of 700 gpm or 1.56 cfs. The location of the application is in a spring area which feeds Morris Creek during the summer season. This creek is one of the major tributaries to Elk Creek and is utilized by downstream domestic use and livestock watering and existing water rights. There is very little information available concerning the flows of Morris Creek.

It is recommended by the Staff that Morris Creek, being a major tributary to Elk Creek and because of the limited data on the flows, be withdrawn from further appropriation for a period of three years to

allow time to acquire additional flow data. No action is required on Application No. 1059-1, this can be retained in deferred status. The application priority date will be retained if additional information indicates that waters are available for appropriation after this three year period.

Application No. 1088-1 for Don Brassfield requests an appropriation of 2.0 cfs to irrigate 140 acres from a dry draw known as the Brassfield Draw. There is a proposed storage of 90 acre feet on the draw. This is a dry draw hydrologic unit of Elk Creek with runoff usually occurring in the early spring and during high intensity rainfall periods in the summer. Runoff will usually occur in the early spring when flows are available in Elk Creek. The base flows of Elk Creek will not be affected significantly by this proposed project. The Staff recommends approval of Application No. 1088-1 as requested with the following qualification:

Low flows as needed for downstream domestic use, including livestock watering must be by-passed.

Application No. 1089-1 for Darrell Hackens requests an appropriation of 3.26 cfs of the waters of a dry draw to irrigate 228 acres. A small storage dam with a capacity of 25 acre feet is included on the application. This draw known as Hackens Draw is a tributary to Elk Creek however the contribution of flows to Elk Creek would be in the early spring when flows are available in Elk Creek. The proposal consists of a ditch and dike system which would spread the water over the lands to increase the production of the grasses. It is recommended that this permit be approved as requested by the application with the following qualification:

Low flows as needed for downstream domestic use, including livestock watering must be by-passed.

Application No. 1090-1 for Kerne Judson requests an appropriation of 0.63 cfs of the waters of Lessard's Draw to irrigate 44 acres of grass lands. This is a dry draw which is a tributary to Elk Creek. The proposal consists of diversion dikes and ditches for the spreading of waters during times of runoff. As the water flows down the draw the water will spread over the lands then back into the channel of the draw. There will be no storage of water. The Staff recommends that this application be approved as requested. No qualification required.

James W. Winterton
JAMES WINTERTON, Water Resources Engineer
Water Rights Commission

STATE OF SOUTH DAKOTA)
COUNTY OF HUGHES) ss

Swore to, before me, this 23rd day of May 1977.

Lois L. Ries
Notary Public

LOIS L. RIES, Notary Public
My Commission Expires
February 2, 1982

SOUTH DAKOTA

Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Division of Water Rights
605 773-3352

No. 1090-1

January 4, 1985

Merle Judson
2722 S Zenobia St
Denver CO 80236

Dear Mr. Judson:

The inspection of your water use system and inspection of the extent of the application of water to beneficial use, as developed under your Water Right No. 1090-1 has been completed. Your final water right document, the Water License, can now be issued.

Statutes require that we charge a \$50.00 fee for the inspection and issuing of the Water License. Upon receipt of the \$50.00 fee from you, your Water License will be sent to you.

South Dakota Water Law 46-5-30.1 requires that a permit holder may not divert water until this \$50.00 license fee has been paid. Please contact us if you have any questions.

Sincerely,

KAREN SCHLAACK
Administrative Aide

NOTE: On form of payment, please include the number of the water permit.
This insures proper handling of the fee.

DWNR-814 8/83

LICENSE FOR PERMIT NUMBER 1070-1

1. Legal location of wells: _____

dams & structures: _____

2. Well Information: Well Drilling Firm _____

No. of wells _____ Depth _____

Casing a) diameter _____ Screen a) type _____

b) length _____ b) length _____

c) type _____ Static Water Level _____

Pump a) make _____ Motor a) make _____

b) model _____ b) model no. _____

c) size _____ c) horsepower rating _____

d) capacity _____ GPM d) motor efficiency rating _____

e) turbine pump _____

no. of stages _____

3. Distribution lines: Diversion dike

a) size of lines 12 ft wide

b) type earth

c) length 60 ft

10 in. culvert in dike

4. Dam information:

a) height to crest _____

b) height to spillway _____

c) crest width _____

d) crest length _____

e) spillway length _____

f) spillway width _____

g) approx. storage _____

h) Distribution lines or canals:

1) size 2 to 3 ft deep

2) type earth

3) length 2250 ft

i) Outlet tubes:

1) diameter _____

2) type _____

3) valued (Y/N) _____

4) valve type _____

5) location on structure _____

5. System Type: a) sideroll:

1) length _____ feet

2) diameter of pipe _____

3) make, model & number of sprinklers _____

4) spacing of sprinklers _____

5) nozzle size _____

b) towline:

1) length _____ feet

2) make, model & number of sprinklers _____

3) spacing of sprinklers _____

4) nozzle size _____

5. System Type: c) center pivot

- 1) make _____
- 2) number of towers _____
- 3) distance between towers _____
- 4) overail length _____
- 5) End gun (Y/N) _____
- 6) high or low pressure _____
- 7) make & size of nozzles _____
- 8) PSI reading while system is running _____
- 9) GPM _____

g) Gun

- 1) make _____
- 2) serial number _____
- 3) nozzle size _____
- 4) capacity (GPM) _____
- 5) PSI _____
- 6) hose size _____
- 7) hose length _____

d) Gate Pipe

- 1) length _____
- 2) diameter _____
- 3) spacing of gates _____

e) Siphons

- 1) number _____
- 2) size _____

f) Portable broom

- 1) make _____
- 2) serial number _____
- 3) nozzle size _____
- 4) capacity (GPM) _____
- 5) PSI _____

h) Hydromatic

- 1) make _____
- 2) model _____
- 3) serial number _____
- 4) length _____
- 5) nozzle size _____
- 6) spacing _____
- 7) PSI _____
- 8) capacity (GPM) _____

YES

NO

Check Items

✓

1. Soil and water permit lands agree with lands being irrigated and lands listed on permit.

✓

2. Special Qualifications to permit being abided by.

✓

3. All Structures, wells and lands on map.

REMARKS:

Permit No. 1090-1Upper Cheyenne Water District**Report Of Examination Of Works And/Or Application Of Water To Beneficial Use**

To: Chief Engineer, Division of Water Rights, DWRN, Foss Bldg., Pierre, SD 57501

I have this day made a thorough examination of the water use system constructed by Merne Judson
 of 2722 S. Zenobia St. Denver, Co. 80236 holder of
 Permit No. 1090-1, bearing the priority of March 9 19 76 authorizing
 the diversion of .63 cu. ft. per second of the waters of Lessard's Draw
 for irrigation purposes in Meade County.

I have to report on the conditions of the same as follows:

- A. Works used to divert the water: Waterspreading system: Diversion dike -
 size 12 ft wide
 type earth
 length 60 ft
10 in. culvert in dike
- B. Works used to transport water to place of use:
- C. Works used to apply water to beneficial use: Ditches -
 size 2 to 3 ft. deep
 type earth
 length 2250 ft.

The system is in the following condition FairThe point of diversion is located Lessard's Draw: 820 ft S and 660 ft E. from
NW corner of sec 24 - T3N - R10EThe works are capable of diverting and conveying to the place of use .22
 cu. ft. per second of water which is to be used for irrigation

Water has been put to beneficial use to the maximum extent as follows:

<u>NW 1/4 NW 1/4</u>	<u>sec 24 - T3N - R10E</u>	<u>10.8</u>
<u>NE 1/4 NW 1/4</u>	<u>"</u>	<u>1.0</u>
<u>SW 1/4 NW 1/4</u>	<u>"</u>	<u>2.8</u>
<u>SE 1/4 NW 1/4</u>	<u>"</u>	<u>1.0</u>

comprising a total of 15.6 acres of land and the license should be issued for .22 cfsApplicable permit qualifications have been complied with ☒ Yes ☐ NoExceptions to compliance are: _____ Date May 23, 1984

Ron Davall
 (signature)

State of South Dakota
Water License No. 1090-1

(1) Merne Judson
of 2722 S. Zenobia Street, Denver, Colorado 80236
made Application No. 1090-1, March 9, 1976 for a water permit to appropriate
0.63 cubic feet per second of water from Lessard's Draw
Meade County, South Dakota for Irrigation purposes.
Permit No. 1090-1, with a priority date of March 9, 1976
was approved May 24, 1979 and issued to applicant(s) for diversion of water with construction of the described
water supply system to be completed on or before May 24, 1984 and for the application to beneficial use of said
water on or before May 24, 1988.

and

(2) It is certified that the application has complied with the provisions of South Dakota State Law relating to completion of
the construction of the water supply system and is entitled to divert 0.22 cubic feet per second of water
for beneficial use. The location of the diversion point(s) is on Lessard's Draw: 820 feet S and
660 feet E from the NW Corner Section 24, T3N, R10E (BB)

and

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to the following extent, to irrigate the following land all in T3N, R10E

Section 24 NW $\frac{1}{4}$ NW $\frac{1}{4}$ 10.8 Acres (BB)

NE $\frac{1}{4}$ NW $\frac{1}{4}$ 1.0 Acre (BA)

SW $\frac{1}{4}$ NW $\frac{1}{4}$ 2.8 Acres (BC)

SE $\frac{1}{4}$ NW $\frac{1}{4}$ 1.0 Acres (BD)

TOTAL 15.6 ACRES

(4) Pursuant to §46-5-30.1 Herne Judson

of 2722 South Zenobia Street, Denver, Colorado 80236

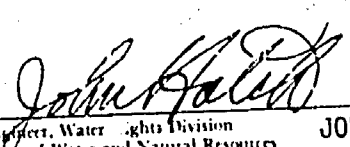
the holder(s) and/or owner(s) of Water Permit No. 1090-1 is issued a license to appropriate water, the right to use

0.22 cubic feet per second of water from Lessard's Draw with a priority date

of March 9, 1976 from the location specified in (2) of this license. The water to be

conducted to and upon lands specified in (3) of this license for the purpose of Irrigation

This license is subject to any limitations or qualifications listed in Water Permit No. 1090-1 and subject to South Dakota State Law.


Chief Engineer, Water Rights Division
Department of Water and Natural Resources

JOHN HATCH

January 23, 1985

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

No 4 9897

Pierre, January 17, 1935

RECEIVED OF Herne R. Judson, 2722 South Zenobia St., Denver, CO 80236

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. 1099-1	50	00
Fee for Filing Transfer Form _____		
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	50 00

By

Chief Engineer

JOHN HATCH (MS)

No. 1090-1

South Dakota
Department of
Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

WATER RIGHTS DIVISION
Phone (605) 773-3352

January 23, 1985

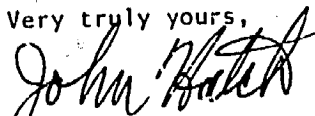
Merne R. Judson
272 1/2 South Zenobia Street
Denver, Colorado 80236

Dear Mr. Judson:

Enclosed herewith is, Water License No. 1090-1. This is the final water right document completing your process of obtaining a water right.

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.

Very truly yours,



JOHN HATCH, Chief Engineer
Water Rights Division

JH: ms

Enclosures

WNR-317 3/83
Transmittal of Water License

1090-1

NOT TO SCALE



Ron Duvall
Water Resources Eng.

W/R 1090-1