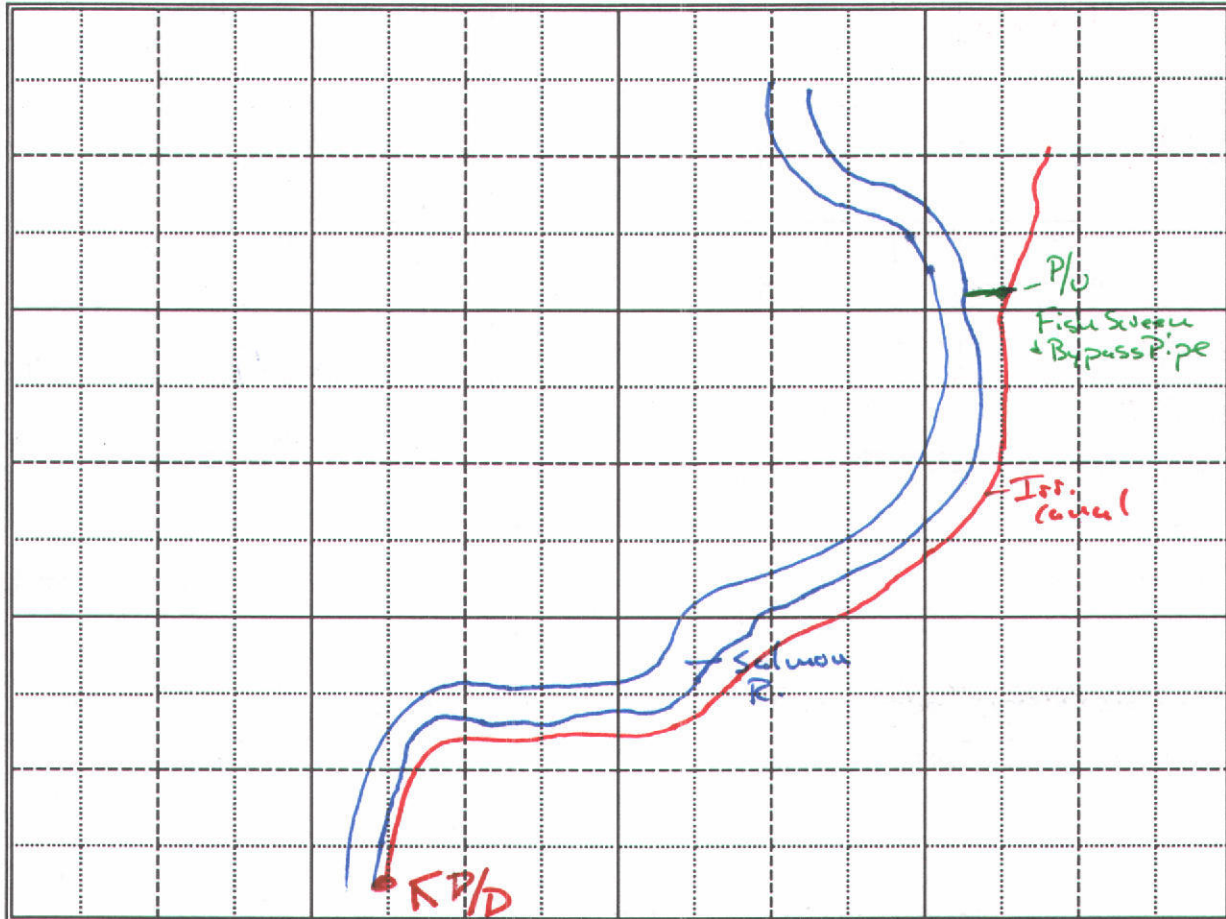


3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = _____

☒ Copy of USGS Quadrange Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

☐ Aerial Photo Attached (required for irrigation of 10+ acres)

☒ Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
n/a					

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Automatic Level	C3E	Sokkiso	Lietz 153284	10347		
Tripod & Survey Rod						

2. Measurements: Water Surface At Inlet = 8.11'
 " " At Catch Basin = 10.45'
 H = 2.34'

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AUG 15 1994

3172 IV NE
(BAYHORSE)

4923

4922

25'

T 13 N

T 12 N

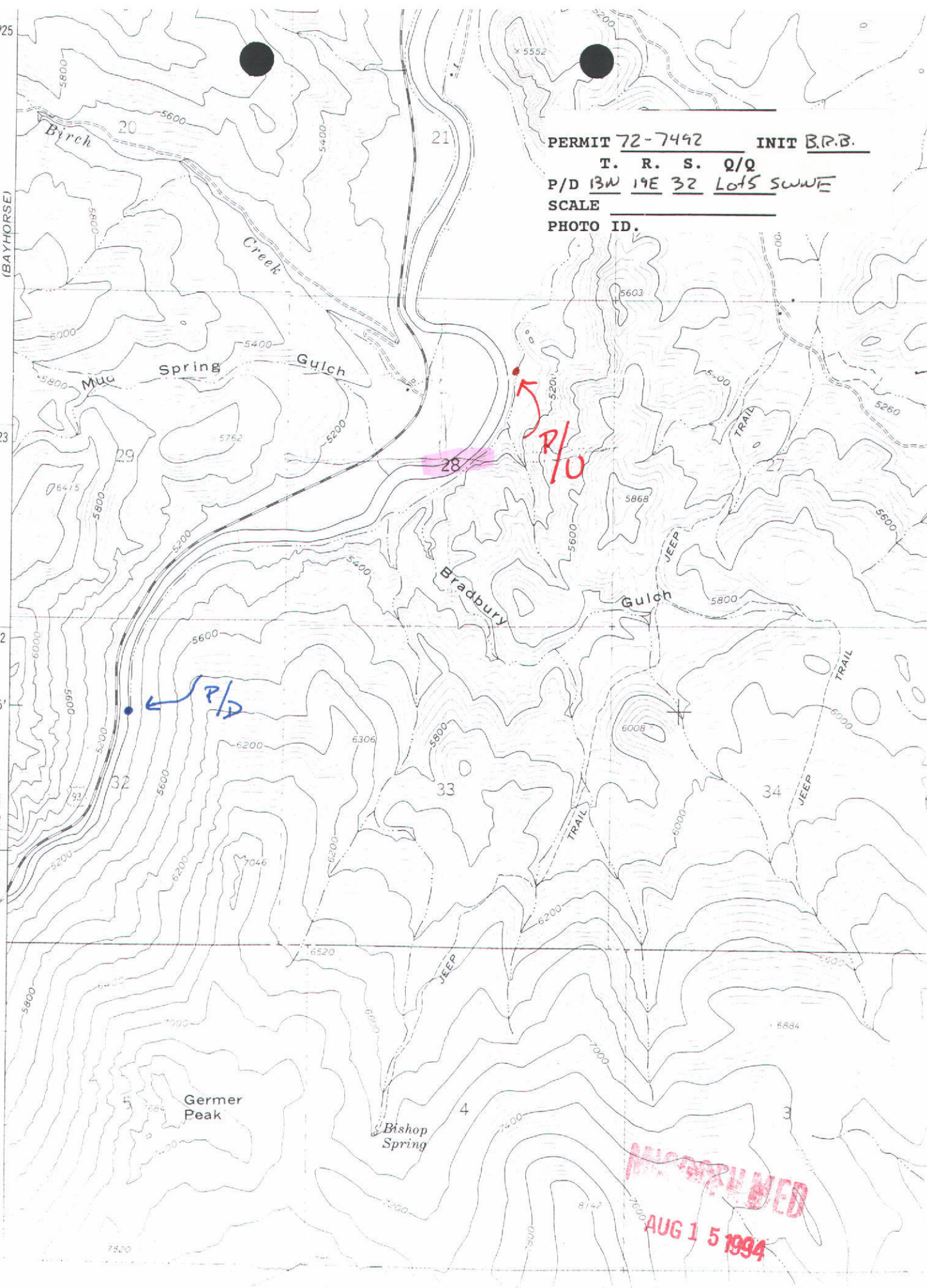
4920

4919

STANLEY 48 MI
CLAYTON 16 MI

72-7492

328 13N 19E



PERMIT 72-7492 INIT B.R.B.
T. R. S. Q/Q
P/D 13W 19E 32 Lots SWNE
SCALE _____
PHOTO ID. _____

RECEIVED
AUG 15 1994

P 72-7492

[illegible]

RECEIVED
AUG 15 1994

722-07492

These photos
were taken on
8-17-93.

A 12" concrete
pipe runs
from concrete
cabin base "see"
27' to 19 pipe
(cut in half, that
is used as a flume)
the flumes runs
107' to the Salween
R.

the outlet of
the pipe into
the flume was
not 100% full



Open
discharge
into
Salween
R.



MICROFILMED
AUG 15 1994

P72-07492

These photos
were taken on
8-17-93.



inlet
is
below
arrow

P/O

5 drum screen

P/O is

A 12" concrete pipe runs from inlet
to concrete catch
basin



the catch
basin is
used as
a fish
trap

The pipe from
inlet to catch
basin was
100% submerged
full at outlet

fish
trap

MIC

AUG 15 1994

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 72-07492

Priority: June 9, 1992

Maximum Diversion Rate:

0.80 CFS

This is to certify, that STATE OF IDAHO
DEPT OF FISH & GAME
PO BOX 25
BOISE ID 83707

has complied with the terms and conditions
of the permit, issued pursuant to Application for Permit dated June 9, 1992; and
has submitted Proof of Beneficial Use on January 13, 1993. An examination indicates
that the works have a diversion capacity of 5.120 cfs of water from:

SALMON RIVER

tributary to **SNAKE RIVER**

source, and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
FISH PROPAGATION	04/15 to 10/15	0.80 CFS	

LOCATION OF POINT(S) OF DIVERSION: Lot 5(SWNE), Sec. 32, Township 13N, Range 19E
CUSTER County

PLACE OF USE: FISH PROPAGATION

TWN RGE SEC

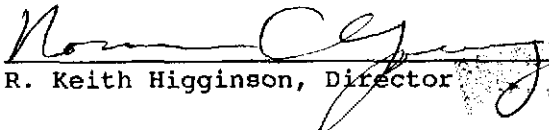
13N 19E 28 Lot 1(NWNE)

CONDITIONS/REMARKS:

1. This water right is appurtenant to the described place of use.
2. This right is subject to all prior water rights and may be forfeited by five years of non-use.
3. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
4. Use of water under this right shall be non-consumptive.
5. The issuance of this right in no way grants any right-of-way or easement across the land of another.
6. Fish propagation use is for fish protection through the installation of a deflecting screen at a diversion canal entrance and a bypass pipe to flush the fish back to the Salmon River.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code.
Witness the seal and signature of the Director, affixed at Boise, this 26th
day of JULY, 1994.

Acting for


R. Keith Higginson, Director

AUG 15 1994

OFFICE USE ONLY
Amt. of Fee \$ 100.00
Date 1-14-93
Receipt No. 0026514
Receipt by [Signature]

RECEIVED

JAN 13 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Department of Water Resources

PROOF OF BENEFICIAL USE

The Idaho Department of Water Resources considers this form a statement that the permit holder(s) has/have completed all development that will occur under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below. This form must be accompanied by a license examination fee, when necessary, or a completed field examination report prepared by a certified water right examiner who has been appointed by the department.

1. Permit No. 72-07492 Telephone No. (208) 334-3700
2. Name(s) of Permit Holder(s): Idaho Department of Fish and Game
3. Mailing Address: 600 S. Walnut, Boise, Idaho 83707
4. Source of Water: Salmon River, tributary of Snake River

If **GROUNDWATER**, Well Driller's Name: _____ Date Drilled: _____

OPTIONAL:

Pump horsepower: _____ Pressure (psi): _____ Dynamic pumping level (ft.): _____

5. Extent of Use (as authorized by the permit):

Domestic _____ (No. of households) Stockwater _____ (No. and type of stock)

Irrigation _____ (No. of acres) Other Fish Propagation

6. Total rate and/or volume for which proof is submitted 0.80 cfs OR _____ acre/feet

7. Refer to the approval conditions on your permit and respond accordingly:

Measuring device: Required? _____ Yes X No Installed? _____ Yes _____ No

OR

Flow Measurement Port: Required? _____ Yes X No Installed? _____ Yes _____ No

8. Fee Enclosed: \$ 100.00 (See License Fee Schedule on back of Instruction Sheet)

9. Person to contact to accompany the Department representative during field examination of the water system.

Jim Blake (208) 756-2271
Name Telephone No.

P.O. Box 1336, Highway 93 N, Salmon, Idaho 83467
Address

10. The above information is my true statement of the extent to which the above numbered permit has been developed and I relinquish any undeveloped portion of the permit to the state of Idaho.

FEB 05 1993

12-10-92 Jim Blake Const Supervisor D.D.F.H.
Date Signature (and title, if on behalf of a company or organization)

State of Idaho
Department of Water Resources

Permit To Appropriate Water

NO. 72-07492

Proposed Priority: June 9, 1992

Maximum Diversion Rate:

0.80 CFS

This is to certify, that **STATE OF IDAHO**
DEPT OF FISH & GAME
PO BOX 25
BOISE ID 83707

has applied for a permit to appropriate water from:

SALMON RIVER

tributary of **SNAKE RIVER**

and a permit is **APPROVED** for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
FISH PROPAGATION	03/15 to 11/15	0.80 CFS

LOCATION OF POINT(S) OF DIVERSION: Lot 5(SWNE), Sec. 32, Township 13N, Range 19E
CUSTER County

PLACE OF USE: FISH PROPAGATION
TWN RGE SEC

13N 19E 28 NWNE

CONDITIONS/REMARKS:

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before **October 1, 1993**.
2. Subject to all prior water rights.
3. Use of water under this right shall be non-consumptive.
4. The issuance of this right in no way grants any right-of-way or easement across the land of another.
5. Fish propagation use is for fish protection through the installation of a deflecting screen at a diversion canal entrance and a bypass pipe to flush the fish back to the Salmon River.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.
Witness the signature of the Director, affixed at Boise, this

28th day of September, 1992


R. Keith Higginson, Director

for

RECEIVED

DEC 10 1992

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

Ident. No. 72-7492

RECEIVED

JUN 15 1992

Department of Water Resources
Southeast Region Office

To appropriate the public waters of the State of Idaho

1. Name of applicant Idaho Department of Fish and Game Phone 334-3700

Post office address 600 S. Walnut, P.O. Box 25 Boise, ID. 83707

2. Source of water supply Salmon River which is a tributary of Snake River

3. Location of point of diversion is _____ 1/4 of SW 1/4 of NE 1/4, Govt. Lot 5

Sec. 32 Township 13N Range 19E B.M. Custer County; additional

points of diversion if any: _____

4. Water will be used for the following purposes:

Amount 0.8 for fish propagation purposes from 3/15 to 11/15 (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated is (a) 0.8 and/or (b) _____
cubic feet per second acre feet per annum

6. Proposed diverting works:

a. Description of ditches, flumes, pumps, headgates, etc. Concrete structure in irrigation ditch, screen and bypass pipe

b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet; period of year when water will be diverted to storage: _____ to _____ inclusive.

c. Proposed well diameter is _____ inches; proposed depth of well is _____ feet.

d. Is ground water with a temperature of greater than 90°F being sought? no

7. Time required for the completion of the works and application of the water to the proposed beneficial use is Screen was built in 1973 and has operated since that time
_____ years (minimum 1 year).

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DEC 10 1992

8. Description of proposed uses (if irrigation only, go to item 9):

- a. Hydropower; show total feet of head and proposed capacity in KW. _____
- b. Stockwatering; list number and kind of livestock. _____
- c. Municipal; show name of municipality. _____
- d. Domestic; show number of households. _____
- e. Other; describe fully. Fish propagation - screen prevents fish from entering irrigation ditch and bypass pipe returns fish and water to river

9. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
13N	19E	28		H															

Total number of acres to be irrigated _____

10. Describe any other water rights used for the same purposes as described above. none

11. a. Who owns the property at the point of diversion? Challis Irrigation Co.

b. Who owns the land to be irrigated or place of use? same

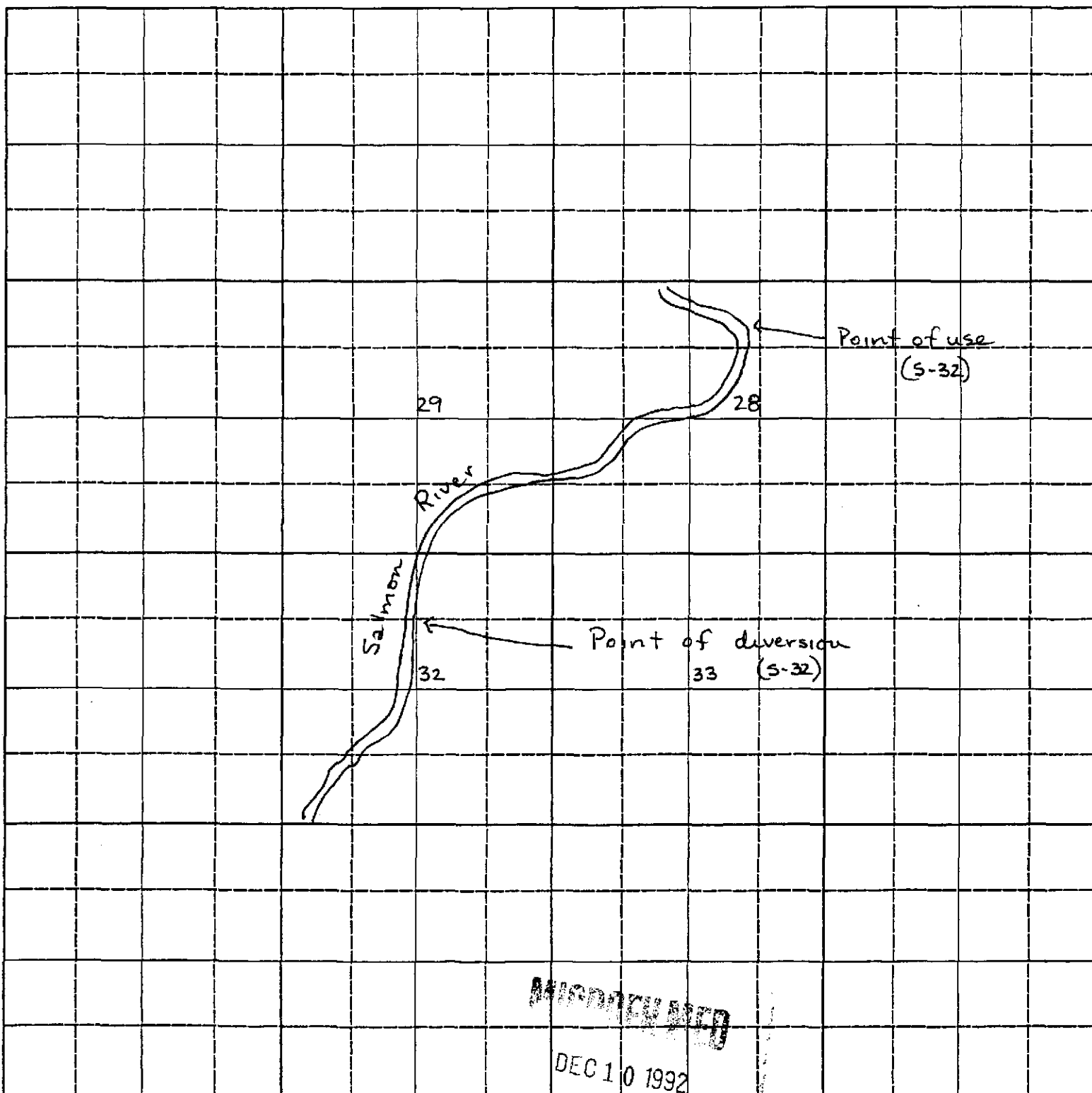
c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing. Easement agreement^{S-32} filed at Custer Co. courthouse on 8/10/62, pg. 542-544, Book 32. Ditch owners - Challis Irrigation Co.

12. Remarks: _____

RECORDED
DEC 10 1992

72-7492

13. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



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DEC 10 1992

Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Cynthia Robertson 10FG
(Applicant)

Received by SC Date 6/1/92 Time 2:30 Preliminary check by MTS
Fee \$ 4500 Received by SC # C024477 Date 6/10/92 for rec'd 6/9
Publication prepared by MB Date 7/6/92 Published in Challis Messenger
Publication approved M. Baldwin Date 8-24-92

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. _____, and said application is hereby _____.

1. Approval of said application is subject to the following limitations and conditions:

a. SUBJECT TO ALL PRIOR WATER RIGHTS.

b. Proof of construction of works and application of water to beneficial use shall be submitted on or before _____, 19 ____.

c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land.

d. The water right acquired under this permit if for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this permit and shall not give rise to any right or claim against any future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this permit.

e. Other:

RECEIVED

DEC 10 1992



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

July 28, 1994

STATE OF IDAHO
DEPT OF FISH & GAME
PO BOX 25
BOISE ID 83707

RE: WATER RIGHT NO. 72-07492

Dear Water Right Holder(s):

Enclosed herewith is a copy of the Water Right License issued on the above referenced permit. If you have any questions, please contact me within 10 days of receipt of this license.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Johnson', with a long horizontal line extending to the right.

JIM JOHNSON, Manager
Water Right Permits Section

JJ:dc

Enclosure

MAILED 11
AUG 15 1994

WR0749NP
No. L72-07492

IDAHO DEPARTMENT OF WATER RESOURCES
WATER RIGHT PROFILE REPORT

DATE: 06/21/94
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	STATE OF IDAHO DEPT OF FISH & GAME PO BOX 25 BOISE ID 83707 (208) 334-3700	06/09/1992	FISH PROPAGATION	04-15 10-15	0.80 CFS	
					TOTAL DIVERSION:	0.80 CFS

Water Source: SALMON RIVER

Tributary to: SNAKE RIVER

Stage: LICENSE

Point(s) of Diversion Capacity: 5.12 CFS

Point(s) of Diversion: T13N R19E S32 Lot 05(SWNE)

CUSTER County

Place of use Legal Description for: FISH PROPAGATION

NE				NW				SW				SE											
T	R	S	:	NENE	NWNE	SWNE	SENE	:	NENW	NWNW	SWNW	SENW	:	NESW	NWSW	SWSW	SESW	:	NESE	NWSE	SWSE	SESE	:
			:	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	:
13N	19E	28	:	01-F				:					:					:					:

Pou County: CUSTER

Conditions of Approval:

- 027 - Use of water under this right shall be non-consumptive.
- 004 - The issuance of this right in no way grants any right-of-way
- or easement across the land of another.

Remarks: Fish propagation use is for fish protection through the installation of a deflecting screen at a diversion canal entrance and a bypass pipe to flush the fish back to the Salmon River.
This right is subordinate to all existing water rights at the point of diversion.

Removed

Dates: App. Received: 06/09/1992 Priority Date: 06/09/1992
Proof Due Date: 10/01/1993 Proof Made Date: 01/13/1993
Exam Made Date: 08/17/1993 Exam Sent to S.O.: 06/16/1994
Licensed Date:

Misc: Water District Number: Field Exam Fee: R (Received)

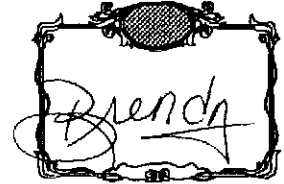
Comments: Date: 09/22/1992 User-ID: MILLER Subject: SCREEN NUMBER
The screen for this permit is number S-32.

Date: 09/22/1992 User-ID: MILLER Subject: MORATORIUM EXEMPTION
This permit falls within the acceptable parameters of the
Salmon-Clearwater Moratorium.

Audit: 06/21/94 BCHAPMAN 06/21/94 BCHAPMAN

LICENSE REVIEW CHECKLIST

PERMIT NO. 72-7492 DATE 10-21-94



NAME	Yes ☐ No ☒	Or Address Change?
PRIORITY DATE	Yes ☐ No ☒	Advance? ☐ Advanced to: _____ Order to reinstate needed? _____ Incorrect fee for rate recommended? _____
SOURCE	Yes ☐ No ☒	Changes or just clarification of originally intended source? _____ Notice of Intent to Void necessary? _____
POINT OF DIV	Yes ☐ No ☒	Amendment needed? _____ Overlaps? _____
PLACE OF USE	Yes ☐ No ☒	Amendment needed? <u>Add Gov Lot # 1</u> Overlaps? _____
DIV RATE	Yes ☐ No ☒	Measurement Q = <u>5.12</u> Theoretical Q = _____
Capacity: <u>5.12</u> Combined rates exceed capacity _____ Permit/fee limits: <u>.80</u> Allowable: <u>.80 CFS</u>		
ANNUAL VOLUME	Yes ☐ No ☒	Season of use: <u>CHANGE to 4-15 to 10-15</u> Calculations: _____
<i>Flow through only</i>		Flow limit: _____ cfs x _____ x 1.9835 = _____ Combined volumes exceed capacity/allowable _____
	USES	Yes ☐ No ☒
REMARKS	Yes ☒ No ☒	Multiple p/d(s) in 1/4 1/4? _____ Other <u>Subordination remark</u>
CONDITIONS	Yes ☐ No ☒	Measuring/Locking Devices _____ Watermaster control - District _____ Irrigation Overlap _____ Water Quality _____ Other _____
COMMENTS: <u>Adjusted season of use to current season of use for this area.</u>		

RECOMMENDED	CFS	VOLUME	LICENSE ☒
<u>Fish Prop</u>	<u>.80</u>	_____	
_____	_____	_____	1ST AMENDMENT LETTER _____
_____	_____	_____	FINAL AMENDMENT LETTER _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

JUN 17 1994

Department of Water Resources

A. GENERAL INFORMATION

Permit No. 72-07492

1. Owner: State of Idaho - Dept. of Fish & Game Phone No. 334-3700

Current Address: 600 S. Walnut, P.O. Box 25 Boise 83707

2. Accompanied by: Mel Schulte, IDWR EXAM DATE: 8-17-93

Address: _____ Phone No. _____

Relationship to Permit Holder: _____

3. Source: Salmon River tributary to Sawtooth River

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE

2. Other water rights with the same point of diversion: Challis Irrigation Co.

C. DIVERSION AND DELIVERY SYSTEM

R72-07264, R72-10324, R72-07076A+B,
R72-07052, R72-07264, R72-10325, R72-11740
A72-00034, A72-00035

1. Point(s) of Diversion:

Ident No.	Gov't Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
	5		SW	NE	32	13W	19E	Custer	USGS Topo, Inspection

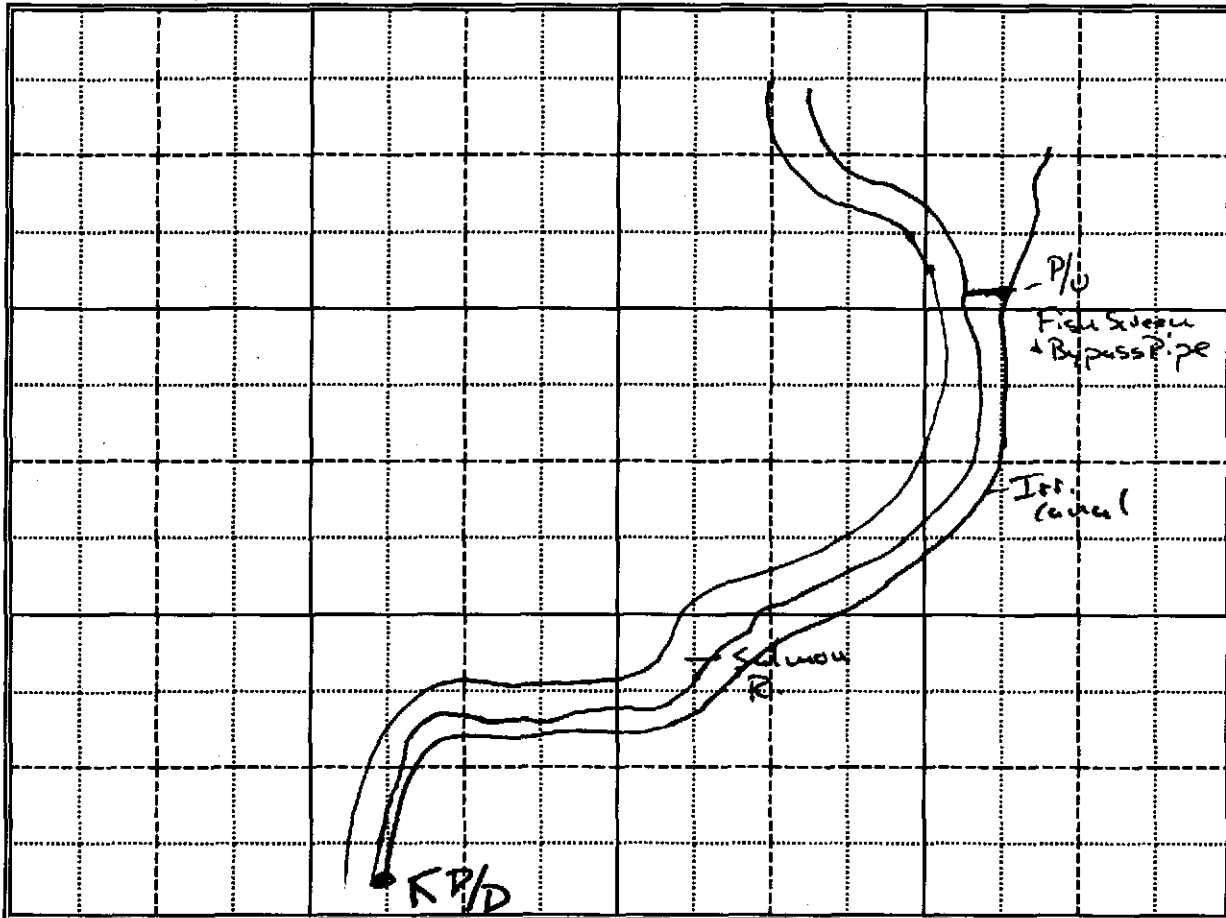
2. Place(s) of Use:

Indicate Method of Determination USGS Topo, Inspection

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
13W	19E	32		H															H
		28		41															

AUG 15 1994

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = _____

☒ Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

☐ Aerial Photo Attached (required for Irrigation of 10+ acres)

☒ Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A					

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Automatic Level	CSE	Sokkia	153284	10347		
Tripod & Survey Rod						

2. Measurements: Water Surface At Inlet = 8.11'
 " " At Catch Basin = 10.45'
 H = 2.34'

AUG 15 1994

E. NARRATIVE/REMARKS/COMMENTS

The bypass (12" concrete) pipe runs from inlet to a concrete catch basin (west 48'7"). The concrete catch basin is a 4'x8' structure that can contain a mobile fish trap if desired. A 12" concrete pipe continues from the end of the catch basin 27' to a flume. The flume is made out of a 14" steel pipe (cut in half). The flume runs west 107' to the Salmon River where water runs open discharge in the river.

The inlet can not be opened all the way or water will spill out around the flume at the inlet of the flume.

The head was measured from the inlet to the catch basin. A calculation was completed using a Manning's n coefficient based on concrete. The outlet was submerged at the catch basin.

The H₂O water level above the inlet was 3.1'.

The use of water shall be non-consumptive only.

This water right is subordinate to all existing water rights at the point of diversion.

Water returns to Salmon River in NWNE (L+1), 13N, 19E, S28

Have conditions of permit approval been met? ☒ yes ☐ no

AUG 15 1994

☒ Additional Computation Sheets Attached

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{\hspace{10em}}$$

$$V_{DB} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$$

2. Volume Calculations for Other Uses:

For Non-consumptive Use Only

1. Recommended Amounts

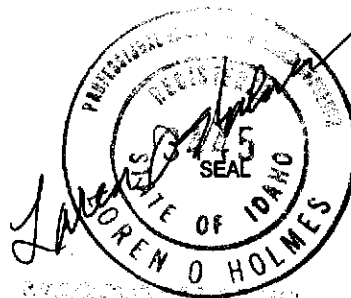
Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Fish Propagation	~~3-15~~	~~4-15~~	0.80 cfs	-
	→ 4-15	10-15 OK		
	5-1	9-30		
Totals:			0.80 cfs	-

2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above ✓ None
 ___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

Field Examiner's Name Brett Berry Date 8-23-93

Reviewer	Date
----------	------



* Correct season for this area is 4-15 to 10-15. BC

AUG 15 1994

DATE: August 20, 1993

FROM: Brett Barry

TO: Files 72-074: 82,83,84,85,88,90,91,92,93,95

SUBJECT: Fish Screens - Measurement

In the Salmon River drainage basin, the IDFG has built a fish screen on almost every major irrigation canal that diverts water from a river or creek that possess a spawning fish population.

The IDFG filed adjudication claims on these fish screens but then withdrew some of their claims. These permits are taking the place of the withdrawn claims.

On August 16,17, and 18, I conducted the field examinations for the above water permits. Kelly Christenson or Mel Schulte also helped conduct the examination. Each fish screen, or permit, had a unique structure and bypass pipe. The water permit was for the diversion of water from the irrigation canal to the bypass pipe at the fish screen.

Most of the permits contained bypass pipes that were underground from the entrance at the fish screen to the outlet at the river or creek, therefore, a polysonic ultrasound measurement was usually not possible.

Loren Holmes, manager of Southern Regional office, suggested we survey the structure and obtain the difference in elevation between the water surfaces. This enables us to find the amount of head(energy per unit weight) consumed in the bypass pipe. Once the amount of head consumed is found, the flow can be calculated by estimating the relative roughness of the pipe or by estimating a Manning's coefficient.

The actual calculation involves using the Manning's equation for head loss in a pipe and the minor losses caused by inlets, outlets, and transitions, and the velocity head generated by an open discharge. This calculation was completed with the use of a program developed by Allen Merritt and myself on LOTUS 1-2-3.

The program is very useful for calculating the discharge on longer pipes. But, when the bypass pipes are very short, the minor losses control the head loss and cannot be estimated accurately enough for predictable results.

Therefore, on very short bypass pipes and where the discharge at the outlet of the bypass pipe is not full, a measurement was obtained by treating the system as an orifice with a certain amount of head.

AUG 15 1994

IDAHO DEPARTMENT OF WATER RESOURCES
WORKSHEET TO CALCULATE FISH SCREEN BYPASS

=====

PERMIT NUMBER:	72-748 ⁷²	Lotus program: FISHSCRE.WK3
LOCATION:	Salmon River	Created by: Allen Merritt
BY:	BRB	Date last revised:
DATE:	8-20-93	8-10-93 BY ADM

=====

CONCRETE KIND OF PIPE

12 DIAMETER IN INCHES
2.34 HEAD IN FEET (DIFF BETWEEN HEAD & TAILWATER)
49 LENGTH OF PIPE IN FEET
0.013 MANNINGS ROUGHNESS COEF
2 MINOR LOSSES K VALUE
(INLET) RE-ENTRANT = 1, FLUSH = 0.10-0.50
(OUTLET) OPEN = 1, SUBMER = 1 est. 2 1
(TRANSITION) 0.0-1.0

1 dia in feet
0.5 pipe radius in feet
0.25 hydraulic radius in feet
0.047755 hydraulic slope
0.7854 cross section area of pipe

5.122198 CFS (DIRECTLY CALCULATED FROM MANNINGS)

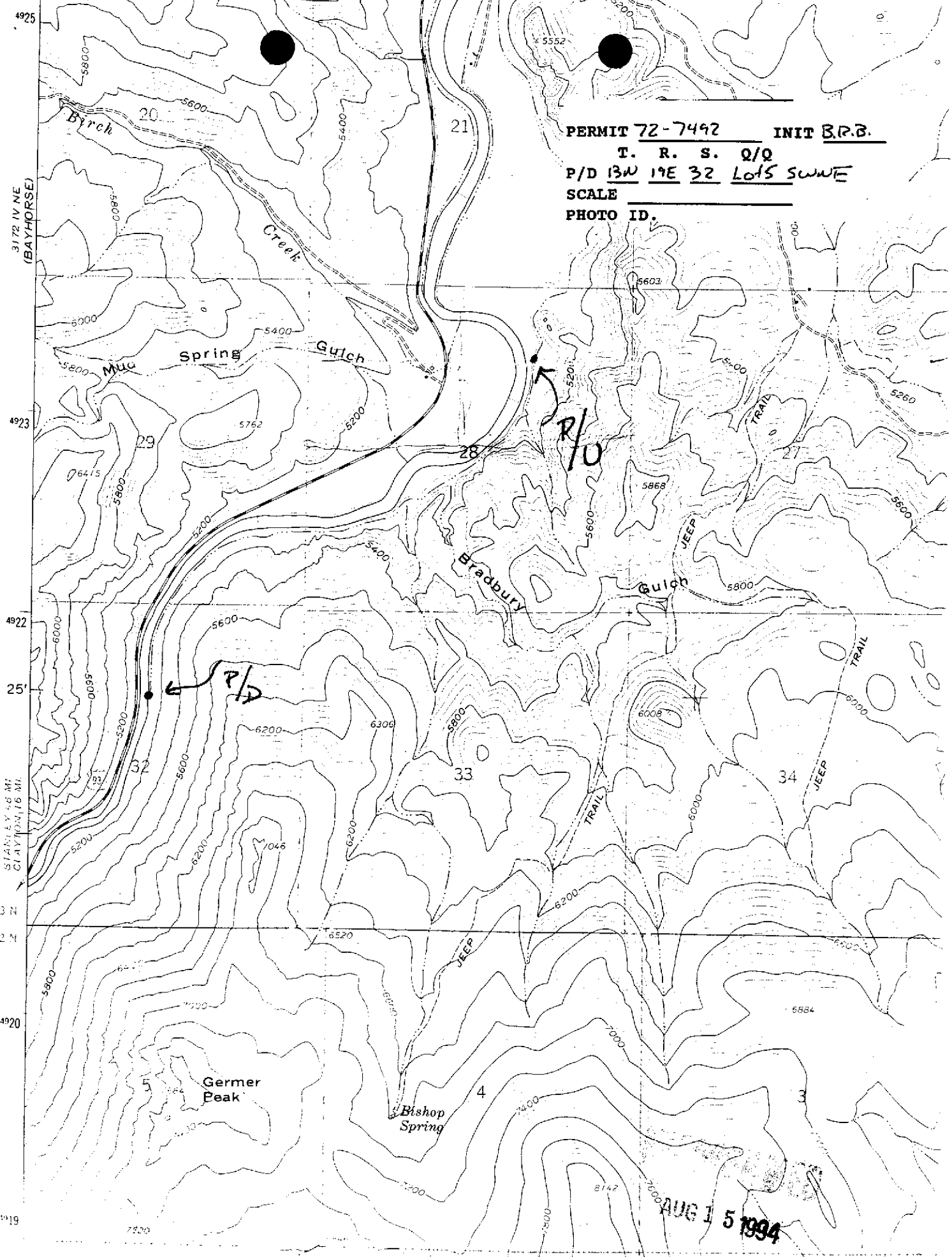
5
The head was measured from inlet
to concrete catch basin.

The headgate wasn't completely open
because the flume could not handle
any more discharge.

The inlet was not a re-entrant tube
but was worn & poorly constructed.

MAINTENANCE
AUG 15 1994

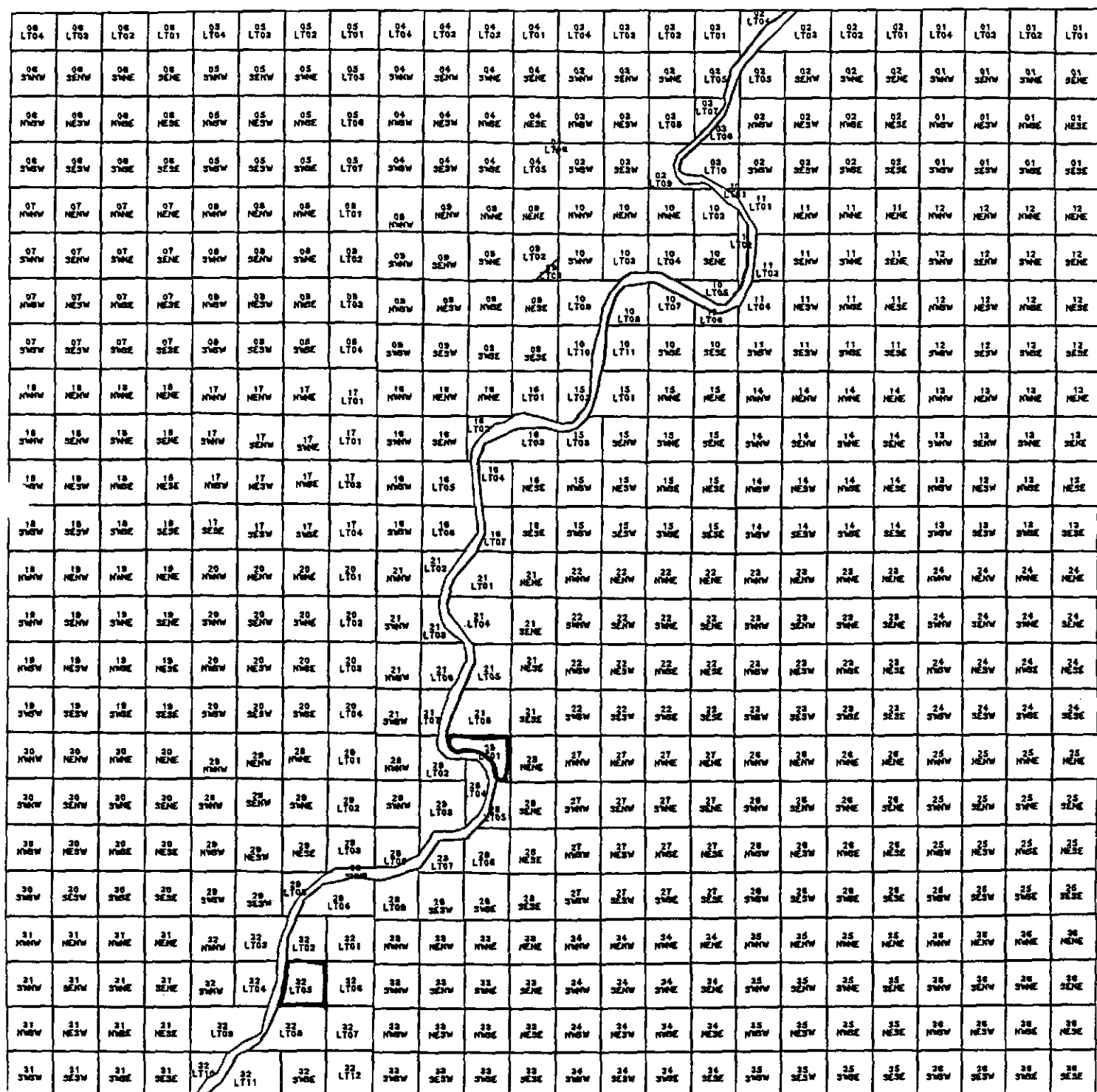
72-7492
S28 13N 19E



PERMIT 72-7492 INIT B.P.B.
T. R. S. Q/Q
P/D 13N 19E 32 LOTS SWNE
SCALE
PHOTO ID.

AUG 15 1994

P 72-7492



AUG 15 1994

P72-07492

These photos
were taken on
8-17-93.



A 12" concrete
pipe runs
down concrete
catch base "steel"
27' to 19" pipe
(cut in half, that
is used as a flume)
the flume runs
107' to the Salmon
R.

the outlet of
the pipe into
the flume was
not 100% full



open
discharge
into
Salmon
R.

AUG 15 1994

P72-07492

These photos
were taken on
8-17-93.



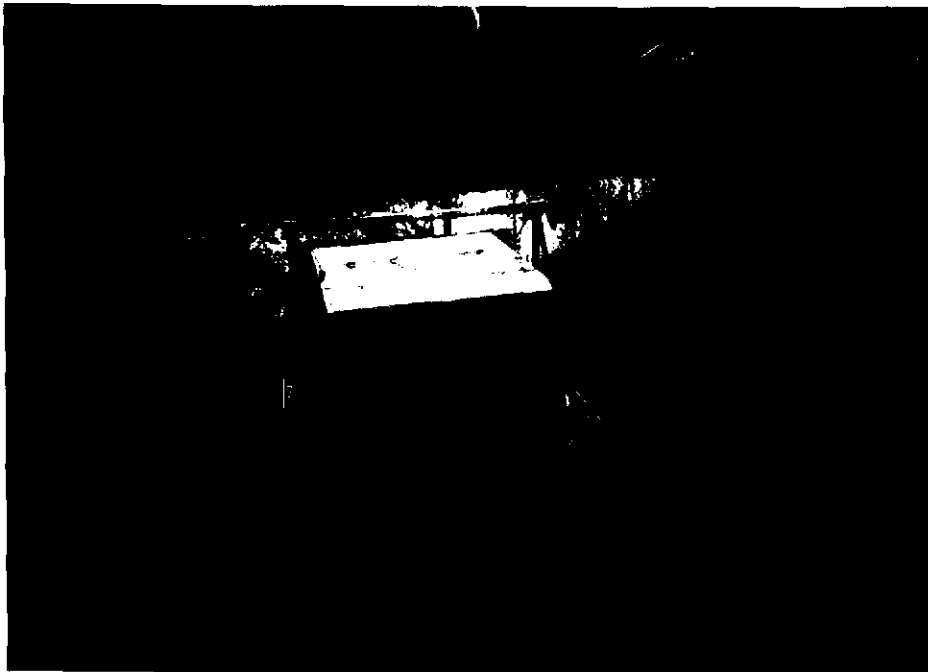
inlet
is
below
arrow

P/O

5 drum screen

P/O is

A 12" concrete pipe runs from inlet
to concrete catch
basin



the catch
basin is
used as
a fish
trap

The pipe from
inlet to catch
basin was
100% submerged
full at outlet

AUG 15 1994

January 15, 1993

STATE OF IDAHO
DEPT OF FISH & GAME
PO BOX 25
BOISE ID 83707

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 72-07492

Dear Permit Holder:

The department acknowledges receipt of the proof of beneficial use form submitted for the above referenced permit. The next step in the process of developing a water right is for the department to conduct a field examination to determine and confirm the use being made of the water.

If you have questions concerning this matter, please feel free to contact the SOUTHERN Regional Office in Twin Falls at (208)736-3033.

Sincerely,

Karen L. Gustafson
Secretary/Records Manager

c: IDWR - Region

FEB 05 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

September 30, 1992

STATE OF IDAHO
DEPT OF FISH & GAME
PO BOX 25
BOISE ID 83707

PERMIT APPROVAL NOTICE

RE: PERMIT NO. 72-07492

Dear Permit Holder:

Enclosed is a copy of your approved application for permit. We direct your attention to the conditions of approval on the final page.

Enclosed is a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop this permit. Also enclosed is a form entitled "Proof of Beneficial Use". If your project is already completed you should complete and submit this form immediately.

Sincerely,

BRENDA L. MILLER
Water Resource Agent

BLM:cz

Enclosures

RECEIVED
DEC 10 1992

Public Notices

NOTICE OF APPLICATION FOR WATER RIGHT

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

71-07146

State of Idaho
Dept. of Fish and Game
P.O. Box 25
Boise, ID 83707

Source: Elk Creek Tributary:

Valley Creek

Diversión Pt: NENW Sec 16 T

11N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T11N R12E S16 NENW

71-07147

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Elk Creek Tributary:

Valley Creek

Diversión Pt: SESW Sec 11 T

11N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T11N R12E S11 SESW

71-07148

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Valley Creek Tributary:

Salmon River

Diversión Pt: SESW Sec 3 T 11N

R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T11N R12E S03 SESW

71-07149

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: Lot 2 (NWNE) Sec 5

T08N R 14E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T08N R14E S05 NWNE

71-07150

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: Lot 2 (NWNE) Sec 5

T08N R 14E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T08N R14E S05 NWNE

71-07151

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: SESW Sec 10 T

07N R 14E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T07N R14E S10 SESW

71-07152

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: SESE Sec 8 T 08N

The People's Right To Know

Source: Salmon River Tributary:

Snake River

Diversión Pt: NESE Sec 8 T 08N

R 14E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T08N R14E S08 NESE

71-07155

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Valley Creek Tributary:

Salmon River

Diversión Pt: SWNW Sec 3 T 11N

R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T11N R12E S03 SWNW

71-07156

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Valley Creek Tributary:

Salmon River

Diversión Pt: SESE Sec 11 T 11N

R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T11N R12E S11 SESE

71-07157

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Valley Creek Tributary:

Salmon River

Diversión Pt: NWNW Sec 13 T

11N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T11N R12E S13 NWNW

71-07158

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Valley Creek Tributary:

Salmon River

Diversión Pt: SENW Sec 13 T

11N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T11N R12E S13 SENW

71-07159

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Valley Creek Tributary:

Salmon River

Diversión Pt: NENW Sec 24 T

11N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T11N R12E S24 NENW

71-07161

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: SWSW Sec 26 T

07N R 14E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/9/1992

In: Custer County

T07N R14E S28 SWSW

71-07182

State of Idaho

71-07164

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Groundwater

Diversión Pt: SENW Sec 31 T

10N R 14E in Custer County

Use: Domestic (.040 cfs)

Total Diversion: (.040 cfs)

Date Filed: 8/24/1990

In: Custer County

T10N R14E S31 SENW

77-07317

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Knapp Creek Tributary:

Marsh Creek

Diversión Pt: SWNW Sec 18 T

12N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T12N R12E S18 SWNW

77-07318

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Knapp Creek Tributary:

Marsh Creek

Diversión Pt: NENW Sec 18 T

12N R 12E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T12N R12E S18 NENW

77-07482

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: NWNW Sec 35 T

15N R 19E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T15N R19E S26 SWSW

72-07483

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: SESW Sec 19 T

12N R 19E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T12N R19E S19 NWWS

72-07484

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Salmon River Tributary:

Snake River

Diversión Pt: SWNW Sec 19 T

12N R 19E in Custer County

Use: Fish propagation (.800 cfs)

Total Diversion: (.800 cfs)

Date Filed: 8/24/1990

In: Custer County

T12N R19E S19 SWNW

72-07485

State of Idaho

Dept. of Fish and Game

P.O. Box 25

Boise, ID 83707

Source: Herd Creek Tributary:

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STATEMENT

AUG 24 1992



Custer Publishing, Inc.

Department of Water Resources

Phone 879-4445

P.O. Box 405

Challis, Idaho 83226

Dept. of Water
222 Shoshone St. East
Twin Falls, Id 83301

Job No.	Date	DESCRIPTION	Amount
544 lines	8-20-92	Notice of Application for Water Right 8/6+13/92 # 71-07146, 71-07147, 71-07148, 71-07149, 71-07150, 71-07151, 71-07152, 71-07153, 71-07154, 71-07155, 71-07156, 71-07157, 71-07158, 71-07159, 71-07161, 71-07162, 71-07163, 71-07164, 77-07317, 77-07318, 72-07482, 72-07483, 72-07484, 72-07485, 72-07486, 72-07487, 72-07488, 72-07489, 72-07490, 72-07491, 72-07492, 72-07493, 72-07494, 72-07495, 72-07496, 72-07497, 72-07498, 72-07499	\$ 512.80 OK MB 8-24-92

A finance charge of 1½ percent (annual percentage rate of 18%) with a minimum charge of 50¢ will be charged to all accounts not paid within 30 days of billing.

PAID

DEC 10 1992

NOTICE OF APPLICATION FOR WATER RIGHT

The Following application(s) have been filed to appropriate the public waters of the State of Idaho:

72-07492

STATE OF IDAHO
DEPT OF FISH & GAME
PO BOX 25
BOISE, ID 83707

Source: SALMON RIVER

Tributary: SNAKE RIVER

Diversion Pt: LOT 5 (SWNE) Sec 32 T 13N R 19E in CUSTER County.

Use: FISH PROPAGATION (.800 CFS)
Total Diversion: (.800 CFS)

Date Filed: 6/ 9/1992

In: CUSTER County
T13N R19E S28

NWNE

The permit(s) will be subject to all prior water rights. Protests must be filed with the Director, Dept. of Water Resources, Southern Region, 222 Shoshone Street East, Twin Falls, ID 83301 on or before AUGUST 24, 1992.

R. KEITH HIGGINSON, Director

Published: 8/ 6/1992 & 8/13/1992

MICROFILMED

DEC 10 1992

DEC 10 1992
MIRROF MED

Legal OK in
8/6/92 name of
MS 8
8-11-92
CM.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Southern Region
222 Shoshone Street East
Twin Falls, ID 83301
(208)736-3033

JULY 8, 1992

CUSTER PUBLISHING COMPANY
PO BOX 405
CHALLIS, ID 83226

Gentlemen:

Enclosed you will find a legal notice which we wish to have published on the dates indicated (once a week for two consecutive weekly issues) in your newspaper. If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Please send the affidavit of publication and publication billing to this office before AUGUST 24, 1992.

Yours truly,

Mary Baldwin
Secretary/Office Coordinator

Enclosure

DEC 10 1992



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 736-3033

CECIL D. ANDRUS
Governor

08-Jul-1992

R. KEITH HIGGINSON
Director

ATTN CINDY ROBERTSON
FISHERY BIOLOGIST
IDAHO FISH & GAME
PO BOX 25
BOISE ID 83707-0025

Re: Applications for Permit Nos. 71-07146 thru 71-07166,
72-07482 thru 72-07499

Dear Ms. Robertson:

The Department of Water Resources acknowledges receipt of 39 water right applications for permit. Each application has been assigned an identification number. Please refer to this number in all further correspondence. A computer produced proof report for each application is enclosed for your information and reference.

This office will be advertising the applications with points of diversion located within Custer County in the Challis Messenger on 8/6 & 8/13/92. Application No. 71-07160 will be advertised in the Wood River Journal on 8/5 & 8/12/92 because it has a point of diversion located within Blaine County. A period of ten days following the second publication will be allowed for the submittal of protests.

If an application is protested you will be sent a copy of the protest. The protest must be resolved before the application is approved or denied. If the protest is not resolved voluntarily, this Department will conduct a conference and/or hearing on the matter.

If the application is not protested, it will be forwarded to our State Office in about five weeks. State office personnel will conduct a complete review prior to final processing of the application and will notify you of the outcome of this review. When a permit is issued, you will be sent a copy. A

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DEC 10 1992

Idaho Fish & Game
Page 2
08-Jul-1992

typical processing time for an unprotested application is about eight weeks.

Please feel free to contact this office if you have any questions regarding this procedure.

Very truly yours,

Mel Schulte
Water Right Agent

MS:MB

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JUL 16 1992

APPLICATIONS FOR WATER RIGHT PERMITS FOR FISH SCREENS
IN THE SALMON RIVER BASIN

<u>Screen Number</u>	<u>Cost</u>
EF-14 ✓	\$45.00
EF-20	45.00
EF-22	45.00
EF-24	45.00
EF-HC-3	45.00
S-1	45.00
S-8	45.00
S-20	45.00
S-21	45.00
S-21A	45.00
S-23	45.00
S-24	45.00
S-28	45.00
S-32	45.00
S-33	45.00
S-38	45.00
S-39	45.00
S-39A	45.00
S-40	45.00
S-41	45.00
S-42	45.00
S-43	45.00
S-44	45.00
S-45	45.00
S-47	45.00
S-PC-1	45.00
S-VC-1	45.00
S-VC-2	45.00
S-VC-3	45.00
S-VC-4	45.00
S-VC-6	45.00
S-WSC-1	45.00
S-WCS-2	45.00

WATER RIGHT # 120

DEC 16 1992