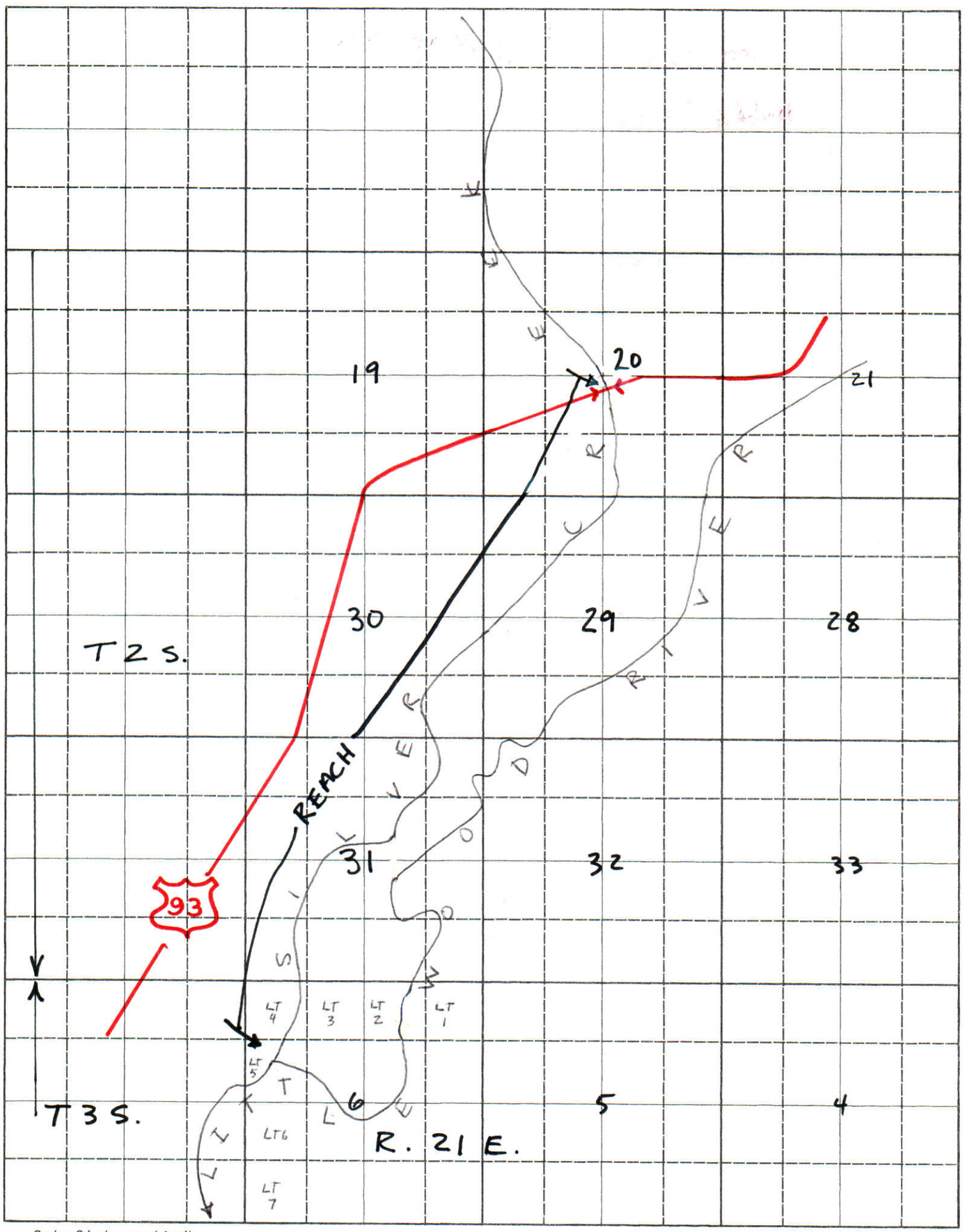
11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile.

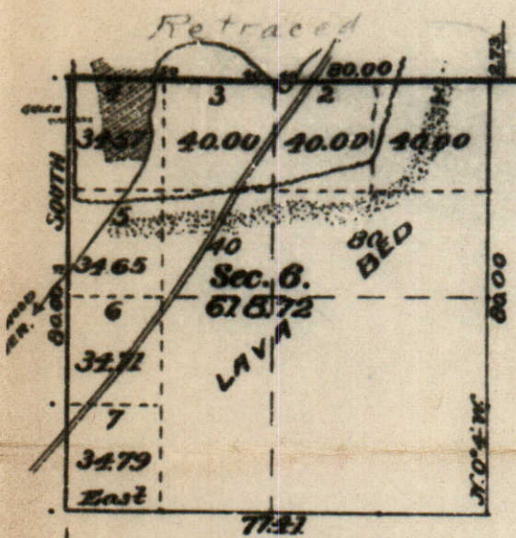
BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

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(Applicant)

Township No 3 South, Range No 21 East

G f F e E d D



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NOV 2 1983

Department of Water Resources
Southern District Office

State of Idaho, } SS.
County of Blaine }

GORDON O. GLASMANN, being first duly sworn, deposes and says that he is the printer (publisher) of the Wood River Journal, a newspaper published every week in Hailey, County of Blaine, State of Idaho; that said newspaper has been continuously and uninterruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 20 day of October, 19 83, and the date of the last publication was on the 27 day of October, 19 83.

Gordon O. Glasmann

Subscribed and sworn to before me this 27th day of October, 19 83

(SEAL)

Roberta Mackenzie
NOTARY PUBLIC

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APR 13 1987

WOOD RIVER JOURNAL
Hailey, Idaho

COST OF PUBLICATION

Numer of Picas per Line	13		
Number of Lines in Notice	62		
Number of Insertions	2		
_____	Lines tabular at	_____	4¢ / Pica
62	Lines straight at	24.18	3¢ / Pica
62	Subsequent lines at	16.12	2¢ / Pica
	TOTAL COST	40.30	

COPY OF NOTICE

(Paste Here)

Notice of Hearing Application for Instream Water Right
TITLE OF NOTICE

37-7849
~~PLAINTIFF ATTORNEY~~

DEFENDANT

PLAINTIFF

Dept of Water Resources
1041 Blue Lakes Blvd N. TF
BILL TO

NOTICE OF HEARING
APPLICATION FOR INSTREAM WATER RIGHT

NOTICE IS HEREBY GIVEN, That the Idaho Water Resources Board has, on August 26, 1980, submitted an application for permit to the Department of Water Resources proposing the appropriation of water to preserve the minimum streamflow from Silver Creek tributary to the Little Wood River and further described as follows:

37-7849

Source: Silver Creek tributary to Little Wood River

Point of Minimum Streamflow: The reach of Silver Creek from the point where it crosses Highway 93 in NWSE, Sec. 20, T.2S., R.21E. Downstream to the confluence of Silver Creek and the Little Wood River in Lot 5, Sec. 6, T.3S., R.21E.

Rate of Flow: 74.00 Cubic Feet Per Second

Season of Use: January 1 to December 31

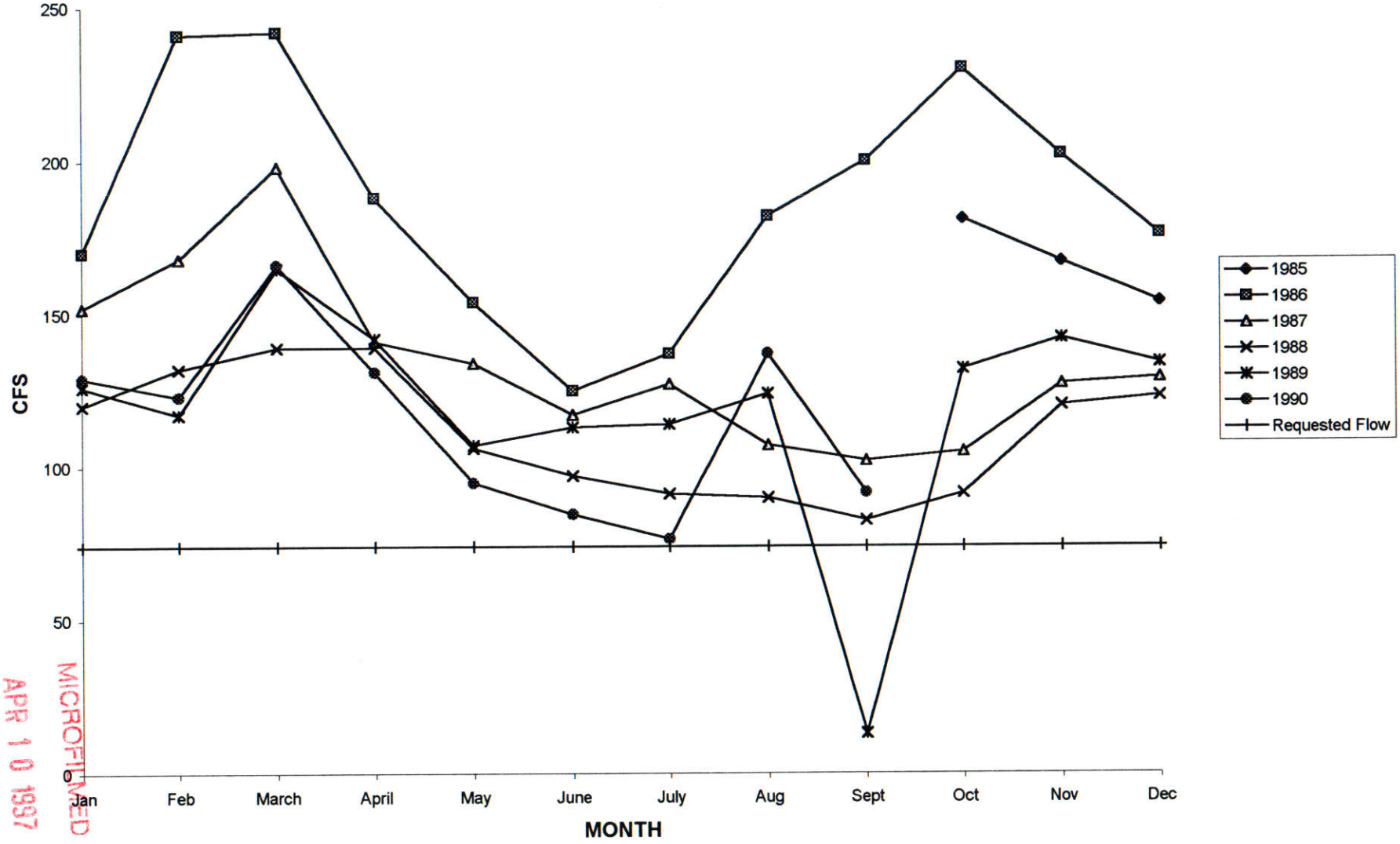
Use: To preserve fish populations and aesthetics

The Director of the Department of Water Resources will hold a public hearing on the application at 9:00 a.m., Thursday, November 10, 1983, in the Planning and Zoning Meeting Room of the Old County Courthouse, 206 First Avenue South, Hailey, Idaho, for the purpose of hearing evidence in regard to the application. The hearing will be held pursuant to the provision of Sec. 42-1503, IDAHO CODE.

If issued, this permit will be subject to all prior water rights. Any party who wishes to formally appear in this proceeding for the purpose of examining witnesses should file a notice of appearance with the Director, Department of Water Resources, Statehouse, Boise, Idaho, five (5) days prior to the hearing. Other parties will be given an opportunity to informally present their views and comments without the necessity of filing a notice of appearance.

A. KENNETH DUNN
Director

SILVER CREEK MEASUREMENTS



APR 10 1997 MICROFILMED

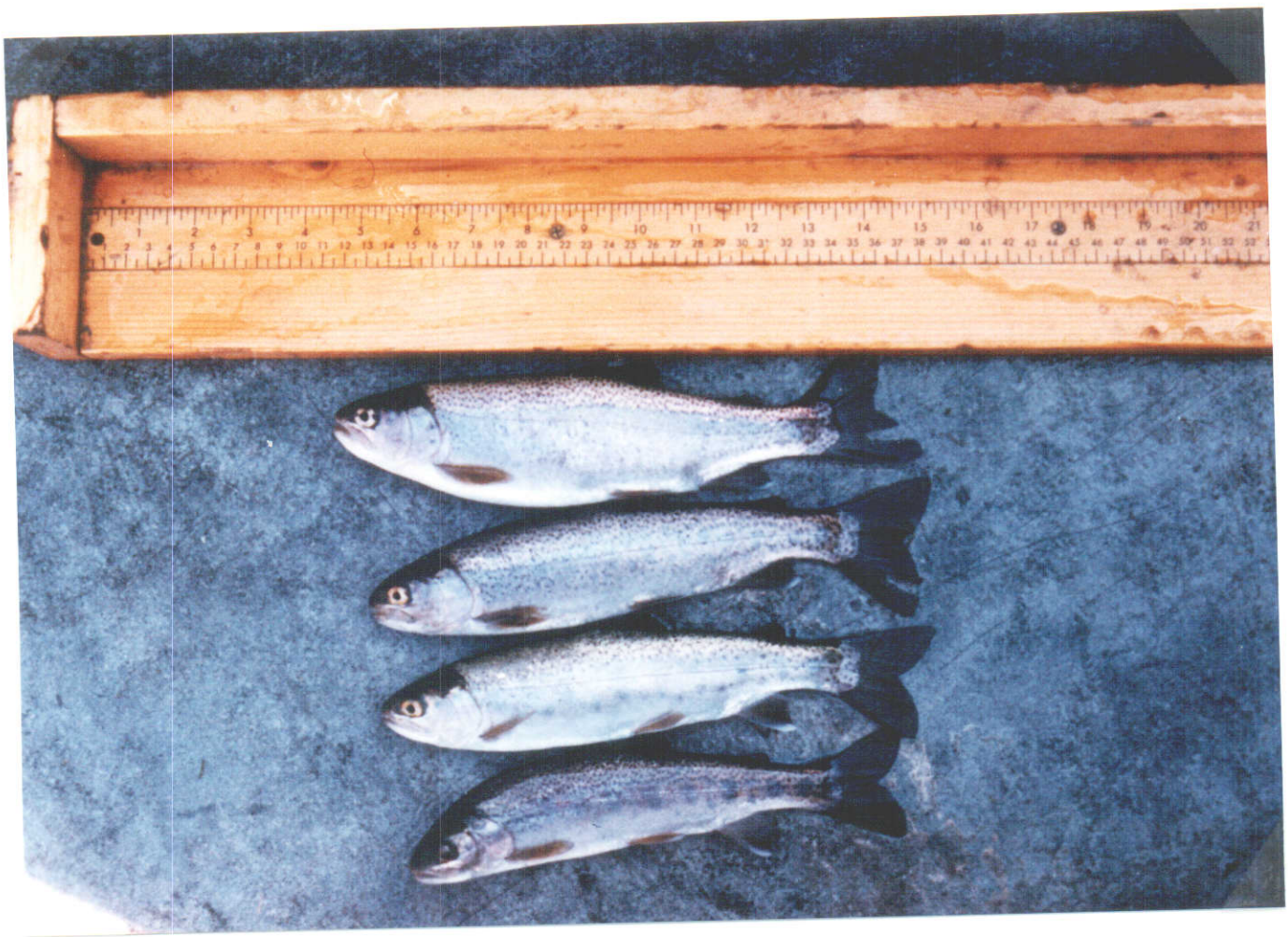
EXHIBIT NO. 1



Nice brown trout caught by anglers in the Priest Campground access site on Silver Creek located less than one mile above Highway 93, the upper end on the minimum stream flow reach. Photo taken by Stu Murrell, Regional Conservation Educator, Idaho Department of Fish and Game on May 26, 1984.

MICROFILMED
APR 10 1987

EXHIBIT NO. 2



Wild rainbow trout in excellent body condition obtained by electrofishing in the "Bear Track" Williams study area on the Little Wood River during fall population estimates. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

MICROFILMED
APR 10 1997

EXHIBIT NO. 3



Brown trout ranging in size from 11 to 16 inches obtained by electrofishing in the "Bear Track" Williams study site on the Little Wood River. Holes in tails of two lower fish are marks to indicate fish which were marked in the preceding week and are used to estimate total fish population. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

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APR 10 1997

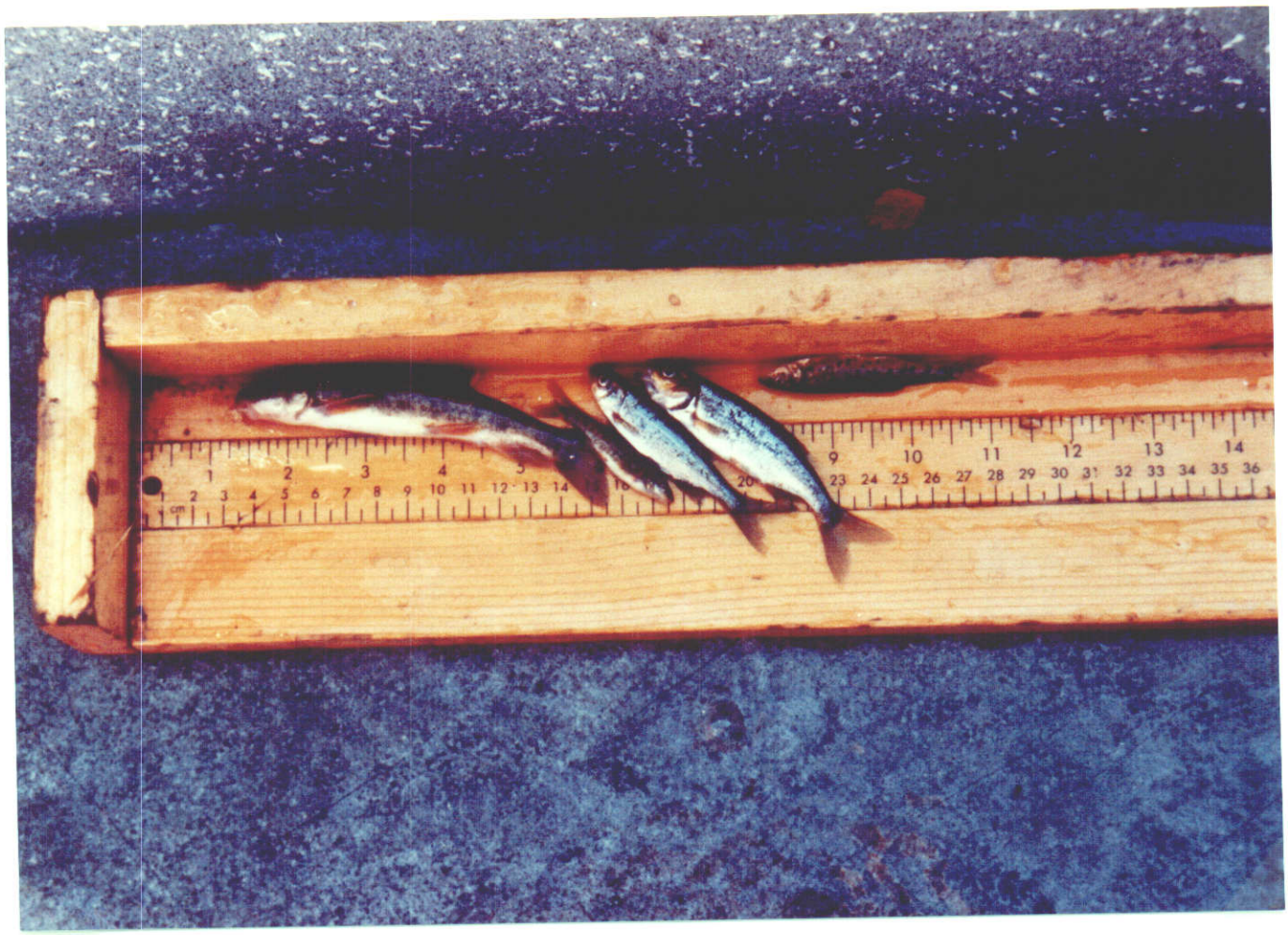
EXHIBIT NO. 4



Two nice brown trout from the "Bear Track" Williams area of the Little Wood River displayed by Idaho Department of Fish and Game fishery technicians Christie Cockerham and Jane Mauser. Fish obtained by electrofishing during fall population estimate studies. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

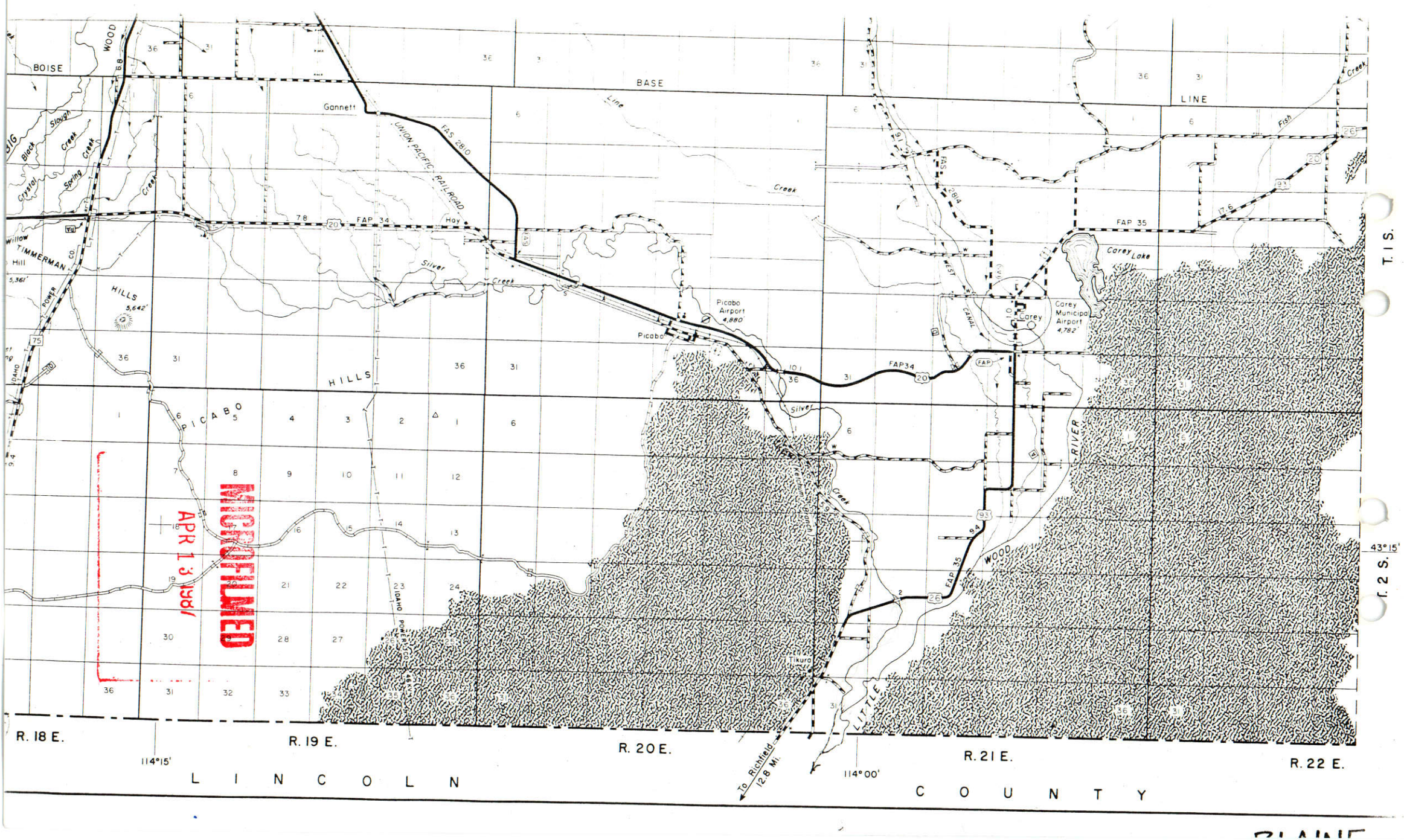
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APR 10 1997

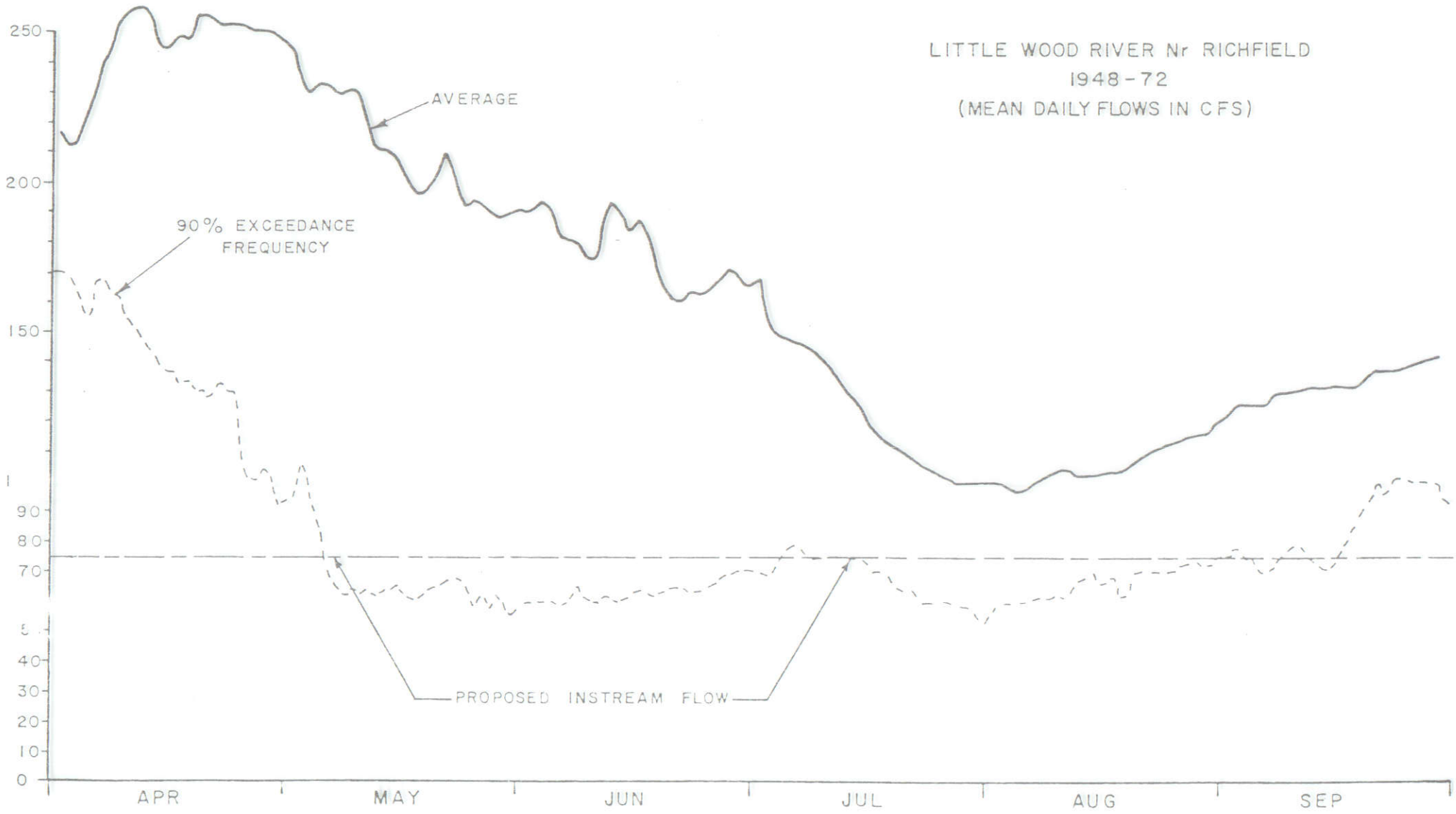
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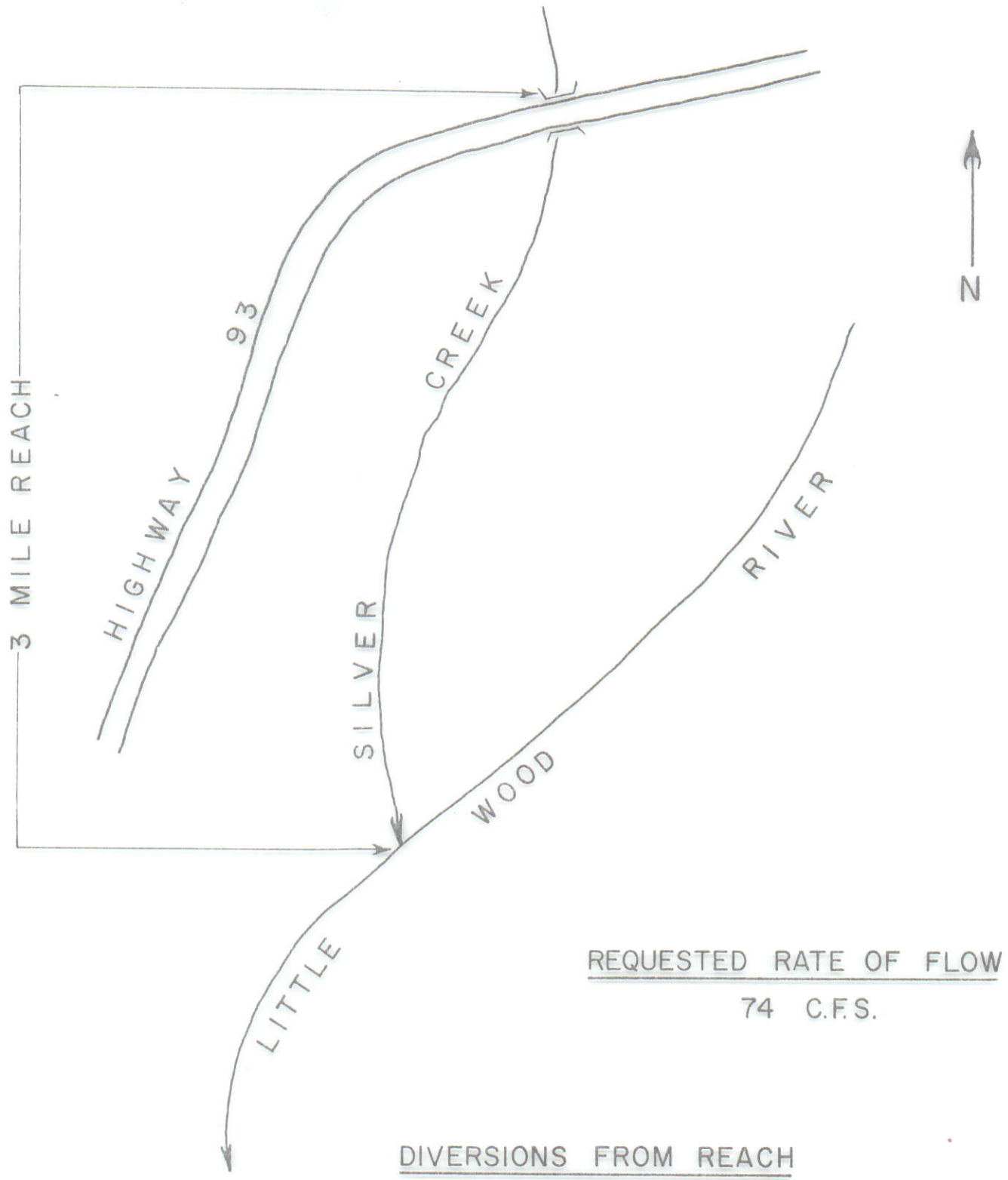


Nongame forage fish (sucker, dace and redside shiner) obtained from the "Bear Track" Williams access site on the Little Wood River. Fish sampled by electrofishing when doing fish population studies. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

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BOISE
BASE
LINE
Gannett
UNION PACIFIC RAILROAD
FAS 2810
FAP 34
FAP 35
Hoy
Silver Creek
Picabo
Picabo Airport 4,880'
Carey
Carey Municipal Airport 4,782'
Carey Lake
WEST CANAL
HILLS
PICABO
RIVER
WOOD
LITTLE
Fish Creek
Black Slough Creek
Crystal Spring Creek
Willow Creek
TIMMERMAN Hill 5,361'
HILLS 5,642'
IDAHO POWER CO. 46 KV
To Richfield 12.8 Mi.
APR 13 1981
MICROFILMED
R. 18 E.
R. 19 E.
R. 20 E.
R. 21 E.
R. 22 E.
T. 1 S.
T. 2 S.
114°15'
114°00'
43°15'
LINCOLN COUNTY
BLAINE


LITTLE WOOD RIVER Nr RICHFIELD
1948-72
(MEAN DAILY FLOWS IN CFS)
AVERAGE
90% EXCEEDANCE FREQUENCY
PROPOSED INSTREAM FLOW
250
200
150
90
80
70
40
30
20
10
0
APR
MAY
JUN
JUL
AUG
SEP



REQUESTED RATE OF FLOW

74 C.F.S.

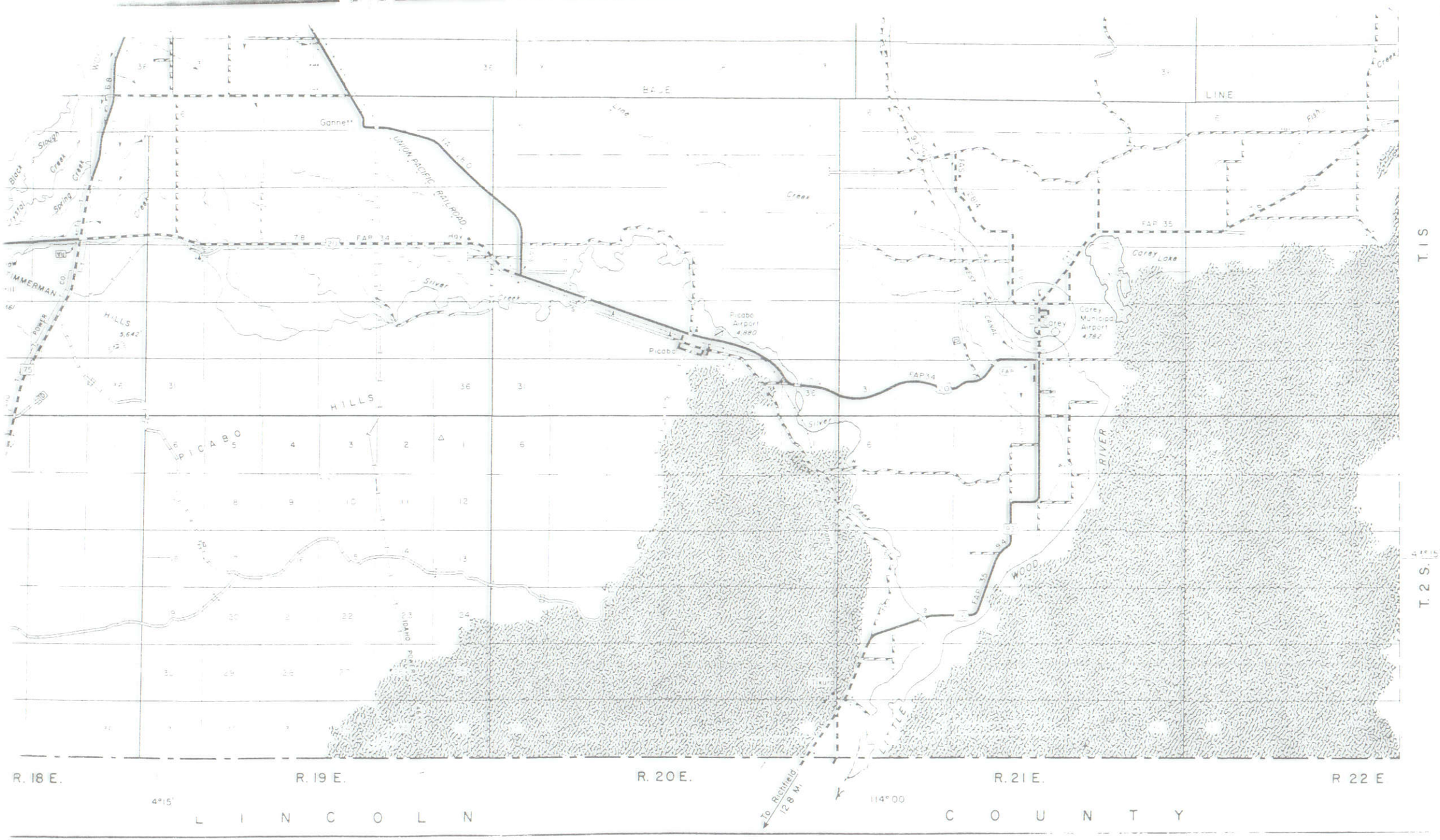
DIVERSIONS FROM REACH

APPLICATIONS = 0

PERMITS = 0

LICENSES = 1.36 C.F.S., 140 AF

DECREES = 17.2 C.F.S.

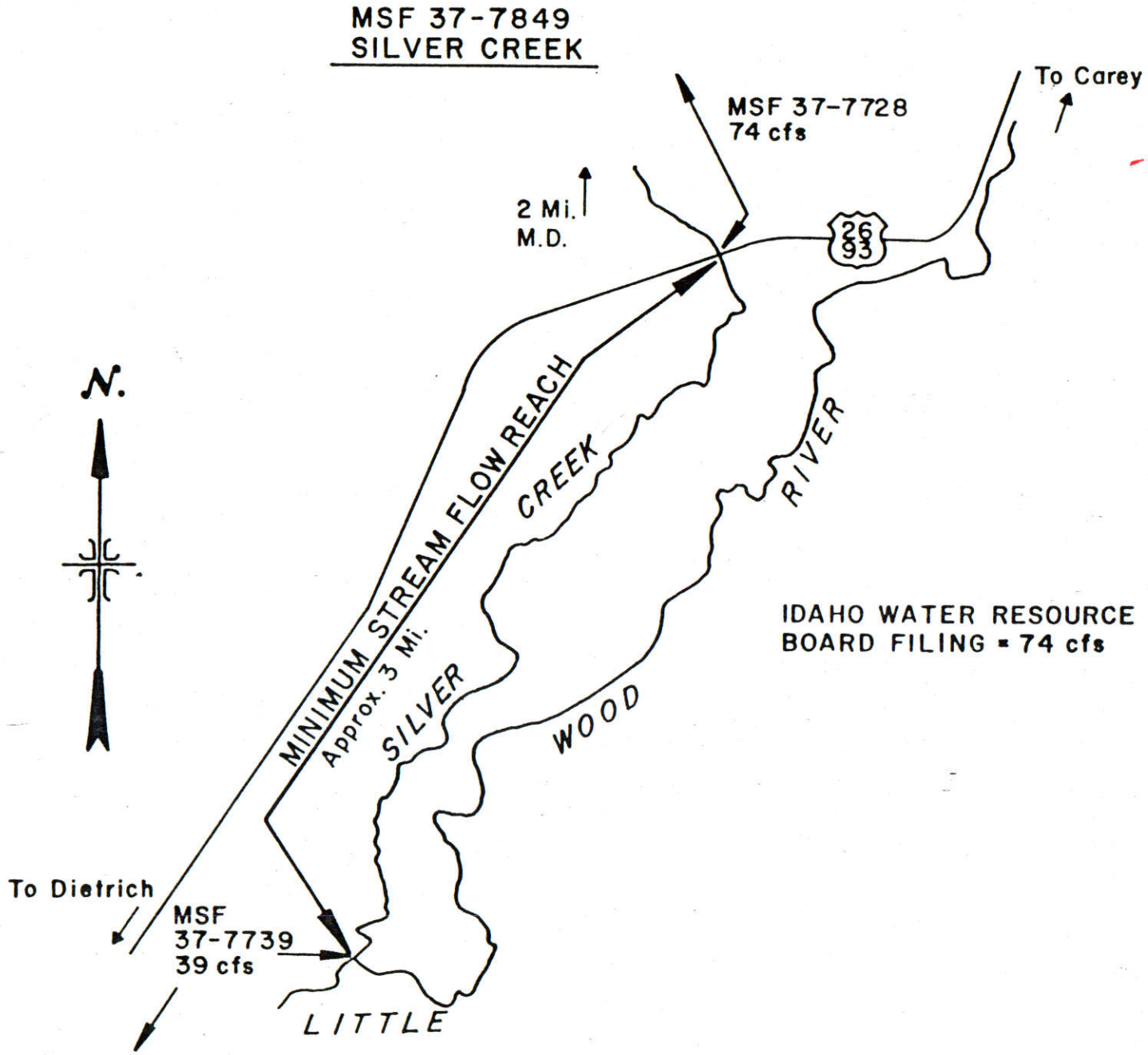

BASE LINE
Gannett
UNION PACIFIC RAILROAD
Picabo
Picabo Airport 4,880
Corey
Corey Municipal Airport 4,782
Corey Lake
HILLS
PICABO
Silver Creek
Big Wood River
Little Wood River
Timmerman Hills 5,642
FAP 34
FAP 35
T. 1 S.
T. 2 S.
R. 18 E.
R. 19 E.
R. 20 E.
R. 21 E.
R 22 E
To Richfield 12.8 Mi
114°00
4°15'
L I N C O L N C O U N T Y
B L A I N E

ATTENDANCE ROSTER

MSF-Silver Creek 37-7849
Hearing
November 10, 1983

NAME	ADDRESS	REPRESENTING
Ted Quine	Box 133	self
J R Sepi	Box 608 Hailey	IDAHO Power Co.
Jon Sorensen	Carey	
Tim Cochrane	2320 Gov't Way CDA	IDFG
Paul Valcarce	Box 662, Picabo, Id.	IDFG
Loyd L Newby	Box 1 Shoshone	Water Dist 37M
Dick Creeds	~~Big Wood~~ Box C Shoshone, Ida	Big Wood Canal
Jim Holcomb	BOX 1136 SV ID	
Bob Bell	816 16th AVE E	IDFG Jerome
Loren Strode	Carey Id	

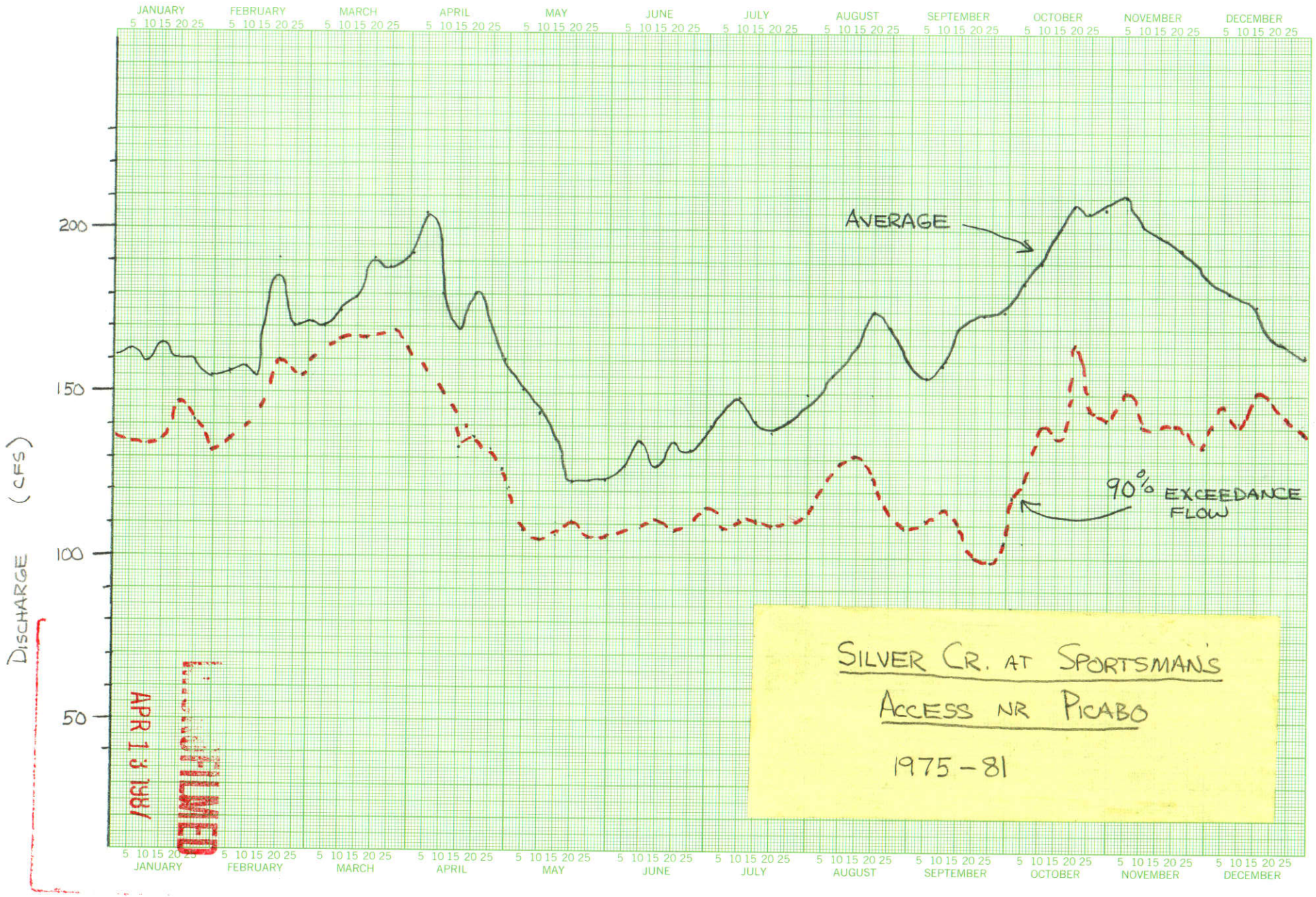
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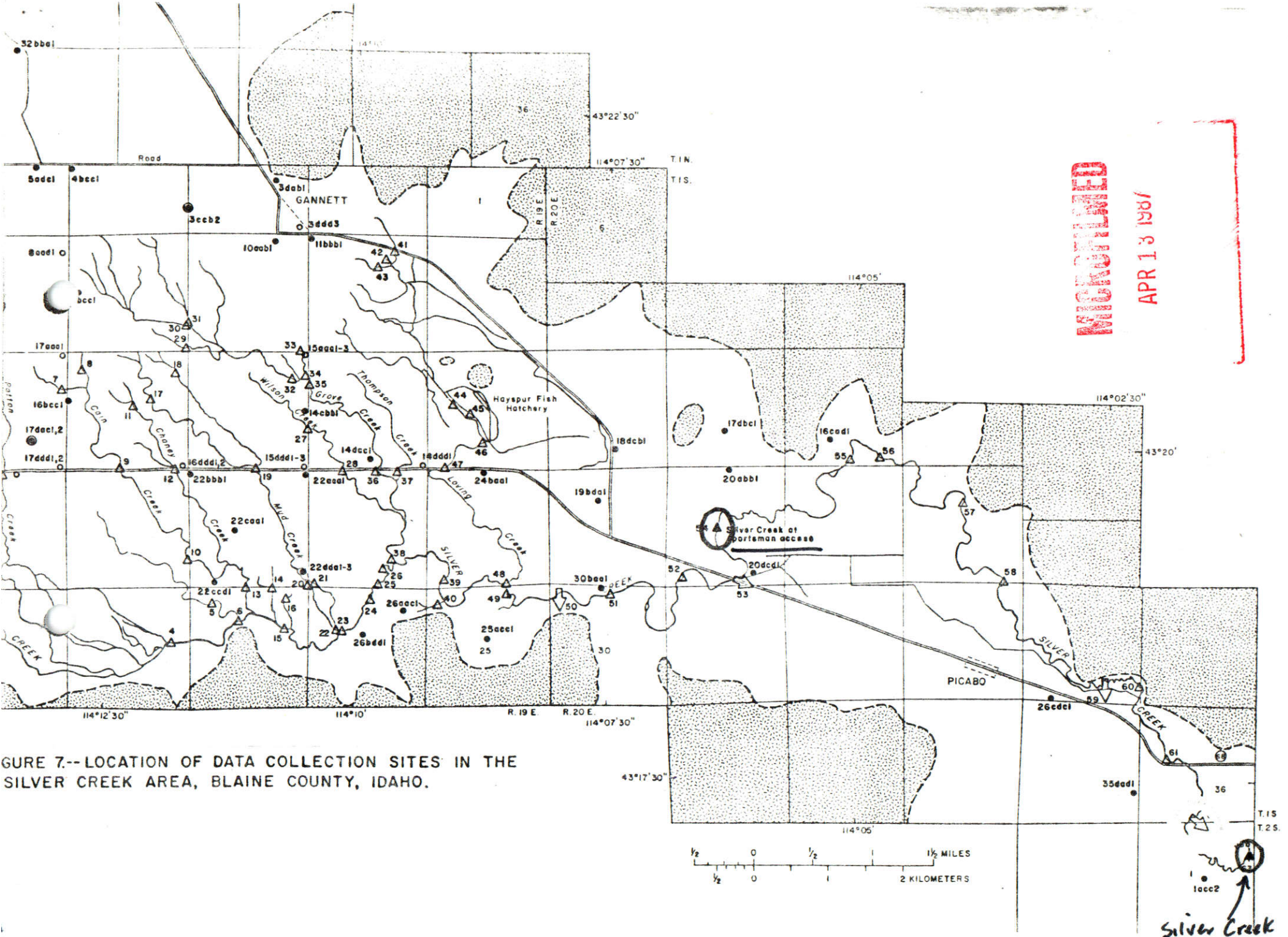


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K+E 1 YEAR BY DAYS X 250 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 2890





GURE 7.--LOCATION OF DATA COLLECTION SITES IN THE SILVER CREEK AREA, BLAINE COUNTY, IDAHO.

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Silver Creek nr Picabo

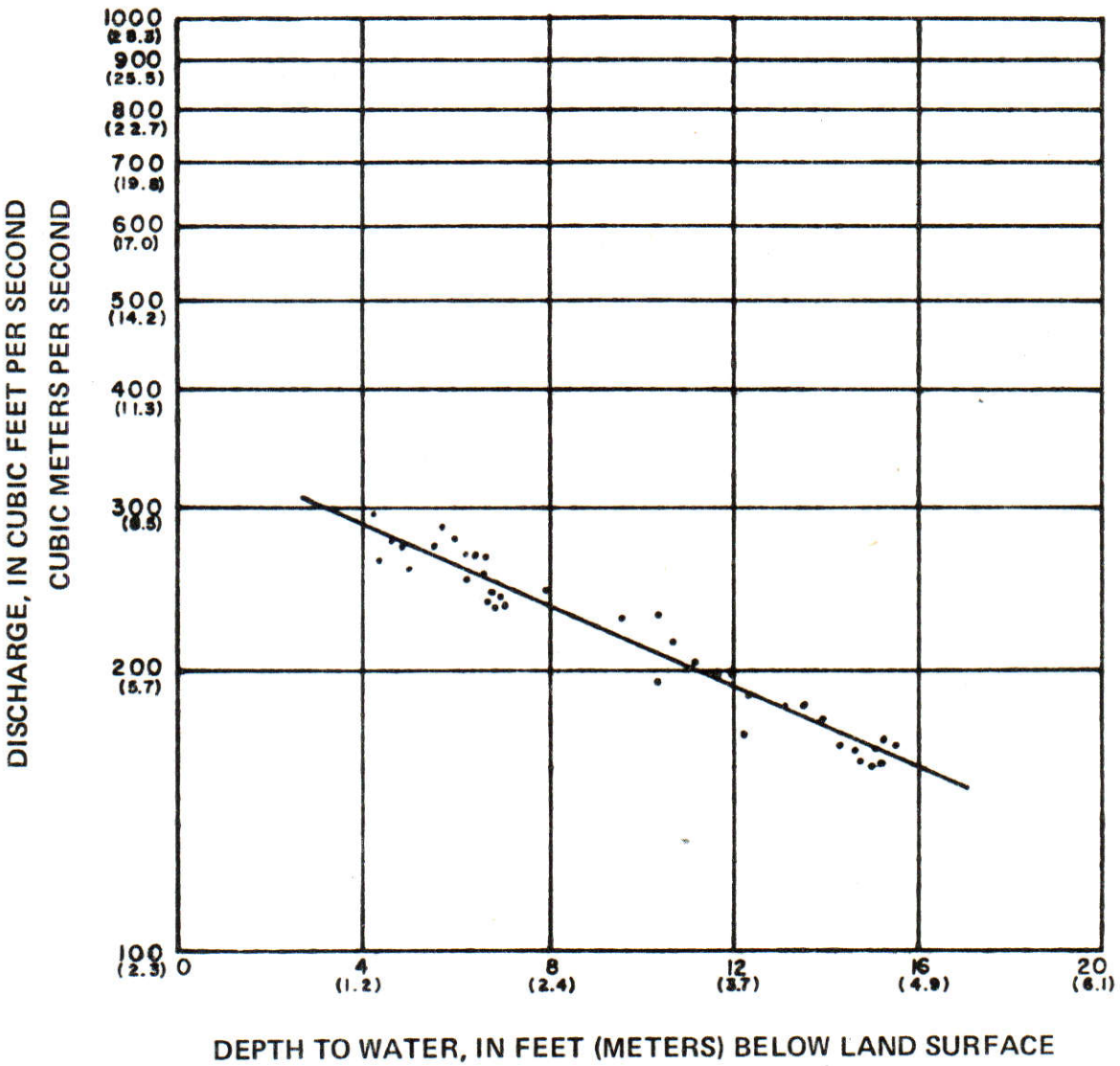
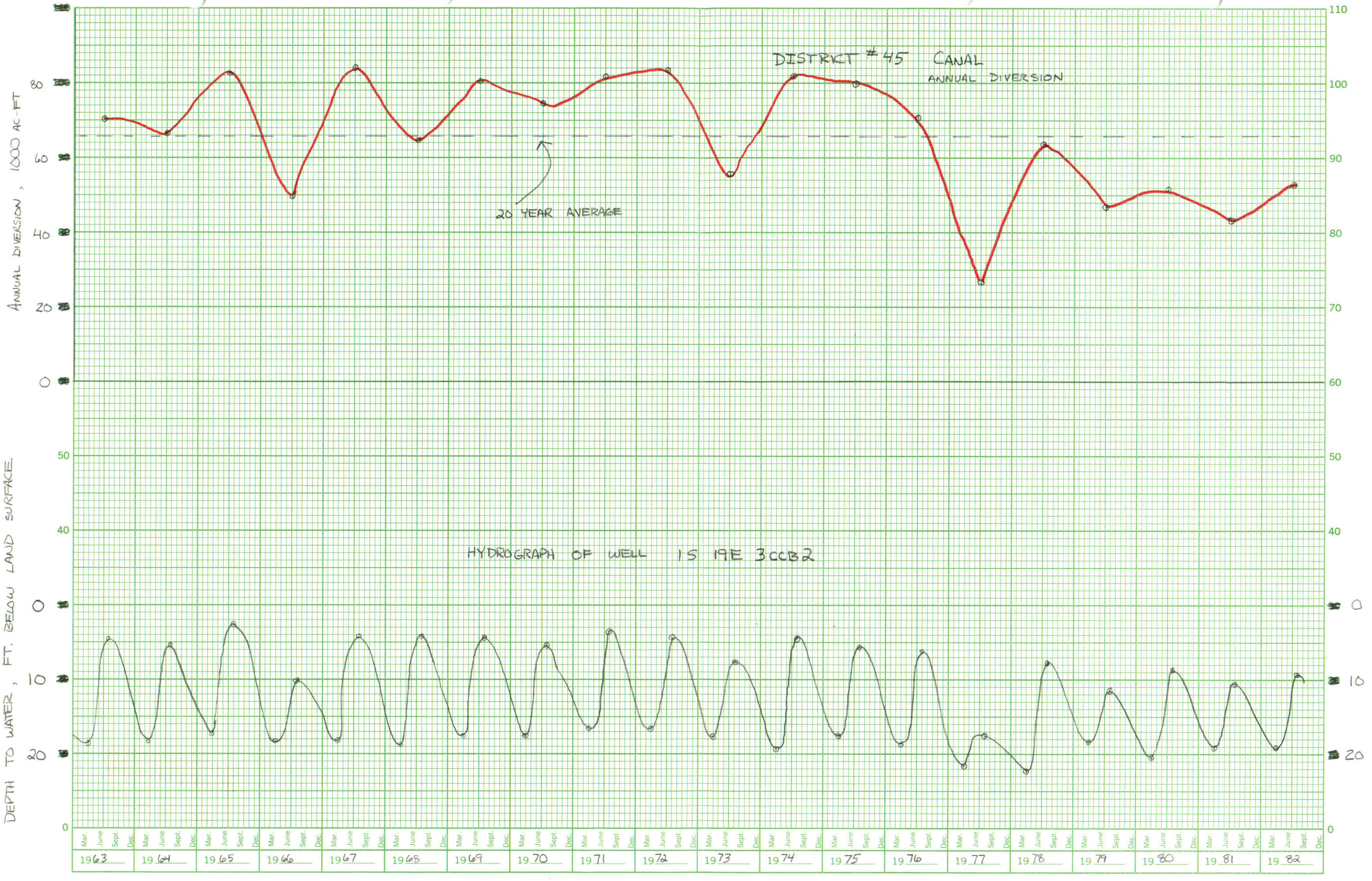


FIGURE 11. Stage-discharge relation between depth to water in well 1S-19E-3ccb2 and adjusted base flow in Silver Creek.

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FIGURE A. HYDROGRAPH OF WELL 1S 19E 3CCB2 AND ANNUAL DIVERSION OF 'DISTRICT' CANAL



47 3850
K&E 20 YEARS BY MONTHS X 110 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

- Bob Bell
  - Qualifications
  - Statement is F & G Exhibit B.
  - Exhibit C Dec 1978 Job Completion Report

- Paul Valcarce Sr Conservation officer for ~ 3 yrs
  On Oct 15 1977 was at Silver Creek
  20-25 cfs
  One of the better sections of stream within the patrol area.
  Less wintertime water could result in more "anchor ice".
  Deer, songbirds & mule deer common. Also water fur bearers:
  mink, muskrat, otter. Plus raptors & predators.

- Reid Newby
  Mean Dev would need to be placed as follows:
  One just downstream from confluence w/ Little Wood &
  one just upstream
  Also, reinstate gage # 10, 2 mi upstream from Hwy 93 bridge

- Mr Ted Sorenson - Testimony
  Concerned about impact on irrigators
  Says that F&G estimates are extremely high for the reach
  estimates 250 fishermen/year in the reach

- Loren Strode Carey
  Leases Sorenson's farm
  Estimates per year fishermen days (2 people per day)

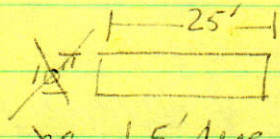


EXHIBIT NO. 1

Exhibit 1-A. Trophy-sized brown trout obtained in Idaho Department of Fish and Game electrofishing operation in November, 1976 on the lower portion of Silver Creek in the vicinity of the instream flow request. Photo taken by Idaho Department of Fish and Game Fisheries Biologist.



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EXHIBIT NO. 1

Exhibit 1-B. Large-sized brown trout and rainbow obtained in Idaho Department of Fish and Game electrofishing operation in November, 1976 on the lower portion of Silver Creek in the vicinity of the instream flow request. Photo taken by Idaho Department of Fish and Game Fisheries Biologist.



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EXHIBIT NO. 2

Exhibit 2-A. Juvenile brown trout obtained in Idaho Department of Fish and Game electrofishing operation in November, 1976 on the lower portion of Silver Creek in the vicinity of the instream flow request. Photo taken by Idaho Department of Fish and Game Fisheries Biologist.



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EXHIBIT NO. 2

Exhibit 2-B. Looking upstream on Silver Creek on the Sorenson property within the requested instream flow section. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.



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EXHIBIT NO. 2

Exhibit 2-B. Looking upstream on Silver Creek on the Sorenson property within the requested instream flow section. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.

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EXHIBIT NO. 3

Exhibit 3-A. Looking downstream at low falls on Silver Creek on the Sorenson property within the requested stream flow section. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.



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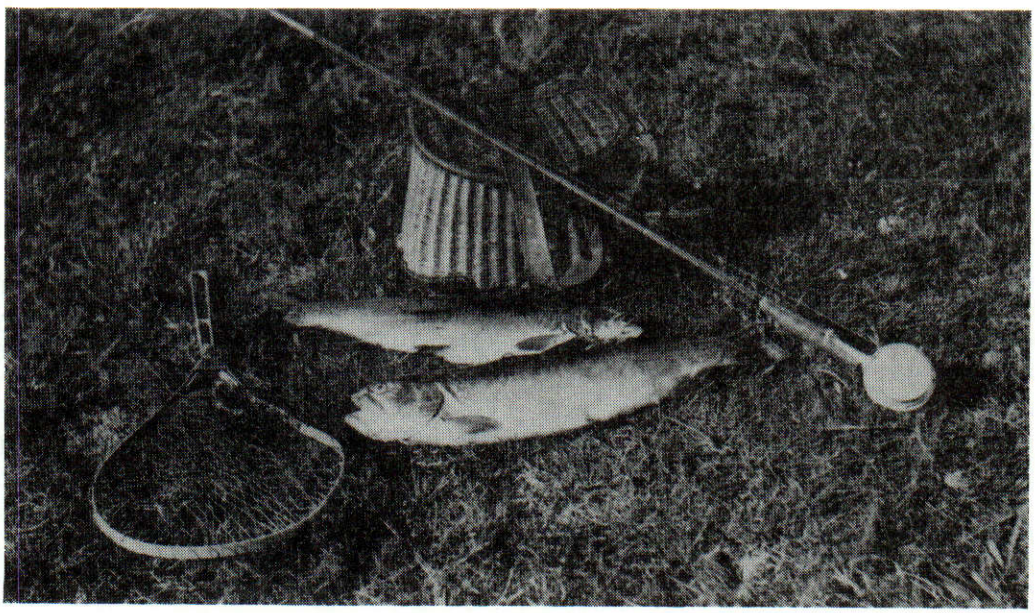
EXHIBIT NO. 3

Exhibit 3-B. Looking upstream on Silver Creek on the Sorenson property within the requested stream flow section. This photo typifies some of the excellent riparian habitat found along portions of the stream. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.



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Wild rainbow trout caught in Silver Creek - circa 1925.

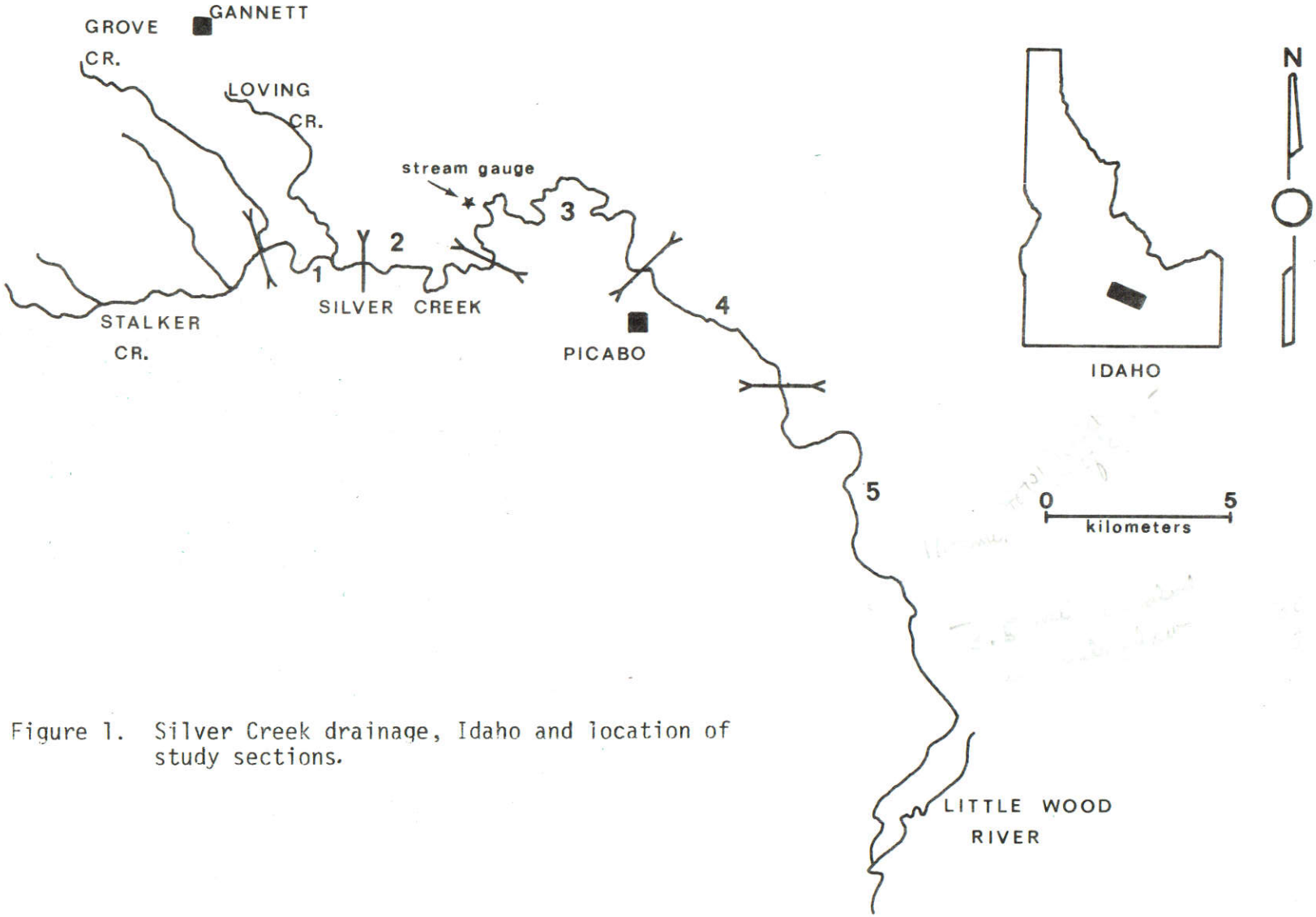


Figure 1. Silver Creek drainage, Idaho and location of study sections.

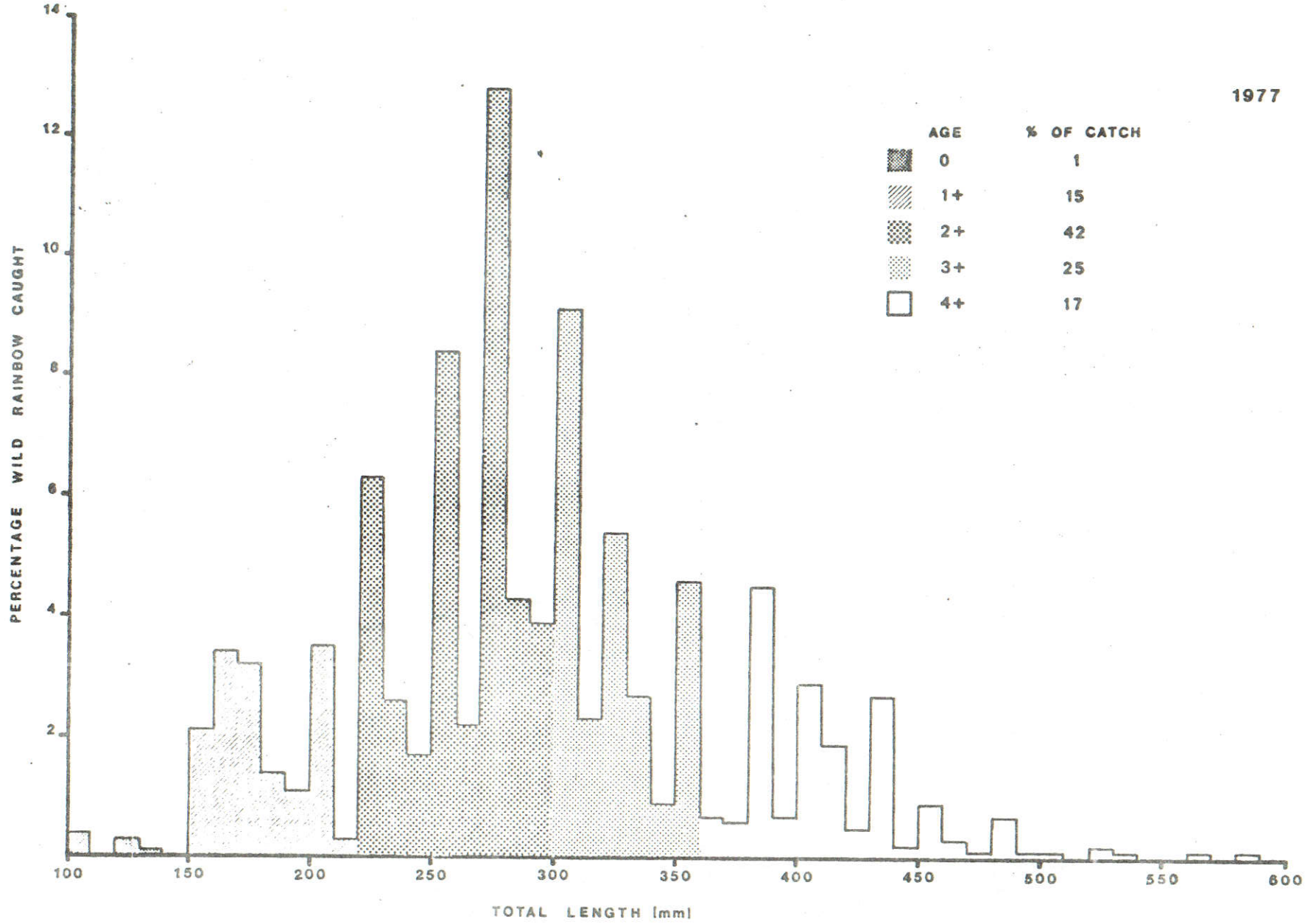


Figure 12. Length frequencies of wild rainbow trout captured by anglers in all sections of Silver Creek, 28 May to 30 November 1977 and the percentage of the catch in various age classes.



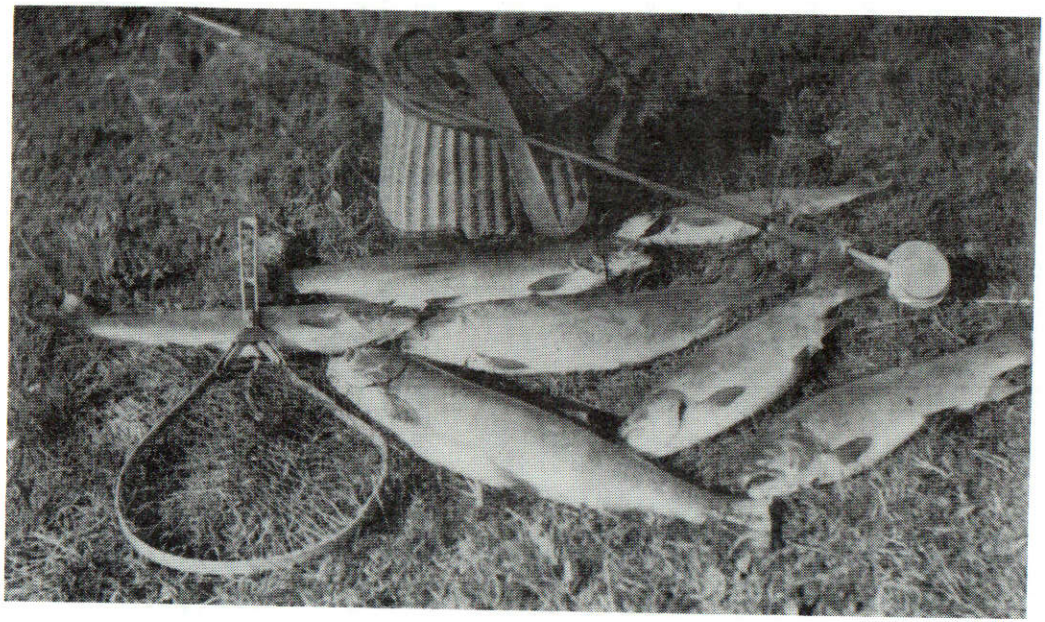
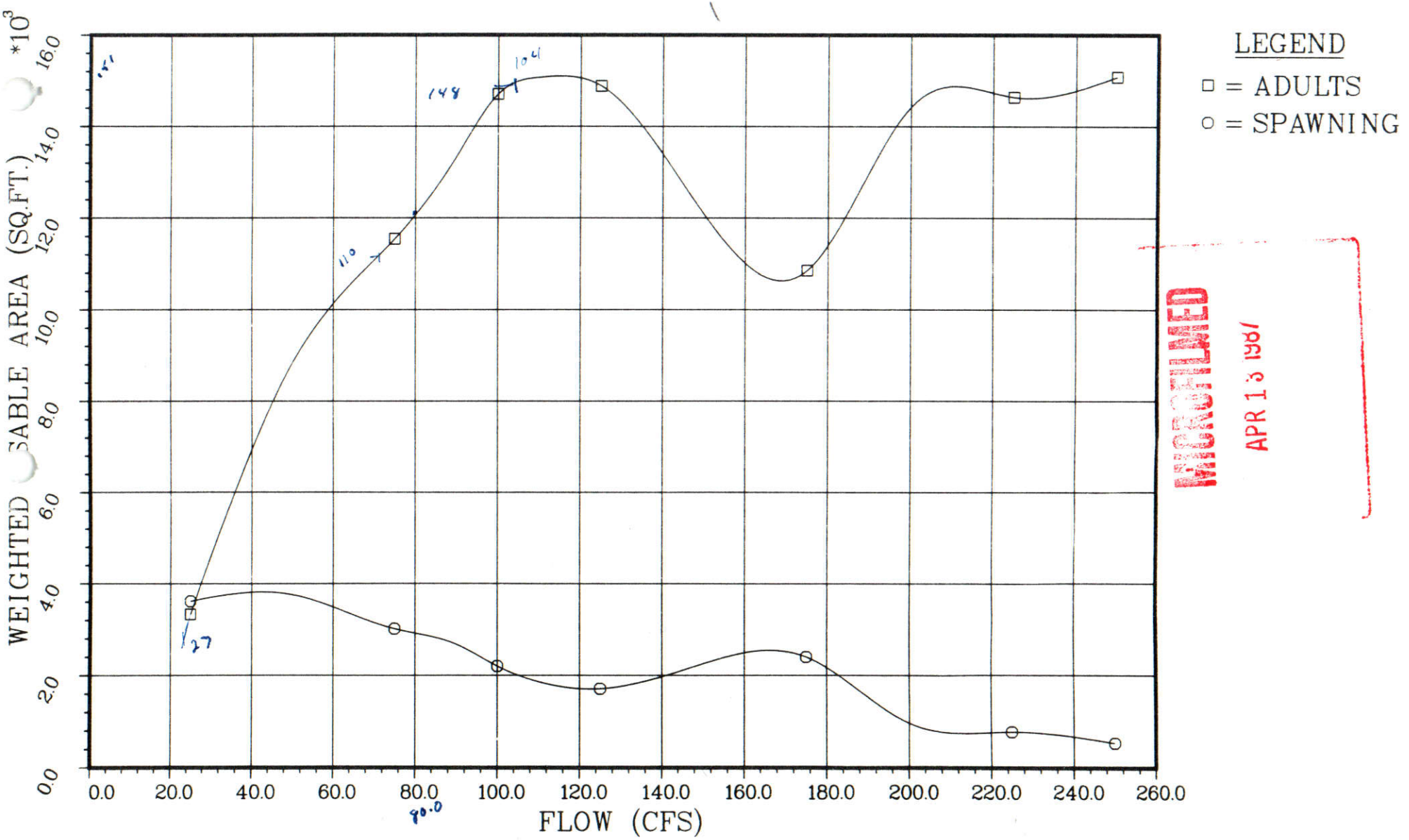


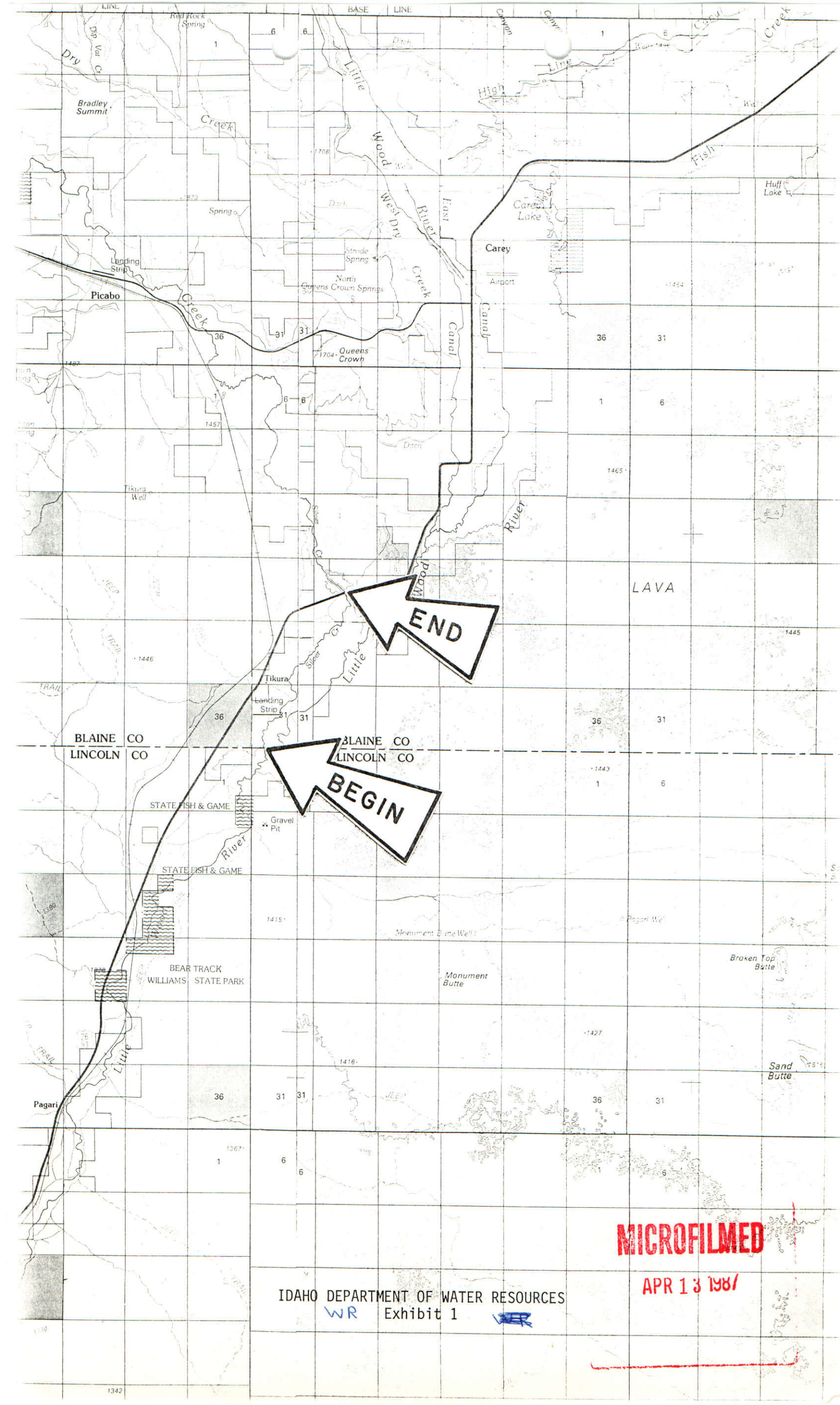
Figure 14. Photos of large rainbow trout captured in Silver Creek - circa 1925, from the collection of Mrs. Claude High.

F + G D
Illustrative purposes only.

IDAHO FISH AND GAME DEPARTMENT STREAM FLOW STUDY
SILVER CREEK AT SIMPLOT SC6
BROWN TROUT



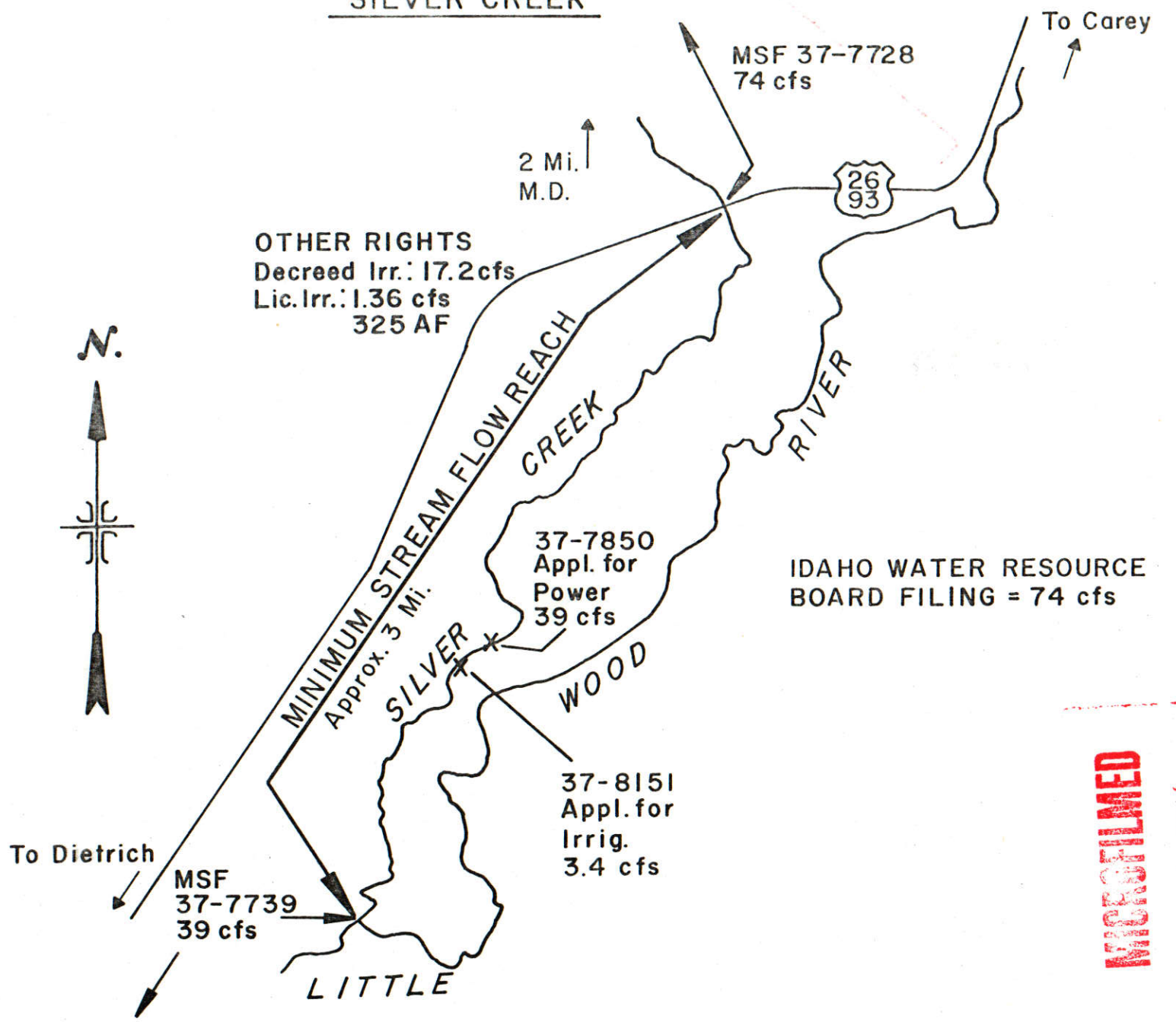
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IDAHO DEPARTMENT OF WATER RESOURCES
WR Exhibit 1

MSF 37-7849
SILVER CREEK



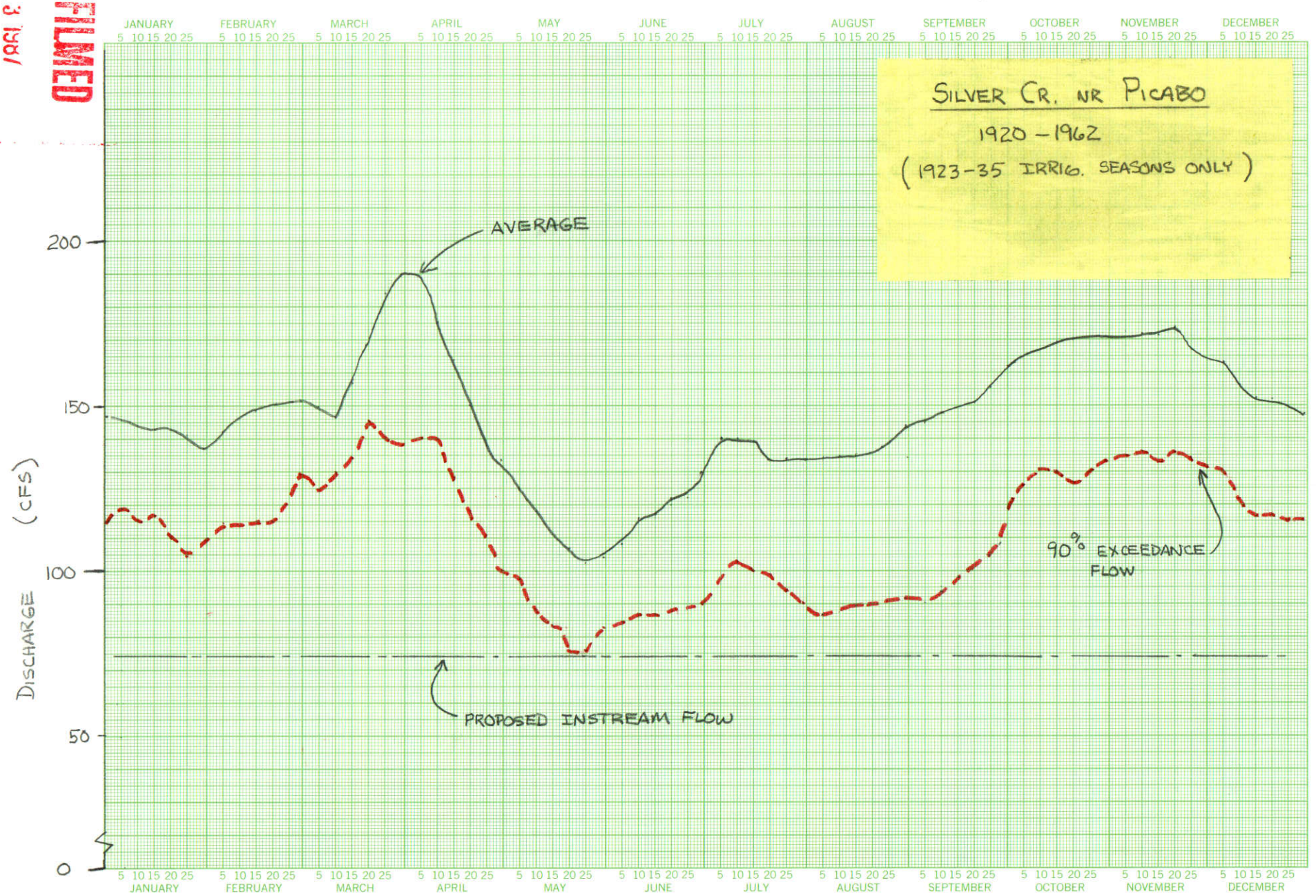
IDAHO DEPARTMENT OF WATER RESOURCES
Exhibit 2
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APR 13 1981

APR 13 1987
MICROFILMED

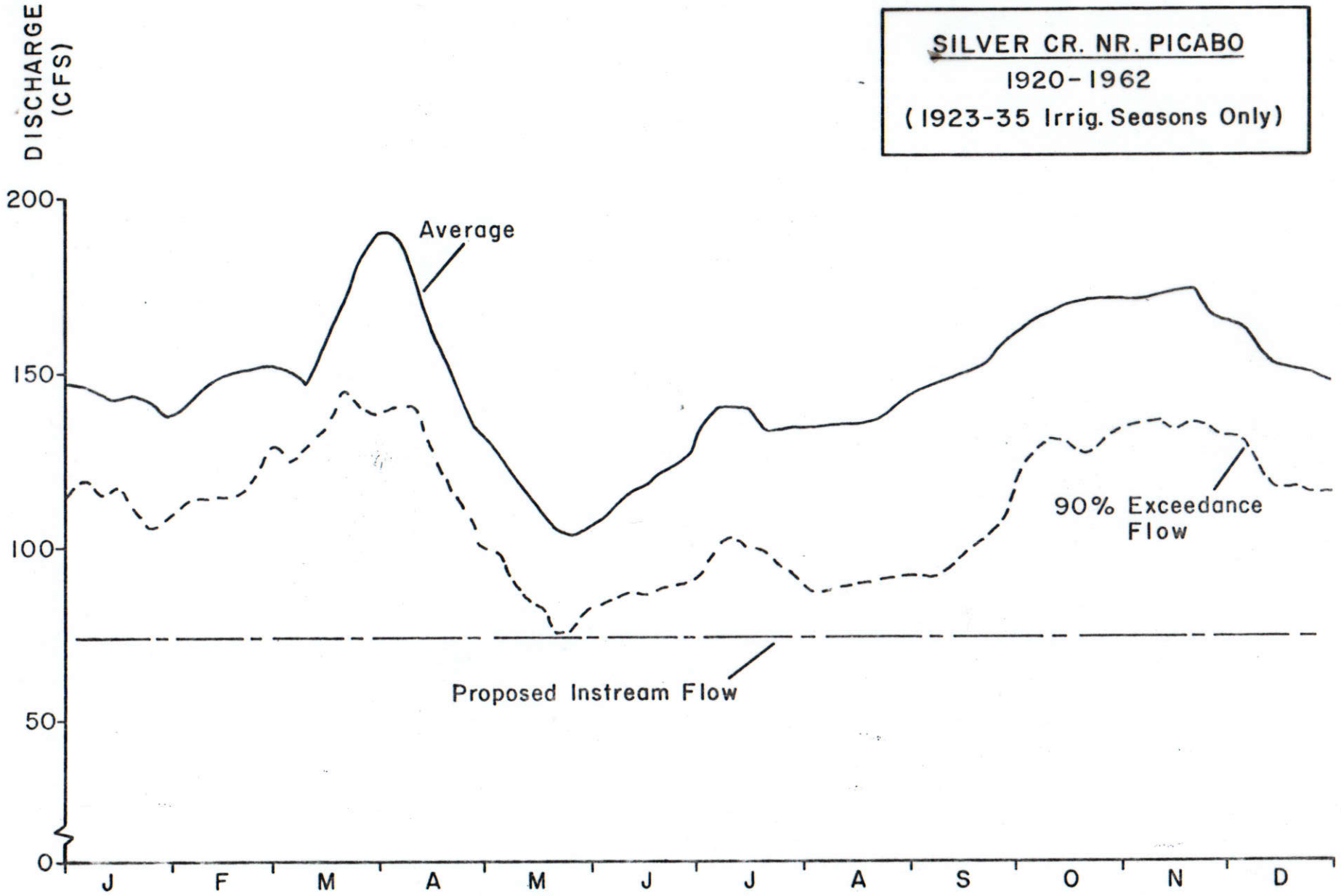
K+E 1 YEAR BY DAYS X 250 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

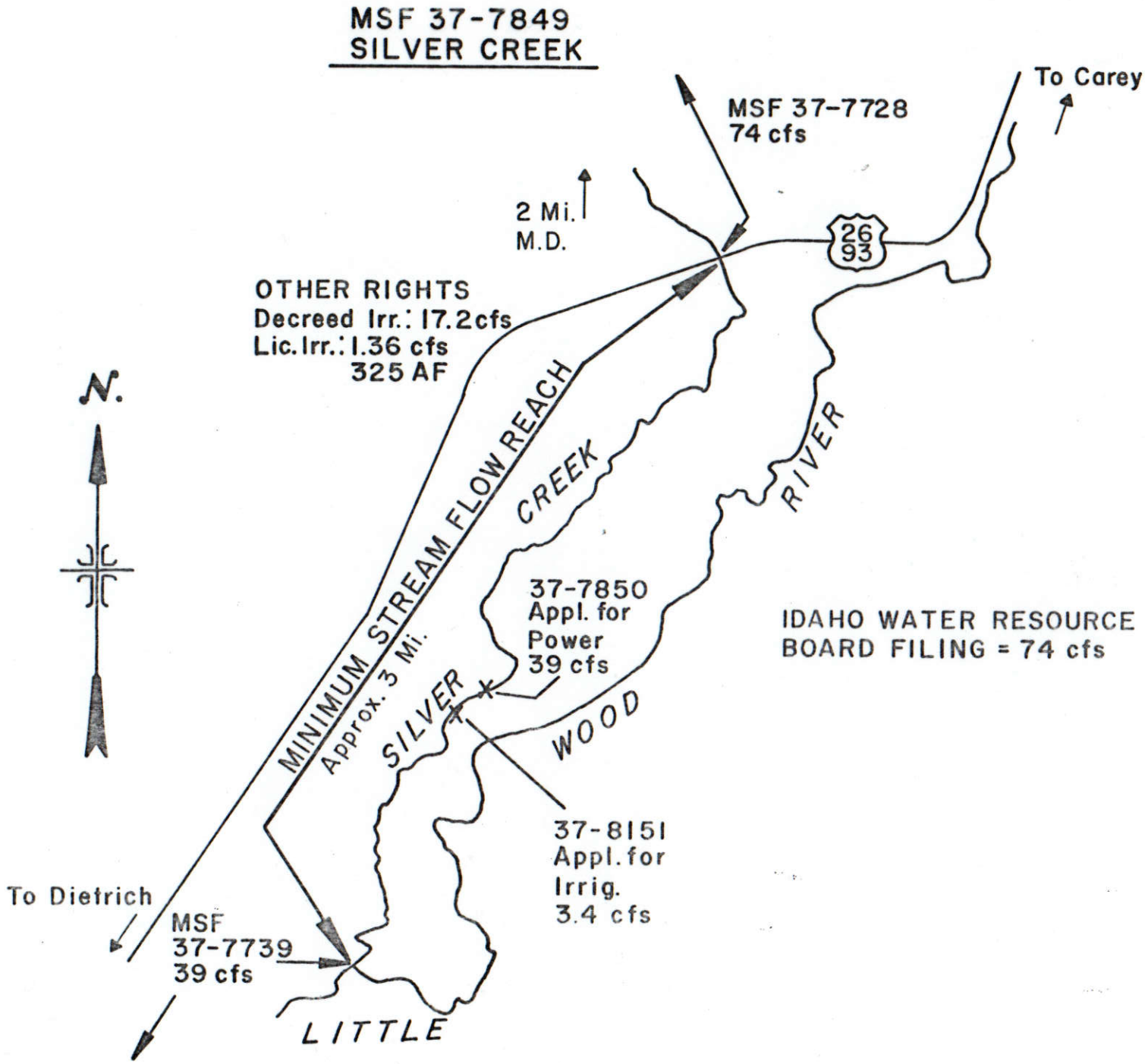
46 2890

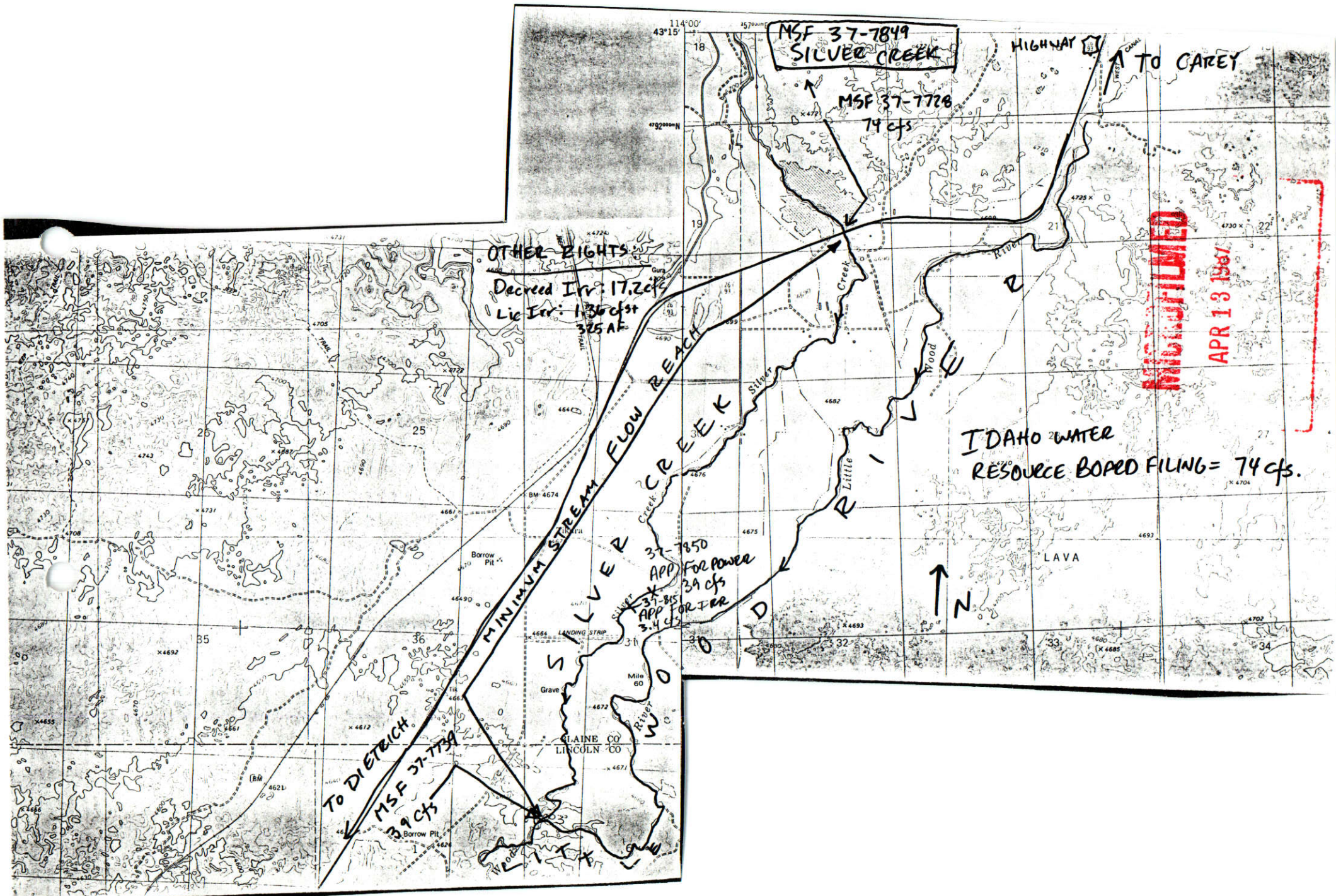
FIGURE 1. SUMMARY HYDROGRAPH DATA, SILVER CREEK



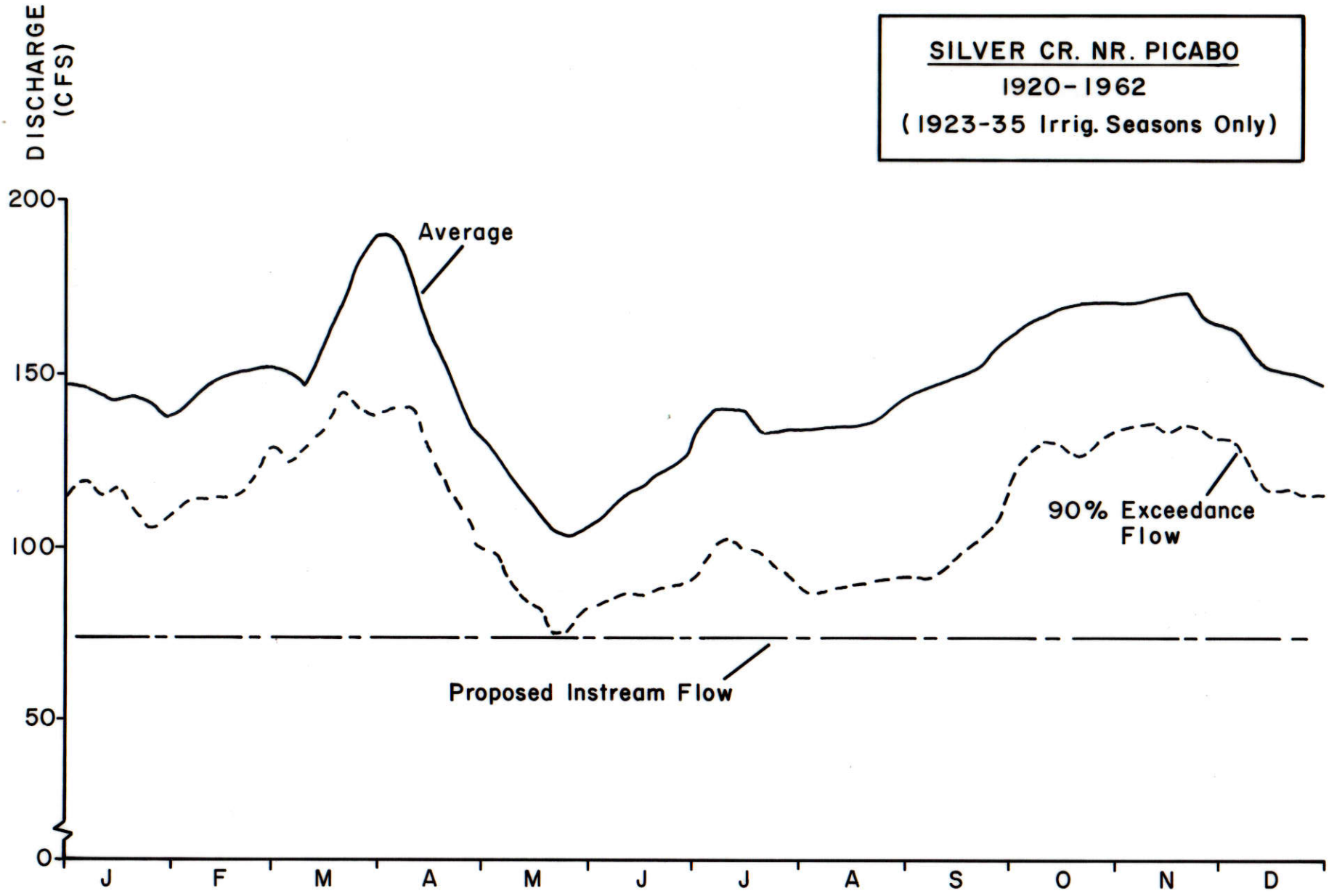
SUMMARY HYDROGRAPH DATA, SILVER CREEK

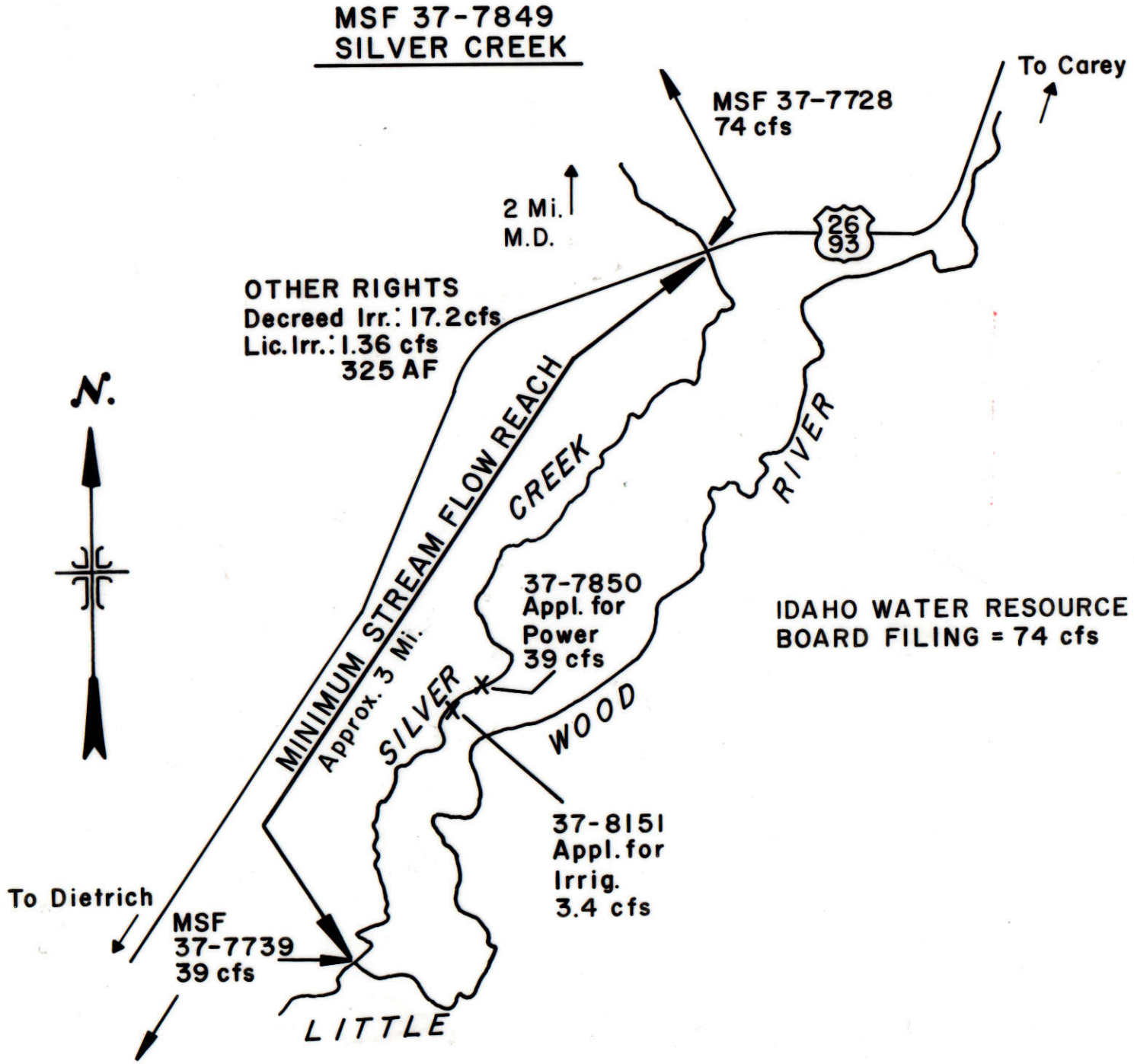



MSF 37-7849
SILVER CREEK
To Carey
MSF 37-7728
74 cfs
2 Mi.
M.D.
26
93
OTHER RIGHTS
Decreed Irr.: 17.2cfs
Lic. Irr.: 1.36 cfs
325 AF
N.
MINIMUM STREAM FLOW REACH
Approx. 3 Mi.
CREEK
RIVER
37-7850
Appl. for
Power
39 cfs
IDAHO WATER RESOURCE
BOARD FILING = 74 cfs
SILVER
WOOD
37-8151
Appl. for
Irrig.
3.4 cfs
To Dietrich
MSF
37-7739
39 cfs
LITTLE


MSF 37-7849
SILVER CREEK
MSF 37-7728
74 cfs
HIGHWAY
TO CAREY
OTHER RIGHTS:
Decreed Irr: 17.2 cfs
Lic Irr: 1.36 cfs
325 AF
MINIMUM STREAM FLOW REACH
SILVER CREEK
WOOD RIVER
Silver Creek
Little Wood River
Wood River
IDAHO WATER RESOURCE BOARD FILING = 74 cfs.
APR 13 1987
37-7850
APP FOR POWER
39 cfs
37-815
APP FOR IRR
3.4 cfs
To DIETRICH
MSF 37-7739
39 cfs
LAVA
CLAINE CO
LINCOLN CO
Borrow Pit
LANDING STRIP
Mile 60
BM 4674
BM 4621
N

SUMMARY HYDROGRAPH DATA, SILVER CREEK




MSF 37-7849
SILVER CREEK
To Carey
MSF 37-7728
74 cfs
2 Mi.
M.D.
26
93
OTHER RIGHTS
Decreed Irr.: 17.2cfs
Lic. Irr.: 1.36 cfs
325 AF
N.
MINIMUM STREAM FLOW REACH
Approx. 3 Mi.
SILVER CREEK
WOOD RIVER
37-7850
Appl. for
Power
39 cfs
IDAHO WATER RESOURCE
BOARD FILING = 74 cfs
37-8151
Appl. for
Irrig.
3.4 cfs
To Dietrich
MSF
37-7739
39 cfs
LITTLE

AFFIDAVIT OF PUBLICATION

State of Idaho, } SS.
County of Lincoln }

Melba Thorne, being first duly sworn, deposes and says that he is the printer (publisher) of the Lincoln County Journal, a newspaper published every week in Shoshone, Lincoln County, State of Idaho; that said newspaper has been continuously and uninteruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 15 day of September 1983, and the date of the last publication was on the 22 day of September, 1983.

Melba Thorne

Subscribed and sworn to before me this 22 day of September, 1983.
(SEAL)

Marylinn Hagen
NOTARY PUBLIC

LINCOLN COUNTY JOURNAL
Shoshone, Idaho

COST OF PUBLICATION

Number of Lines in Notice		
Number of Insertions		
Lines tabular at	315c	
24 Lines straight at	39 21c	9.36
24 Subsequent lines at	26 15c	6.24
TOTAL COST		15.60

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APR 13 1987

COPY OF NOTICE
(Paste Here)

Notice of Public Meeting
TITLE OF NOTICE

37-7849-37-7919
PLAINTIFF ATTORNEY

DEFENDANT

PLAINTIFF

BILL TO
Dept of Water Resources

NOTICE OF PUBLIC MEETING
APPLICATIONS FOR INSTREAM WTER RIGHTS
No. 37-7849 - 37-7919

Notice is hereby given that the Idaho Water Resource Board will conduct a public meeting on Thursday, September 22, 1983, at 7:30 p.m., in the Hailey High School, Fox Acre Road, Hailey, Idaho.

The meeting will be held to present information and receive public comment on applications for permit to appropriate water for instream flows in the Big Wood River between Ketchum and Bellevue and in Silver Creek between Highway 93 and the confluence with Little Wood River.

PUB: 9-15, 22

PUBLICATION RATES
(Idaho Code, Rev. Statutes 1971)

7 pt. per line, straight	21c
7 pt. per line, tabular	315c
7 pt. per line, successive insertions	15c

RECEIVED
No. 2347
SEP 26 1983
Department of Water Resources
Southern District Office

AFFIDAVIT of PUBLICATION

State of Idaho, } SS.
County of Blaine }

GORDON O. GLASMANN, being first duly sworn, deposes and says that he is the printer (publisher) of the Wood River Journal, a newspaper published every week in Hailey, County of Blaine, State of Idaho; that said newspaper has been continuously and uninterruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 15 day of September 1983, and the date of the last publication was on the 22 day of September, 1983.

Subscribed and sworn to before me this _____ day of _____, 19____.
(SEAL)

NOTARY PUBLIC

WOOD RIVER JOURNAL
Hailey, Idaho

COST OF PUBLICATION

Numer of Picas per Line 13
Number of Lines in Notice 21
Number of Insertions 2

_____ Lines tabular at _____ 4¢ / Pica
21 Lines straight at 8.19 3¢ / Pica
21 Subsequent lines at 5.46 2¢ / Pica
TOTAL COST 13.65

MICROFILMED
APR 13 1987

COPY OF NOTICE
(Paste Here)

Instream Water Rights - No 37-7849-37-7919
TITLE OF NOTICE
PLAINTIFF ATTORNEY

DEFENDANT

PLAINTIFF

Dept of Water Resources
1041 Blue Lake Blvd N, TF
BILLING

NOTICE OF PUBLIC MEETING APPLICATIONS FOR INSTREAM WATER RIGHTS No. 37-7849 - 37-7919

NOTICE IS HEREBY GIVEN, That the Idaho Water Resource Board will conduct a public meeting on Thursday, September 22, 1983, at 7:30 p.m., at Wood River High School, Fox Acre Road, Hailey, Idaho.

The meeting will be held to present information and receive public comment on applications for permit to appropriate water for instream flows in the Big Wood River between Ketchum and Bellevue and in Silver Creek between Highway 93 and the confluence with Little Wood River.

Publish: Wood River Journal--September 15 & 22, 1983.

PUBLICATION RATES
(Idaho Code, Rev. Statutes 1980)

7-8 pt. per line, straight	3¢ / Pica
7-8 pt. per line, tabluer	4¢ / Pica
7-8 pt. per line successive insertions	2¢ / Pica

RECEIVED
No. SEP 26 2128 1983
Department of Water Resources
Southern District Office

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 37-07849

Priority: August 26, 1980 **Minimum Stream Flow:** 74.00 CFS

This is to certify, that STATE OF IDAHO
IDAHO WATER RESOURCE BOARD
STATEHOUSE
BOISE ID 83720 has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated August 26, 1980; and has submitted Proof of Beneficial Use on November 14, 1991. A minimum stream flow for:

SILVER CREEK tributary to **LITTLE WOOD RIVER**

has been established as follows:

BENEFICIAL USE	PERIOD OF USE	MINIMUM STREAM FLOW
MINIMUM INSTREAM FLOW	01/01 to 12/31	74.00 CFS

LOCATION OF MINIMUM STREAM FLOW REACH:

Beginning of Stream Flow Reach NWSE , Sec. 20, Township 02S, Range 21E
End of Stream Flow Reach Lot 5(SWNW), Sec. 6, Township 03S, Range 21E
BLAINE County

CONDITIONS OF APPROVAL AND REMARKS

1. This right is subject to all prior water rights.
2. Use of water under this right shall be non-consumptive.
3. Use of water under this right is subject to control by the watermaster of State Water District No. 37M.
4. This minimum streamflow shall be considered in the evaluation of applications for permit to appropriate waters from Silver Creek and tributaries filed after 8/26/80.
5. Pending a general readjudication of the Silver Creek stream system, the use of water under this right shall recognize and allow the continued beneficial diversion, both within and upstream from the minimum flow reach, of water for irrigation and other purposes under any existing water right established by diversion and application to a beneficial use or by application, permit or license on file or issued by the Director under the provisions of Chapter 2, Title 42, Idaho Code, with a priority of water right date earlier than the August 26, 1980 priority date of this right.

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APR 1 0 1997

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 37-07849

CONDITIONS OF APPROVAL AND REMARKS

6. The Director retains jurisdiction to review and amend any and all parameters of this right. Prior to undertaking a review of the water right, the Director shall identify the reasons for exercising retained jurisdiction under this condition, and give notice thereof to the public generally and to specific persons or parties known by the Director to be interested. The Director shall thereafter conduct a hearing for the purpose of determining whether the minimum stream flow should be modified or amended in the public interest. The burden of proof at the hearing shall be upon the person or party seeking to establish that a particular parameter of the water right should be modified or amended to satisfy the public interest. Review of the water right under this condition may not occur prior to 15 years after issuance of the license.
7. Upon the future finding and order of the Director that gauging stations are required to maintain the approved minimum flow on Silver Creek, such measuring devices shall be permanently installed and maintained as specified by the Department.
8. This minimum stream flow is for maintaining wild trout rearing, spawning, and migration.
9. This minimum stream flow reach begins at the point where Silver Creek crosses Highway 93 in the NWSE, S20, T2S, R21E and ends at the confluence with the Little Wood River in Lot 5, S6, T3S, R21E.

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 3rd day of April, 1992.

KARL J. DREHER, Director

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APR 10 1997

Form 217
07/90

For Office Use Only
Amt. of Fee $_____
Date _____
Receipt No. _____
Received by _____

RECEIVED
NOV 14 1991
Department of Water Resources

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

PROOF OF BENEFICIAL USE

The Idaho Department of Water Resources will consider this form as 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 or a completed field examination report prepared by a certified water right examiner who has been appointed by the department.

1. Permit No. 37-07849 Telephone No. 327-7900

2. Name(s) of Permit Holder(s): Idaho Water Resource Board

3. Post Office Address: 1301 N. Orchard, Boise, ID 83706

4. Source of Water: Silver Creek

   a. If ground water, well driller's name: _____ Date drilled: _____

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

5. Extent of Use:

   Domestic _____ (No. of households) Irrigation _____ (No. of acres)

   Stockwater _____ (No. and type of stock) Other Minimum streamflow to maintain wild trout rearing, spawning and migration.

6. Total rate and/or volume for which proof is submitted 74 cfs _____ 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: $ _____ (See License Examination Fee Schedule)

9. Person to contact to accompany the Department representative during the field examination:

   Frank Sherman — Name
   327-7900 — Telephone No.

   1301 N. Orchard, Boise, ID 83706 — Address

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DEC 10 1991

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.

11/14/91
Date

F. Dan Eskelsen Chair I.W.R.B.
Signature (and title if on behalf of a company or organization)

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-7849 TO ESTABLISH A MINIMUM STREAMFLOW IN SILVER CREEK IN THE NAME OF THE IDAHO WATER RESOURCE BOARD) CERTIFICATE OF MAILING

I HEREBY CERTIFY That on this the 16th day of January, 1987, true and correct copies of the foregoing MEMORANDUM DECISION AND ORDER were mailed, postage prepaid to:

Gene Gray, Chairman
Idaho Water Resource Board
Route #1, P.O. Box 46-A
Payette, ID 83661

Mr. Joe Sorenson
SAM Airport, Inc.
Twin Falls, ID 83330

Tim Cochnauer
Idaho Department of Fish and Game
2320 Government Way
Coeur d'Alene, ID 83814

Paul Volcare
Idaho Department of Fish and Game
P.O. Box 662
Picabo, ID 83348

Steve Goddard
Idaho Department of Fish and Game
Statehouse Mail
Boise, ID 83720

Loren Strode
Carey, ID 83320

Reid Newby
Water District 37
P.O. Box H
Shoshone, ID 83352

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APR 13 1987

JANE FOX
Receptionist/Typist
Idaho Department of Water Resources

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-7849 TO ESTABLISH A MINIMUM STREAM-FLOW IN SILVER CREEK IN THE NAME OF THE IDAHO WATER RESOURCE BOARD	MEMORANDUM DECISION AND ORDER

On August 26, 1980, the Idaho Water Resource Board (Board) filed with the Idaho Department of Water Resources (Department) an application for permit to preserve a minimum flow in Silver Creek, tributary to the Little Wood River, in Blaine County. The application was filed by the Board at the request of the Idaho Department of Fish and Game (Fish & Game) in accordance with the provisions of Chapter 15, Title 42, Idaho Code.

A public meeting was held by the Board on September 22, 1983, in Hailey, Idaho, for the purpose of determining local public interest with respect to said application. On October 7, 1983, the Board adopted a resolution requesting the Director of the Department to proceed with administrative action on the application.

Notice describing the proposed appropriation and setting the time and place for the required hearing was published in the Wood River Journal on October 20 and 27, 1983. A public hearing was held at Hailey, Idaho on November 10, 1983.

Parties appearing in a formal capacity included members of the Board; representatives of the Idaho Department of Fish and Game; Mr. Joe Sorenson; and Mr. Loren Strode. The Watermaster of Water

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APR 13 1987

District 37-M (Little Wood River and tributaries), Mr. Reid Newby, presented information as a public witness.

On June 21, 1984, a Proposed Memorandum Decision and Order was rendered by the hearing officer, and the proposed decision was mailed to the parties on June 27, 1984.

Exceptions to the Proposed Memorandum Decision and Order were filed by Fish and Game on July 12, 1984, objected to portions of the Proposed Memorandum Decision and Order: (1) Finding of Fact No. 9 which states that the minimum streamflow is "generally capable of being maintained;" (2) Conclusion of Law No. 2 and Condition No. 6 of the Order which state that the minimum streamflow is subject to establish beneficial use rights; and (3) Condition No. 7 of the Order which provides for review of the Department of Water Resources after ten (10) years of the issuance of the permit, or upon petition of greater than 50% of the registered voters in the Silver Creek Basin.

Based upon sworn testimony, documentation and statements included in the record, and after consideration of the exceptions filed by Fish and Game, the Director of the Department makes the following Findings of Fact, Conclusions of Law, and Order.

FINDINGS OF FACT

1. On August 26, 1980, the Board filed Application for Permit No. 37-7849 to appropriate a minimum streamflow in Silver Creek, which is tributary to the Little Wood River, Blaine County, pursuant to the provisions of Chapter 15, Title 42, Idaho Code.

2. Application for Permit No. 37-7849 proposes to appropriate a minimum streamflow in Silver Creek from the point where it crosses Highway 93 in the NW1/4 SE1/4, Section 2, [illegible] South, Range 21

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APR 1 5 1987

East, B.M., downstream to the confluence with the Little Wood River in Lot 5, Section 6, Township 3 South, Range 21 East, B.M. This reach is located directly downstream and adjacent to the minimum streamflow reach on Silver Creek described in Permit No. 37-7728, and is located directly upstream and adjacent to the minimum stream streamflow reach on the Little Wood River described in Permit No. 37-7739. The proposed rate of flow is 74 cubic feet per second.

3. The purpose of the proposed instream appropriation is to maintain wild trout rearing, spawning and migration within the reach defined above.

4. Based upon the testimony of the staff of the Department, a finding is made that various water rights evidenced by licenses, permits, and decrees exist with points of diversion located within the designated minimum streamflow reach. The testimony of the Board specifically provided that the minimum streamflow application is not intended to interfere with any vested water right, permit or water right application. No recorded beneficial use water rights identify any points of diversion within this minimum streamflow reach; however, there are recorded beneficial use rights with points of diversion upstream on Silver Creek.

5. The minimum streamflow reach defined in Application for Permit No. 37-7849 is located within State Water District No. 37-M, Little Wood River and tributaries.

6. All rights acquired under Application for Permit No. 37-7849 are for instream non-consumptive uses.

7. Based upon the sworn testimony, documentation, and statements comprising the record in this matter, a finding is made that

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APR 13 1987

the minimum streamflow application is necessary to maintain trout spawning and rearing.

8. Based upon testimony presented at the hearing, a finding is made that the benefits to be derived from the minimum streamflow application will be enjoyed by members of the public as opposed to being limited to private use or enjoyment.

9. Based upon testimony and evidence submitted by the Idaho Department of Fish and Game, a finding is made that the flow requested in the application is the minimum flow required to preserve the existing unique characteristics of the stream for the public benefits and is not the ideal or most desirable flow which could be utilized for that purpose.

10. Based upon testimony and evidence submitted concerning available flow measurement data, a finding is made that the flow requested is generally capable of being maintained.

ANALYSIS

There are three primary items of contention with respect to this minimum streamflow application: (1) The adequacy of records to show that the flows are capable of being maintained; (2) The subordination of the minimum streamflow to valid upstream beneficial use rights; and (3) The conditioning of the permit authorizing the Director to review the minimum streamflow right after a term of years to determine if the continuation of the right would serve the public interest.

Adequacy of Flow Records

Although there is a long-term flow record for a measurement station located about two miles upstream from the reach [illegible] period

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of record for that station ended in 1962. A suggestion was raised at the hearing that flow data from that station may not be acceptable because flows in Silver Creek may have decreased in recent years due to changes in irrigation practices in the recharge areas tributary to Silver Creek.

At least one recent study has concluded that flows in Silver Creek have declined because many irrigation systems in the Bellevue area have converted from flood to sprinkler, resulting in the decrease of diversion rates from the Big Wood River and a corresponding reduction in the excess flows which have historically recharged Silver Creek. However, an inspection of Silver Creek flow records collected since 1962 does not yet show a measurable trend in this direction. Based on recent flow records available on Silver Creek, the Department concludes that if the data from the measurement station located two miles upstream from the reach were to be extended for twenty years beyond 1962, no significant change in flows would be identifiable.

A comparison of flows in Silver Creek with recorded diversions within and above the minimum streamflow reach indicates that the 74 cubic feet per second flow requested is often not available in the reach during the summer months, but on a year-round basis the flow is found to be capable of being maintained most of the time.

Subordination

The second item of contention questions the impact of the minimum streamflow water right on delivery of upstream claimed water rights. Pursuant to Section 42-607, Idaho Code, the watermaster of a water district is charged with the responsibility to insure that all

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APR 10 1981

decreed, permit or licensed water rights should be delivered prior to claimed or unrecorded beneficial use water rights. The unappropriated water from which a minimum streamflow is to be appropriated is defined in Section 42-1502(g), Idaho Code, however, as "water which is not subject to diversion and application to beneficial use or by application, permit or license . . .." A minimum streamflow is subject to valid prior rights established by diversion and application to beneficial use. Furthermore, the delivery practices of Water District 37-M in delivering the prior rights established by diversion and application to beneficial use should not be altered.

Retained Jurisdiction For Re-evaluation

Public interest is a dynamic factor subject to change as the needs and desires of the people in an area and throughout Idaho evolve. A perpetual commitment of a significant amount of water from a stream or river system to a use without a workable method of changing the terms of that use could at some future time adversely affect the public interest. Approval of a minimum stream flow should provide for a periodic review of the continued public interest.

Change in the public interest, which may occur, cannot be immediately foreseen, but the imposition of a reasonable period of years after which the public interest may again be assessed will provide for necessary change if needed. The provision contained in the proposed Memorandum Decision and Order providing for review upon petition of a majority of registered voters within the Silver Creek Drainage has been deleted. However, the goal of that provision is accomplished by providing that after a reasonable time period has expired, the public interest may be re-evaluated. A review of the

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APR 13 1987

minimum streamflow not prior to fifteen (15) years will allow proper assessment of shifting public interest.

CONCLUSIONS OF LAW

1. The proposed minimum streamflow appropriation will not interfere with any vested water right, permit, or right under an application having a priority date earlier than August 26, 1980. An exception is to the application of Section 42-607, Idaho Code, which requires the watermaster to distribute water only to decreed permitted or licensed rights in times of scarcity. Distribution of water to prior existing water rights established by diversion and application to a beneficial use may be interfered with in contravention of Section 42-1503, Idaho Code, if delivery of water to the minimum streamflow right is not subordinated to such rights.

2. The proposed minimum stream flow should not be allowed to alter historic delivery practices to valid beneficial use water rights in Water District 37-M, Little Wood River.

3. The proposed minimum stream flow appropriation is in the public, as opposed to the private interest.

4. The proposed minimum streamflow appropriation is necessary to maintain trout spawning, rearing, and habitat.

5. The proposed minimum streamflow appropriation is the minimum flow required for the purpose cited in Conclusion of Law No. 4 and is not the ideal or most desirable flow.

6. The proposed minimum streamflow appropriation is usually capable of being maintained.

ORDER

IT IS, THEREFORE, HEREBY ORDERED that Application for Permit No.

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APR 15 1987

37-7849 is APPROVED subject to the following conditions:

1. The use of water under this permit is subject to all prior rights.

2. This minimum streamflow permit shall be considered in the evaluation of applications for permit to appropriate waters from Silver Creek and tributaries filed after August 26, 1980.

3. Pending a general readjudication of the Silver Creek stream system, the use of water under this permit shall recognize and allow the continued beneficial diversion, both within and upstream from the minimum flow reach, of water for irrigation and other purposes under any prior existing water right established by diversion and application to a beneficial use or by application, permit or license on file or issued by the Director under the provisions of Chapter 2, Title 42, Idaho Code, with a priority of water right date earlier than the August 26, 1980 priority date of this permit. See I.C. § 42-1502(g) (Supp. 1986).

4. The minimum streamflow approved under this application is subject to control by the watermaster of Water District 37-M, Little Wood River and tributaries.

5. The use of water under this permit shall be non-consumptive.

6. Upon the future finding and order of the Director that gauging stations are required to maintain the approved minimum flow on Silver Creek, such measuring devices shall be permanently installed and maintained as specified by the Department.

7. Proof of instream beneficial use of the minimum stream flow appropriated shall be submitted in a manner approved by the Department within five years after the permit approval is finally effective

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APR 1 0 1987

as herein provided. The proof submitted shall include at least three years of flow data for the water course. The proposed frequency of the data accumulation must be submitted to the Director for review and approval.

8. The Director retains jurisdiction to review and amend any and all parameters of this permit and subsequent license. Prior to undertaking a review of the water right, the Director shall identify the reasons for exercising retained jurisdiction under this condition, and give notice thereof to the public generally and to specific persons or parties known by the Director to be interested. The Director shall thereafter conduct a hearing for the purpose of determining whether the minimum streamflow should be modified or amended in the public interest. The burden of proof at the hearing shall be upon the person or party seeking to establish that a particular parameter of the water right should be modified or amended to satisfy the public interest. Review of the water right under this condition may not occur prior to 15 years after issuance of either the permit or the license.

9. The application hereby approved by the Director shall be submitted to the Idaho Legislature by the fifth day of the next regular legislative session, and the Director's approval shall not become finally effective until approved by the Legislature pursuant to the procedure provided by Section 42-1503, Idaho Code.

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APR 15 1987

10. Proof of application of water to beneficial use shall be on or before January 1, 1992.

DATED this 16th day of January, 1987.

A. KENNETH DUNN

Director

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APR 13 1987

Form 202
3/78

Ident. No. 37-7849

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

RECEIVED
AUG 26 1980
Department of Water Resources
Southern District Office

1. Name of applicant Idaho Water Resource Board Phone 334-4440

   Post office address Statehouse, Boise, Idaho

2. Source of water supply Silver Creek which is a tributary of Little Wood River

3. Location of Reach: The reach of Silver Creek from the point where it crosses Highway 93 in (NW¼SE¼, Sec. 20, T2S, R21E) downstream to the confluence of Silver Creek and the Little Wood River in Lot 5, Sec. 6, T3S, R21E. BM.

4. Water will be used for the following purposes:

   Amount 74cfs (cfs or acre-feet per annum) for Instream Flow purposes from 01-01 to 12-31 (both dates inclusive)

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

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

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

5. Total quantity to be appropriated:

   a. _____ cubic feet per second and/or b. _____ acre-feet per annum.

6. Proposed diverting works:

   a. Description of ditches, flumes, pumps, headgates, etc. None-(Instream flow)

   b. Height of storage dam _____ feet, active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet, materials used in storage dam: _____

      Period of year when water will be diverted to storage _____ (Month/Day) to _____ (Month/Day) inclusive.

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

7. Time required for the completion of the works and application of the water to the proposed beneficial use is _____ years *(minimum 1 year – maximum 5 years).*

8. Description of proposed uses:
   a. If water is **not** for irrigation:
      (1) Give the place of use of water: Same as reach described in item 3.

      Range _____ B.M.

      (2) Amount of power to be generated: _____ horsepower under _____ feet of head.

      (3) List number of each kind of livestock to be watered _____

      (4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____.

      (5) If water is to be used for other purposes describe: To maintain wild trout rearing, spawning, and migration within the describ[illegible]

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APR 13 1987

b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below:

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

Total number of acres to be irrigated _____

c. Describe any other water rights used for the same purposes as described above. None

9. a. Who owns the property at the point of diversion N.A.

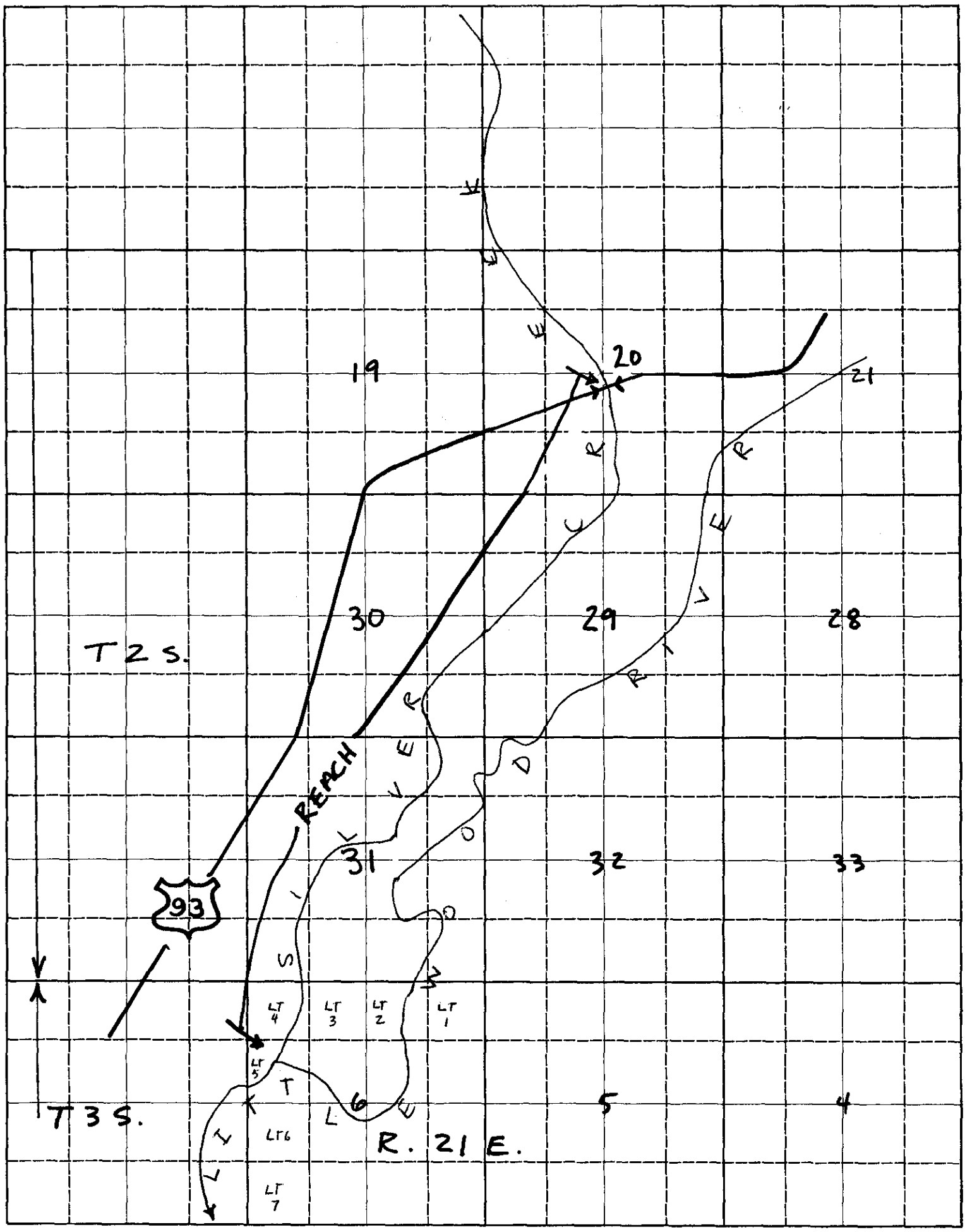
b. Who owns the land to be irrigated or place of use N.A.

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing _____

10. Remarks See atached sheet.

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APR 13 1987

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



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.

MICROFILMED
APR 13 1987

(Applicant)

Received by LH Date 8-26-80 Time 3:30 PM

Preliminary check by [illegible] Fee $ _____

Receipted by _____ Date _____

Publication prepared by _____ Date _____

Published in _____

Publication dates _____

Publication approved _____ Date _____

Protests filed by: _____

_____

_____

Copies of protests forwarded by _____

Hearing held by _____ Date _____

Recommended for approval denial by _____

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. 37-7849, and said application is hereby Approved.

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 January 1, 1992.

   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. Other: PURSUANT TO MEMORANDUM DECISION AND ORDER.

Witness my hand this 16th day of January, 1987.

Director

MICROFILMED
APR 13 1987

BEFORE THE DIRECTOR OF THE DEPARTMENT

OF WATER RESOURCES OF THE

STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-7849 TO ESTABLISH A MINIMUM STREAM FLOW IN SILVER CREEK IN THE NAME OF THE IDAHO WATER RESOURCE BOARD	ORDER ISSUING PROPOSED DECISION

A. Kenneth Dunn, Director of the Department of Water Resources, having reviewed the attached proposed decision prepared by his appointee, Norman C. Young, who conducted the hearing or who has read the record in this case, hereby approves the same as a proposal for decision pursuant to Idaho Code, § 67-5211 and orders that said proposed decision and a copy of this order be served upon each of the parties to these proceedings who appeared at the hearing on November 10, 1983, of this matter or upon their attorneys in accordance with Rule 7.3 of the Rules of Practice and Procedure of this Department.

Each party to these proceedings who appeared at the hearing is hereby afforded the opportunity, pursuant to Idaho Code §§ 42-1701A and 67-5211, to file exceptions to the attached proposed decision and to present briefs and oral agruments in accordance with the provisions of this order. Exceptions may not be filed and briefs and oral agruments may not be presented by parties who did not appear at the hearing of this case. If no timely and proper exceptions are received, an order by the Director will be entered adopting and issuing the proposed decision as his final decision.

I.
EXCEPTIONS

A. To be considered by the Director, exceptions must:

1. be received by the Director on or before the 15th day following the day of service of this Order and the proposed decision,

2. specifically identify the portions of the proposed decision to which exceptions are made and specifically state the grounds for those exceptions, and

3. be sent to each of the parties who appeared or their attorneys.

B. Exceptions not in compliance with the above stated requirements will not be considered and will be deemed an acceptance of the propose decision.

II.
BRIEFS

A. Any briefs in support of exceptions to the proposed decision shall be filed with the Director at the same time that party's exceptions are filed with the Director.

B. Any party desiring to file a brief in response to any exceptions filed by any other party may do so by filing such brief with the Director on or before the 15th day following the last day any exceptions by any other party were served upon that party desiring to respond.

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III.
ORAL ARGUMENTS

A. No oral arguments before the Director on the proposed decision will be held unless specifically requested by a party filing exceptions to the proposed decision and unless that request is filed with the Director concurrently with the filing of that party's exceptions.

B. If oral agruments have been properly requested by a party filing exceptions, any other party, upon reasonable notice to the Director, shall have the right to present oral arguments in response to the exceptions filed.

C. Oral arguments before the Director on exceptions to the proposal for decision shall be heard at the discretion of the Director, pursuant to Idaho Code, § 42-1701A. After all exceptions, briefs and requests for oral arguments have been received, the Director will decide whether to hear oral agruments. If oral arguments are to be heard, the Director will, within a reasonable time, set the case for oral agruments and notify each party of the place, date and hour the oral agruments will take place and of the period of time allocated for the arguments of this case. Unless the Director orders otherwise, all oral agruments shall be heard in Boise, Idaho.

IV.
CERTIFICATION OF SERVICE

A. All exceptions, briefs, requests for oral arguments and other matters filed with the Director in connection with the proposed decision shall be served on all other parties to these proceedings in accordance with Rule 7.2.

V.
FINAL DECISION

A. Following the submission of all exceptions and briefs and oral agruments, if they are heard, the Director shall issue a final decision adopting, modifying or rejecting and replacing the proposed decision. Copies of the decision and order shall be served on all parties.

Dated this 27th day of June, 1984.

A. KENNETH DUNN
Director
Department of Water Resources

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BEFORE THE DIRECTOR OF THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-7849 TO ESTABLISH A MINIMUM STREAM FLOW IN SILVER CREEK IN THE NAME OF THE IDAHO WATER RESOURCE BOARD	PROPOSED MEMORANDUM DECISION AND ORDER

On August 26, 1980, the Idaho Water Resource Board (hereafter Board) filed with the Idaho Department of Water Resources (hereafter Department) for an application for permit to preserve a minimum flow in Silver Creek, tributary to the Little Wood River, in Blaine County. The application was filed by the Board at the request of the Idaho Department of Fish and Game in accordance with the provisions of Chapter 15, Title 42, Idaho Code.

A public meeting was held by the Board on September 22, 1983, in Hailey, Idaho, for the purpose of determining local public interest with respect to said application. On October 7, 1983, the Board adopted a resolution requesting the Director of the Department to proceed with administrative action on the application.

Notice describing the proposed appropriation and setting the time and place for the required hearing was published in the Wood River Journal on October 20 and 27, 1983. A public hearing was held at Hailey, Idaho on November 10, 1983.

Parties appearing in a formal capacity included members of the Board; representatives of the Idaho Department of Fish and Game; Mr. Joe Sorenson; and Mr. Loren Strode. The Watermaster of Water District 37-M (Little Wood River and tributaries), Mr. Reid Newby, presented information as a public witness.

Based upon sworn testimony, documentation and statements included in the record, and his understanding of the law, the Hearing Officer as a representative of the Director of the Department proposes the following Findings of Fact, Conclusions of Law, and Order.

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FINDINGS OF FACT

1) On August 26, 1980, the Board filed Application for Permit No. 37-7849 to appropriate a minimum stream flow ~~in Silver~~

Creek, which is tributary to the Little Wood River, Blaine County, pursuant to the provisions of Chapter 15, Title 42, Idaho Code.

2) Application for Permit No. 37-7849 proposes to appropriate a minimum stream flow in Silver Creek from the point where it crosses Highway 93 in the NW1/4 SE1/4, Section 20, Township 2 South, Range 21 East, B.M., downstream to the confluence with the Little Wood River in Lot 5, Section 6, Township 3 South, Range 21 East, B.M. This reach is located directly downstream and adjacent to the minimum stream flow reach on Silver Creek described in Permit No. 37-7728, and is located directly upstream and adjacent to the minimum stream flow reach on the Little Wood River described in Permit No. 37-7739. The proposed rate of flow is 74 cubic feet per second.

3) The purpose of the proposed instream appropriation is to maintain wild trout rearing, spawning and migration within the reach defined above.

4) Based upon testimony of the staff of the Department, a finding is made that various water rights evidenced by licenses, permits, and decrees exist with points of diversion located within the designated minimum stream flow reach. The testimony of the Board specifically provided that the minimum stream flow application was not intended to affect the delivery of prior water rights represented by permits, licenses or decrees. No recorded beneficial use water rights identify any points of diversion within this minimum stream flow reach; however, there are claimed beneficial use rights with points of diversion upstream on Silver Creek.

5) All rights acquired under Application for Permit No. 37-7849 are for instream non-consumptive uses.

6) Based upon the sworn testimony, documentation, and statements comprising the record in this matter, a finding is made that the minimum stream flow application is necessary to maintain trout spawning and rearing.

7) Based upon testimony presented at the hearing, a finding is made that the benefits to be derived from the minimum stream flow application will be enjoyed by members of the public as opposed to being limited to private use or enjoyment.

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8) Based upon testimony and evidence submitted by the Idaho Department of Fish and Game, a finding is made that the flow requested in the application is the minimum flow required to preserve the existing unique characteristics of the stream for the public benefits and is not the ideal or most desirable flow which could be utilized for that purpose.

9) Based upon testimony and evidence submitted concerning available flow measurement data, a finding is made that the flow requested is generally capable of being maintained.

ANALYSIS

There are two primary items of contention with respect to this minimum stream flow application. The first item regards the adequacy of stream flow data within the identified reach. Although there is a long-term flow record for a measurement station located about two miles upstream from the reach, the period of record for that station ended in 1962. A suggestion was raised at the hearing that flow data from that station may not be acceptable because flows in Silver Creek may have decreased in recent years due to changes in irrigation practices in the recharge areas tributary to Silver Creek.

At least one recent study has concluded that flows in Silver Creek have declined because many irrigation systems in the Bellevue area have converted from flood to sprinkler, resulting in the decrease of diversion rates from the Big Wood River and a corresponding reduction in the excess flows which have historically recharged Silver Creek. However, an inspection of Silver Creek flow records collected since 1962 does not yet show a measurable trend in this direction. Based on recent flow records available on Silver Creek, the Department concludes that if the data from the measurement station located two miles upstream from the reach were to be extended for twenty years beyond 1962, no significant change in flows would be identifiable.

A comparison of flows in Silver Creek with recorded diversions within and above the minimum stream flow reach indicates that the 74 cubic feet per second flow requested is often not available in the reach during the summer months, but on a year around basis the flow is found to be capable of being maintained most of the time.

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The second item of contention regards the impact of the minimum stream flow water right on delivery of upstream claimed water rights. Pursuant to Section 42-607, Idaho Code, the watermaster of a water district is charged with the responsibility to insure that all decreed, permit or licensed water rights should be delivered prior to claimed or unrecorded beneficial use water rights. Approval of this minimum flow water right could force cessation of delivery of upstream beneficial use rights when less than 74 cubic feet per second is flowing throughout the proposed minimum stream flow reach. A change in delivery practices caused by approval of a minimum stream flow could be detrimental to the efficient operation of Water District 37-M, for which water delivery management techniques have been refined over a period of many years.

Public interest is a dynamic factor subject to change as the needs and desires of the people in an area and throughout Idaho evolve. A perpetual commitment of a significant amount of water from a stream or river system to a use without a workable method of changing the terms of that use could at some future time adversely affect the public interest. Approval of a minimum stream flow should provide for a periodic review of the continued public interest.

CONCLUSIONS OF LAW

1) The proposed minimum stream flow appropriation will not interfere with any vested water right, permit, or right under an application having a priority date earlier than August 26, 1980.

2) The proposed minimum stream flow should not be allowed to alter historic delivery practices of Water District 37-M, Little Wood River.

3) The proposed minimum stream flow appropriation is in the public, as opposed to private, interest.

4) The proposed minimum stream flow appropriation is necessary to maintain trout spawning and rearing.

5) The proposed minimum stream flow appropriation is the minimum flow required for the purpose cited in Conclusion of Law No. 4 and is not the ideal or most desirable flow.

6) The proposed minimum stream flow appropriation is readily capable of being maintained.

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ORDER

IT IS, THEREFORE, HEREBY ORDERED that Application for Permit No. 37-7849 is APPROVED subject to the following conditions:

1). Upon the future finding and order of the Director that gauging stations are required to maintain the approved minimum flow on Silver Creek, such measuring devices shall be permanently installed and maintained as specified by the Department.

2) Proof of instream beneficial use of the minimum stream flow appropriated shall be submitted in a manner approved by the Department within five years after the permit approval is finally effective as herein provided. The proof submitted shall include at least three years of flow data for the water course. The proposed frequency of the data accumulation must be submitted to the Director for review and approval.

3). The minimum stream flow approved under this application is subject to control by the watermaster of Water District 37-M, Little Wood River and tributaries.

4). The use of water under this permit shall be non-consumptive.

5). The use of water under this permit is subject to all prior rights.

6) This minimum stream flow permit shall be considered in the evaluation of Applications for Permit on Silver Creek and tributaries filed after August 26, 1980, but shall not cause alterations in historic water delivery practices in Water District 37-M, Little Wood River and tributaries.

7) The Director retains jurisdiction to review and amend any and all parameters of this permit and subsequent license upon his determination that the public interest is no longer served by the minimum stream flow as established. The Director will review the permit and subsequent license 10 years after issuance of the permit or upon petition of 50 percent or more of the registered voters residing within the Silver Creek Basin.

8) The application hereby approved by the Director shall be submitted to the Idaho Legislature by the fifth day of the next regular legislative session and the Director's approval shall

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become finally effective until approved by the Legislature pursuant to the procedure provided by Section 42-1503, Idaho Code.

Dated this 21st day of June, 1984.

NORMAN C. YOUNG
Hearing Officer

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BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NO. 37-7849 TO ESTABLISH A MINIMUM STREAM FLOW IN SILVER CREEK IN THE NAME OF THE IDAHO WATER RESOURCE BOARD	CERTIFICATE OF MAILING

I HEREBY CERTIFY That on this the 27th day of June, 1984, true and correct copies of the foregoing ORDER ISSUING PROPOSED DECISION and PROPOSED MEMORANDUM DECISION AND ORDER were mailed, postage prepaid to:

Donald R. Kramer, Chairman
Idaho Water Resource Board
Route 1
Castleford, ID

Mr. Joe Sorenson
SAM Airport, Inc.
Twin Falls, ID 83330

Tim Cochnauer
Idaho Department of Fish and Game
2320 Government Way
Coeur d'Alene, ID 83814

Paul Volcare
Idaho Department of Fish and Game
Box 662
Picabo, ID 83348

Steve Goddard
Idaho Department of Fish and Game
Statehouse Mail
Boise, ID 83720

Loren Strode
Carey, ID 83320

Reid Newby
Route T
Shoshone, ID 83352

Rita I. Fleck

RITA I. FLECK
Secretary/Records Manager
Idaho Department of Water Resources

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NAME OF STREAM: Silver Creek

LEGAL DESCRIPTION OF THE POINT OF THE STREAM WHERE STREAM FLOW IS REQUESTED: Stream reach described in No. 3 above.

THE PROPOSED STREAM FLOW IN CUBIC FEET PER SECOND: 74 cfs.

THE PURPOSE FOR WHICH THE MINIMUM STREAM FLOW IS PROPOSED: To maintain trout spawning and rearing from the point of requested flow upstream to Highway 93 bridge.

THE PERIOD OF TIME OR SEASON OF YEAR DURING WHICH APPROPRIATION IS PROPOSED: All year.

EVIDENCE THAT THE APPROPRIATION WILL NOT INTERFERE WITH ANY VESTED WATER RIGHT, PERMIT OR WATER APPLICATION OF EARLIER DATE OF PRIORITY: The above requested flow is for instream nonconsumptive use and will be subject to all vested water rights, permits or water applications of earlier dates of priority.

EVIDENCE THAT THE APPROPRIATION WOULD BE IN THE PUBLIC INTEREST AS OPPOSED TO PRIVATE INTEREST: The section of Silver Creek from the Highway 93 bridge downstream to its confluence with the Little Wood River supports excellent populations of high quality wild rainbow and brown trout. This portion of Silver Creek is currently being managed as a wild trout stream and no hatchery catchable trout are stocked within it. Some of the best brown trout angling in Idaho is located in this stretch of the creek. Silver Creek is internationally famous for its excellent trout fishery and is rated as among the top ten trout streams in the United States.

EVIDENCE OR JUSTIFICATION THAT THE APPROPRIATION IS NECESSARY FOR THE PURPOSES SHOWN ABOVE: During 1975, personnel of the Idaho Department of Fish and Game collected field data in the section of Silver Creek above Highway 93 bridge for use with instream flow methodologies in determining flows for fish and wildlife resources. Subsequent to those studies, it has been determined that Silver Creek below Highway 93 bridge is of similar physical and biological characteristics to that above and that flows determined for the upper section will be applicable to the lower section below the bridge. Methodologies, techniques and flow recommendations are presented in the following publication:

> Cochnauer, Tim. 1976. Stream Resource Maintenance Flow Studies, 1976. Job Performance Report, F-69-R-1, Job II, Idaho Department of Fish and Game. 44 pp.

EVIDENCE THAT THE REQUESTED FLOW IS MINIMUM AND NOT THE IDEAL OR MOST DESIRABLE FLOW: The ideal flow would be bankfull discharge or approximately 150 cfs.

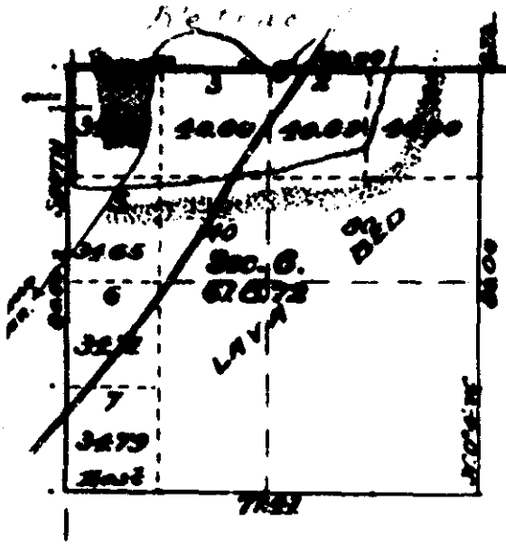
EVIDENCE THAT THE REQUESTED FLOW IS CAPABLE OF BEING MAINTAINED AS EVIDENCED BY RECORDS OF STREAM FLOWS: No gage stations situated in above designated stream section.

LOCATION OF EXISTING GAGE STATION THAT CAN BE USED IN THE ADMINISTRATION OF THIS APPROPRIATION: None.

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Township Nº 3 South, Range Nº 21 East

G f F e E d D



Sec. 5. Sec. 4.

Sec. 7. Sec. 8. Sec. 9.

Sec. 18. Sec. 17. Sec. 16.

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APR 13 1981

AFFIDAVIT of PUBLICATION

RECEIVED

NOV 2 1983

Department of Water Resources
Southern District Office

State of Idaho, } SS.
County of Blaine }

GORDON O. GLASMANN, being first duly sworn, deposes and says that he is the printer (publisher) of the Wood River Journal, a newspaper published every week in Hailey, County of Blaine, State of Idaho; that said newspaper has been continuously and uninterruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 20 day of October, 1983, and the date of the last publication was on the 27 day of October, 1983.

Gordon O. Glasmann

Subscribed and sworn to before me this 27th day of October, 1983

(SEAL)

Roberta Mackenzie
NOTARY PUBLIC

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WOOD RIVER JOURNAL
Hailey, Idaho

APR 13 1987

COST OF PUBLICATION

Numer of Picas per Line 13
Number of Lines in Notice 62
Number of Insertions 2

____ Lines tabular at ____ 4¢ / Pica
62 Lines straight at 24.18 3¢ / Pica
62 Subsequent lines at 16.12 2¢ / Pica
TOTAL COST 40.30

COPY OF NOTICE

(Paste Here)

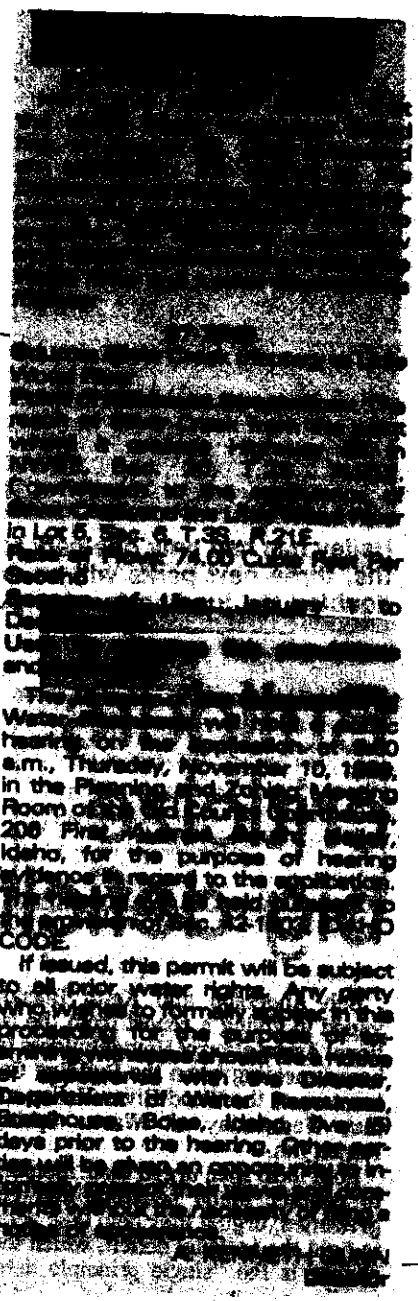
Notice of Hearing
Application for Instream Water Right
TYPE OF NOTICE

37-7849
PLAINTIFF-APPLICANT

DEFENDANT

PLAINTIFF

Dept of Water Resources
1041 Bloe Lakes Blvd N. TF
BILL TO



In Lot 5, Sec. 6, T. 3S., R. 21E.
[redacted] 74.09 CUBIC FEET PER
[redacted] January 10 to
[redacted] the hearing
[redacted] Water
[redacted] hearing on the application at 10:00
a.m., Thursday, November 10, 1983,
in the Planning and Zoning Meeting
Room of the [redacted]
208 First Avenue [redacted]
Idaho, for the purpose of hearing
objections with regard to the application.
[redacted] held
[redacted] 42-1761 IDAHO
CODE.
If issued, this permit will be subject
to all prior water rights. Any party
who wishes to formally appear in the
proceedings on the application or
protest the granting of the application
[redacted] with the Director,
Department of Water Resources,
Statehouse, Boise, Idaho, five (5)
days prior to the hearing. Objections
will be given consideration only to in-
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

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

April 4, 1997

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

STATE OF IDAHO
IDAHO WATER RESOURCE BOARD
STATEHOUSE
BOISE ID 83720

RE: WATER RIGHT NO. 37-07849

Dear Water Right Holder(s):

The Department of Water Resources (the Department) has issued the enclosed license confirming that a water right has been established in accordance with the permit referenced above. The license is a **preliminary order** issued by the Department pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department unless a party petitions for reconsideration or files an exception and/or brief as further described below:**

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the Department within fourteen (14) days of the service date of this order. The Department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See section 67-5243(3), Idaho Code.

EXCEPTIONS AND BRIEFS

Within twenty-one (21) days after (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding. Otherwise, this preliminary order will become a final order of the Department.

If any party appeals or takes exceptions to this preliminary order, opposing parties shall have twenty-one (21) days to respond to any party's appeal. Written briefs in support of or taking exceptions to the preliminary order shall be filed with the Department. The Department retains the right to review the preliminary order on its own motion.

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APR 10 1997

ORAL ARGUMENT

If the Department grants a petition to review the preliminary order, the Department shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Department will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Department orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Department in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with Rules of Procedure 302 and 303.

FINAL ORDER

The Department will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Department may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The Department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

> Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:
>
> (a) the petition for reconsideration is disposed of; or
> (b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

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The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

Sincerely,

Shelley W. Keen
Water Rights Supervisor

SK:ph

Enclosure

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APR 10 1997

CERTIFICATE OF MAILING

I hereby certify that on the **4th** day of **April, 1997**, I mailed a true and correct copy, postage prepaid, of the foregoing **PRELIMINARY ORDER (Approved License)** to the person(s) listed below:

Water Right No. 37-07849

STATE OF IDAHO
IDAHO WATER RESOURCE BOARD
STATEHOUSE
BOISE ID 83720

Vanessa Roby
Secretary

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APR 10 1997

LICENSING REVIEW
MINIMUM STREAM FLOW

RIGHT NO. 37-07849

Proof of beneficial use rec'd 11/14/91

Was flow data submittal a requirement with proof submittal? Yes ✓ No ____

If yes, has data been reviewed and a determination made that minimum flow is capable of being maintained? Yes ✓ No ____

Data submitted fully complies with permit condition (i.e. # of years of flow data sufficient) 3 yrs Req'd

Data Entry for License:

Name Standardized	✓
Total cfs & div. capacity listed as highest flow	✓ 74.0 cfs
P/D(s) beginning and ending descriptions listed	✓
Use flows defined for entire year	✓
P/U left blank (description in remarks)	✓
Remarks/non-standard conditions	
Non-consumptive	✓
Watermaster control	✓ 37-M
Jurisdiction retains to amend	✓
Description of reach(es)	✓
All other applicable permit conditions carried forward	✓

Comments/adjustments _____

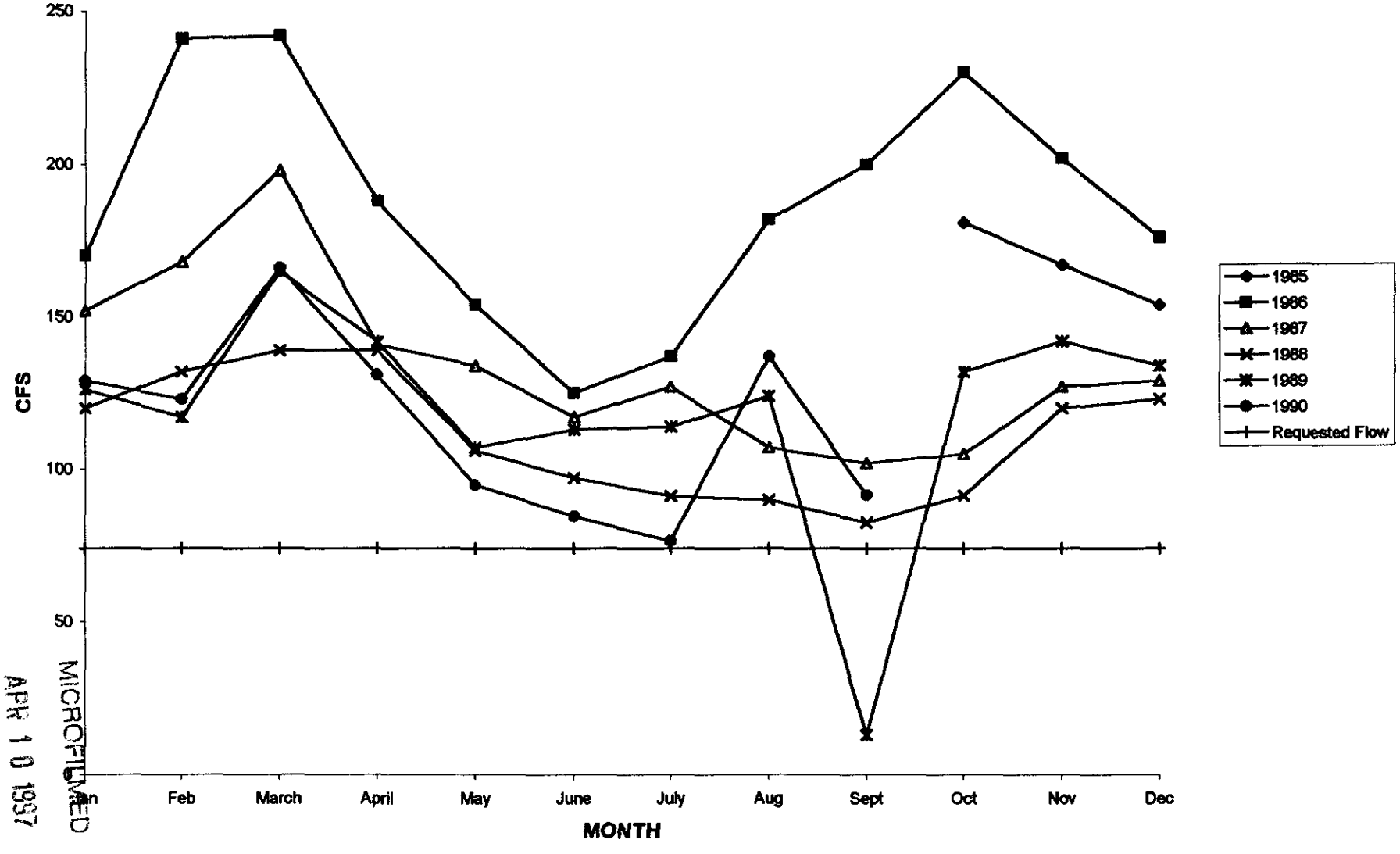
_____

_____

_____

Printed license hand-edited _____

SILVER CREEK MEASUREMENTS



APR 10 1997 MICROFILMED

ANALYSIS SHEET
for
PROOF OF BENEFICIAL USE

Permit No. 37-07849 Date 11/19/91

GENERAL CONSIDERATIONS
- Yes Name same as permit?
- Yes Address same as permit? If no, indicate below.
- Yes Proof timely received? If no, complete priority advancement below.

SOURCE OF WATER
- ✓ Surface water source
- ____ Ground water source
  - NA Drill permit req'd?
  - ____ Copy in file? Drill permit no. ____
  - ____ Amt paid for drilling permit? ____ Correct?
  - ✓ Well log in file?

LICENSE EXAMINATION FEE
- Exempt Required?
- ____ Amount submitted?
- ✓ Correct amount?

MEASURING DEVICE
- NA Measuring device or access port required?
- ____ Installed?
- ✓ Waiver requested or needed?

DEFICIENCIES OR ACTION ITEMS

proof acceptable KRG

PRIORITY CALCULATION

Date proof received	NA		____
Date proof due	____	-	____
No. of days late		=	____
Priority date	____	+	____
NEW PRIORITY DATE	✓	=	____

Proof of Beneficial Use for the Silver Creek Minimum Streamflow
Permit No. 37-7849

The Silver Creek drainage supports a high-quality rainbow trout fishery which has been recognized as one of the top-ten trout streams in North America. Numerous popular articles have been published about this highly touted trout stream.

In 1975, the Idaho Department of Fish and Game (Department) initiated fishery management investigations to assess the status of fish populations in the Silver Creek drainage. Catch-and-release regulations were implemented in 1977 within the Silver Creek Preserve to enhance the abundance of large, wild rainbow trout. The population of wild rainbow trout was comprised predominantly of 2- and 3-year olds and large (>16 inches) and old age (4 years old and older) trout were uncommon (Thurow 1978).

Thurow (1978) reported anglers expended an estimated 32,000 hours of effort and captured over 32,000 fish in the Silver Creek drainage in 1977. Wild rainbow comprised the majority of the catch. The majority of anglers who fished Silver Creek caught at least one fish per trip and the catch rate was approximately one fish per hour.

Fly fishermen comprised the majority of the anglers in 1977, and they were the most successful fishermen on Silver Creek. Most anglers who fished Silver Creek considered the fishing fair or good (Thurow 1978).

The effects of ten years of catch-and-release regulations on rainbow trout populations and changes in populations managed with general fishing regulations were evaluated in 1987. The fishery within the catch-and-release section of Silver Creek showed improvement since 1977. The frequency of larger fish (>16 inches) increased by 20 percent and the oldest rainbow collected was a 5-year old as compared to a 4-year old in 1977. Annual mortality of age 3 and older trout declined from 0.53 to 0.44 in 1987. Catch rates increased from slightly more than one fish per hour to nearly two fish per hour. Angler effort in the catch-and-release section more than doubled and 22 percent more anglers rated the fishery as "good" in 1987, as compared with 1977 (Riehle et al. 1989).

Riehle et al. (1989) reported the portion of Silver Creek below the catch-and-release area, which was under general regulations, showed a decline in angler effort over the ten-year period. Most of the rainbow trout sampled were less than twelve inches long and catch rates of fish greater than twelve inches declined from 0.35 to 0.30 fish per hour.

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DEC 26 1991
Department of Water Resources

R3PC225TV

Although brown were not present in Silver Creek above Picabo in 1977, they accounted for nearly 42 percent of the trout population in the middle reaches in 1987. Brown trout comprised 6 percent of the trout population in the catch-and-release area (Riehle et al. 1989).

The section of Silver Creek encompassed by minimum flow application No. 37-7849 flows through private land and access for fishing is limited. However, the section is extremely important since it contributes significantly to the flow of the Little Wood River downstream during drought years. Department personnel report the Little Wood River nearly dries up between Carey and Silver Creek during the irrigation season in drought years. The minimum streamflow section is important to the fishery because it allows movement of rainbow and brown trout upstream and downstream to public fishing access areas, and provides rearing and spawning habitat for fish.

Fish population studies have been conducted in the Little Wood River on the "Bear Track" Williams access area. This area is located four miles downstream from the confluence with Silver Creek. This area contains a good population of brown trout and a fair population of wild rainbow trout. The brown trout population is supplemented with fingerling releases while the rainbow trout population is supported entirely by wild reproduction. There has been a decline in the number of brown trout from 1986 but numbers have been relatively stable in recent sampling (Table 1). These numbers probably reflect the levels the river can support during the current drought cycle. The river also contains excellent numbers of nongame fish species, e.g. redside shiner, dace and suckers, which provide excellent forage for brown trout.

An angler survey was conducted on eight miles of the Little Wood River between June 14 and September 19, 1986. The upper end of the surveyed section of river began one mile below the confluence of Silver Creek and the Little Wood River. Survey results estimated that anglers fished 4,922 hours during this period or 615 angler hours per mile of river. For the total area and time period, the average catch rate was 0.66 fish/hour or 3,250 fish caught. The survey area had a 2.7 mile catch-and-release section of river but the rest of the area allowed harvest of fish. Even in the harvest area anglers released 60 percent of the fish caught, allowing the fish to provide additional recreational experience for other anglers. Of the fish harvested, 78 percent were brown trout and 22 percent rainbow trout.

Based on the angler survey and a statewide average of $7.28/hour for the beneficial cost of fishing (Sorg et al. 1985), $35,800 was contributed to the local economy. Dollar values were updated to 1991 dollars using the Consumer Price Index.

MICROFILMED
APR 10 1997

Table 1. Population estimates of brown trout and rainbow trout in the Bear Track Williams study area on the Little Wood River. Site is located four miles downstream from confluence of Silver Creek and Little Wood River.

Year	Species	Number per mile				Mean Length (in)
		≥ 4 inch	≥ 12 inch	≥ 16 inch	20 ≥ inch	
1986	Brown	719	172	65	6	9.5
	Rainbow	-[a]	-	-	-	-
1987	Brown	409	74	8	0	10.2
	Rainbow	-	-	-	-	-
1988	Brown	318	129	15	5	11.1
	Rainbow	41	2	0	0	9.1
1991	Brown	320	92	33	2	10.5
	Rainbow	37	0	0	0	8.5

[a]Data not available.

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Photographs of successful anglers on Silver Creek, rainbow and brown trout, and forage fish collected from the Little Wood River downstream of the confluence with Silver Creek (Exhibits 1-5) further demonstrate the quality of the Silver Creek and Little Wood River fisheries and the importance of the requested minimum flow for preserving those fisheries.

Flow records from two gauging stations (no. 13150430, 1974-1990, and no. 13-1505, 1920-1962) indicate that, in general, the 74 cfs requested under permit no. 37-7849 is capable of being maintained on a year-round basis (Attachments 1 and 2). Additional flow information provided by Department of Water Resources at the hearing on permit no. 37-7849 and by Francis and Bjornn (1979) would support this conclusion (Attachment 3).

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References

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Attachment 1

MALAD RIVER BASIN

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.—Lat 43°19'22", long 114°06'29", in SE 1/4 NW 1/4 sec.20, T.1 S., R.20 E., Blaine County, Hydrologic Unit 17040221, on right bank at sportsman access road crossing to campground, 0.6 mi downstream from State Highway 20/23 crossing, 2.3 mi northwest of Picabo, and 4.3 mi southeast of Gannett.

DRAINAGE AREA.—70 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 4,850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.—Records fair. No regulation. Several diversions above station for irrigation.

AVERAGE DISCHARGE.—16 years, 164 ft³/s, 118,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 566 ft³/s Apr. 10, 1985, gage height, 8.82 ft; minimum daily, 69 ft³/s June 30, July 17, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 215 ft³/s Mar. 6, gage height, 7.35 ft; minimum daily, 48 ft³/s July 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	e142	e131	127	124	143	137	118	117	59	105	108
2	114	e140	e131	128	e123	157	137	112	130	59	111	107
3	125	e142	e132	e120	122	180	136	111	127	48	115	104
4	132	143	e136	e121	123	199	137	96	112	58	118	100
5	136	e141	145	122	e123	195	135	85	101	78	121	98
6	138	e140	143	120	124	208	135	83	98	75	128	95
7	141	142	e137	123	e123	207	142	83	97	60	133	94
8	138	e140	e137	143	e124	208	142	85	93	61	136	93
9	138	142	e142	139	126	198	142	91	95	60	140	91
10	137	156	e141	135	125	191	141	90	110	63	146	89
11	137	e142	e139	134	127	196	140	90	116	66	150	94
12	134	e141	e137	137	e127	180	137	92	96	67	150	96
13	134	e142	e137	136	e118	166	135	91	81	65	150	93
14	134	e139	136	137	e116	158	135	92	82	68	150	91
15	126	e137	136	e137	e116	157	134	89	84	69	154	90
16	121	e136	134	136	e118	157	136	92	82	67	151	89
17	119	e142	134	134	e116	157	130	93	78	70	150	90
18	120	e143	133	130	e117	157	129	93	78	72	150	91
19	121	e141	133	131	e118	159	117	91	74	75	152	90
20	123	e155	131	128	e118	157	125	92	71	78	157	91
21	122	e151	132	127	125	154	124	95	69	87	152	89
22	124	e148	132	126	124	152	128	93	66	84	144	86
23	128	e144	132	127	124	150	129	93	63	91	141	87
24	134	144	132	e127	124	145	129	94	60	94	139	86
25	144	e144	131	129	126	142	127	91	60	94	140	83
26	154	e146	130	124	128	141	123	92	64	96	137	76
27	148	e142	131	127	132	142	115	92	62	99	137	82
28	147	e139	130	126	135	146	118	93	57	102	130	84
29	e144	e136	127	124	---	146	118	99	55	100	126	84
30	e144	e132	127	125	---	142	121	101	57	101	119	94
31	e141	---	127	126	---	141	---	123	---	102	e107	---
TOTAL	4096	4272	4156	4006	3446	5131	3934	2935	2535	2368	4239	2745
MEAN	132	142	134	129	123	166	131	94.7	84.5	76.4	137	91.5
MAX	154	156	145	143	135	208	142	123	130	102	157	108
MIN	98	132	127	120	116	141	115	83	55	48	105	76
AC-FT	8120	8470	8240	7950	6840	10180	7800	5820	5030	4700	8410	5440

CAL YR 1989 TOTAL 46250 MEAN 127 MAX 266 MIN 78 AC-FT 91740
WTR YR 1990 TOTAL 43863 MEAN 120 MAX 208 MIN 48 AC-FT 87000

e Estimated

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MALAD RIVER BASIN

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.—Lat 43°19'22", long 114°06'29", in SE¼ NW¼ sec.20, T.1 S., R.20 E., Blaine County, Hydrologic Unit 17040221, on right bank at sportsman access road crossing to campground, 0.6 mi downstream from State Highway 20/23 crossing, 2.3 mi northwest of Picabo, and 4.3 mi southeast of Gannett.

DRAINAGE AREA.—70 mi², approximately.

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 4,850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.—Records fair. No regulation. Several diversions above station for irrigation.

AVERAGE DISCHARGE.—15 years, 167 ft³/s, 121,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 566 ft³/s Apr. 10, 1985, gage height, 8.82 ft; minimum daily, 69 ft³/s June 30, July 17, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 302 ft³/s Mar. 29, gage height, 7.78 ft; minimum daily, 71 ft³/s Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	102	e122	e122	120	119	202	121	112	104	120	120
2	71	105	e123	e124	e120	124	193	117	112	103	119	116
3	75	109	121	e124	e115	117	182	115	118	103	117	112
4	81	111	e123	128	e108	118	170	110	120	113	113	113
5	80	108	122	130	e100	118	165	102	119	116	110	109
6	91	108	122	e128	e105	119	159	100	115	120	110	105
7	100	106	122	e126	e110	119	153	99	115	121	109	107
8	96	108	122	e124	e115	121	151	97	111	120	112	105
9	96	111	122	e128	e120	129	144	86	112	116	112	112
10	96	113	124	e132	e125	133	140	78	116	118	113	116
11	97	115	124	e130	e120	143	140	94	119	114	118	110
12	97	116	124	e130	118	155	139	99	118	113	120	105
13	93	112	127	e128	117	164	138	103	116	115	120	101
14	91	114	126	e129	117	162	137	106	117	114	121	100
15	94	e122	e124	e128	e119	155	137	111	115	114	122	99
16	92	e120	e118	e128	e121	153	135	124	113	115	122	106
17	90	126	e120	e130	123	159	132	118	112	119	120	108
18	89	122	e122	e129	124	162	129	114	115	116	123	111
19	92	120	e124	e130	123	168	130	108	113	112	130	105
20	93	120	e126	e130	116	174	130	108	108	112	134	99
21	94	121	e128	e130	115	168	132	110	106	111	136	94
22	92	125	e126	131	116	163	132	108	111	115	134	93
23	91	147	e126	126	119	181	130	108	114	119	135	91
24	93	148	e124	e120	117	206	129	107	111	116	138	91
25	94	139	e122	e112	117	205	129	106	109	116	142	92
26	97	e132	e120	e114	117	210	117	110	112	113	142	95
27	96	e130	e115	e117	118	226	123	112	110	113	138	97
28	96	130	e118	e119	119	241	124	111	107	112	133	97
29	97	e126	e120	e122	---	266	124	110	106	111	126	96
30	96	e124	e124	e124	---	233	122	108	103	113	127	98
31	100	---	e126	e125	---	210	---	111	---	112	121	---
TOTAL	2831	3590	3807	3898	3274	5121	4268	3311	3385	3529	3837	3103
MEAN	91.3	120	123	126	117	165	142	107	113	114	124	103
MAX	100	148	128	132	125	266	202	124	120	121	142	120
MIN	71	102	115	112	100	117	117	78	103	103	109	91
AC-FT	5620	7120	7550	7730	6490	10160	8470	6570	6710	7000	7610	6150

CAL YR 1988 TOTAL 40543 MEAN 111 MAX 148 MIN 70 AC-FT 80420
WTR YR 1989 TOTAL 43954 MEAN 120 MAX 266 MIN 71 AC-FT 87180

e Estimated

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APR 10 1997

MALAD RIVER BASIN

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.—Lat 43°19'22", long 114°06'29", in SE¼ NW¼ sec.20, T.1 S., R.20 E., Blaine County, Hydrologic Unit 17040221, on right bank at sportsman access road crossing to campground, 0.6 mi downstream from State Highway 20/23 crossing, 2.3 mi northwest of Picabo, and 4.3 mi southeast of Gannett.

DRAINAGE AREA.—70 mi², approximately.

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 4,850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.—Records fair. No regulation. Several diversions above station for irrigation.

AVERAGE DISCHARGE.—14 years, 170 ft³/s, 123,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 566 ft³/s Apr. 10, 1985, gage height, 8.82 ft; minimum daily, 69 ft³/s June 30, July 17, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum daily discharge, 158 ft³/s Dec. 3; minimum daily, 70 ft³/s Aug. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	116	130	e115	127	148	136	132	120	99	79	88
2	101	119	139	e115	126	147	135	124	109	104	70	88
3	99	124	158	e114	e125	144	139	113	105	104	73	87
4	93	120	147	e118	e125	142	146	113	99	99	77	88
5	93	120	142	120	123	142	141	115	100	99	78	91
6	94	122	141	117	123	144	141	114	101	95	83	89
7	95	126	146	117	123	141	140	116	89	92	86	87
8	93	126	141	118	125	140	137	117	91	91	88	85
9	92	126	138	120	128	140	136	116	92	92	88	85
10	95	127	141	121	135	139	136	114	90	91	89	85
11	95	127	145	125	134	137	138	114	96	92	91	80
12	96	128	e138	e124	138	135	137	113	96	93	90	84
13	96	129	e134	121	142	137	137	107	94	89	88	85
14	97	131	e129	121	135	138	135	103	97	88	92	87
15	100	128	e124	123	133	141	136	101	98	90	96	85
16	100	135	123	e122	133	139	132	101	98	92	98	84
17	121	132	123	123	132	138	136	102	99	92	99	84
18	117	130	122	e118	132	138	137	96	97	93	96	83
19	111	129	122	e114	131	138	135	91	96	95	93	83
20	111	129	120	e115	130	139	141	98	94	97	94	83
21	112	129	119	e118	130	140	147	98	93	97	92	83
22	114	129	120	e120	133	140	144	97	90	93	94	81
23	114	129	121	e120	134	139	142	95	94	90	96	77
24	113	128	e120	e122	135	138	143	95	96	84	99	76
25	113	129	e120	e122	135	137	141	95	95	83	98	77
26	112	128	e119	e123	135	137	140	94	95	84	95	74
27	112	127	e118	123	136	138	141	93	97	85	92	73
28	113	128	e118	124	138	136	138	95	99	84	93	71
29	114	128	118	125	147	136	138	96	97	81	95	74
30	115	127	118	127	---	135	135	99	96	80	94	75
31	115	---	e118	e126	---	135	---	127	---	80	90	---
TOTAL	3250	3806	4012	3731	3823	4318	4160	3284	2913	2828	2786	2472
MEAN	105	127	129	120	132	139	139	106	97.1	91.2	89.9	82.4
MAX	121	135	158	127	147	148	147	132	120	104	99	91
MIN	92	116	118	114	123	135	132	91	89	80	70	71
AC-FT	6450	7550	7960	7400	7580	8560	8250	6510	5780	5610	5530	4900

CAL YR 1987 TOTAL 48814 MEAN 134 MAX 242 MIN 86 AC-FT 96820
WTR YR 1988 TOTAL 41383 MEAN 113 MAX 158 MIN 70 AC-FT 82080

e Estimated

MICROFILMED
APR 10 1989

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.—Lat 43°19'22", long 114°06'29", in SE¼ NW¼ sec.20, T.1 S., R.20 E., Blaine County, Hydrologic Unit 17040221, on right bank at sportsman access road crossing to campground, 0.6 mi downstream from State Highway 68 crossing, 2.3 mi northwest of Picabo, and 4.3 mi southeast of Gannett.

DRAINAGE AREA.—70 mi², approximately.

PERIOD OF RECORD.—October 1974 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 4,850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.—Records fair except for estimated daily discharges, which are poor. No regulation. Several diversions above station for irrigation.

AVERAGE DISCHARGE.—13 years, 174 ft³/s, 126,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 566 ft³/s Apr. 10, 1985, gage height, 8.82 ft; minimum daily, 69 ft³/s June 30, July 17, 1977.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 257 ft³/s Mar. 8, gage height, 7.61 ft; maximum gage height, 8.10 ft, Oct. 1; minimum daily, 86 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251	214	191	164	154	167	171	122	141	123	111	105
2	250	213	188	164	156	171	164	126	131	132	111	105
3	247	211	186	164	157	177	164	125	124	125	107	105
4	244	211	185	166	157	185	165	124	120	123	106	106
5	244	211	184	165	157	200	164	124	117	118	106	107
6	243	210	186	164	159	231	155	122	116	115	104	109
7	242	208	187	163	158	242	157	120	117	115	105	108
8	241	209	186	164	158	239	161	119	124	116	107	107
9	239	207	186	164	160	217	158	118	125	119	107	107
10	238	203	182	e155	160	210	157	120	123	123	105	105
11	241	200	174	e155	161	209	155	120	122	127	102	105
12	239	200	179	159	166	212	153	119	118	126	101	105
13	237	202	177	160	187	224	146	118	117	124	99	103
14	236	203	177	e155	208	240	147	118	117	121	102	104
15	234	204	179	e145	194	221	148	118	117	122	109	103
16	229	201	178	e125	179	210	145	118	114	121	108	102
17	227	202	176	e130	175	205	137	138	114	126	106	104
18	226	200	174	e135	171	212	133	148	108	141	107	106
19	223	200	174	e140	170	205	130	148	111	152	112	102
20	219	197	173	e140	169	199	130	146	112	152	112	100
21	218	199	172	e144	167	190	130	147	113	148	109	100
22	220	195	172	e148	167	186	129	147	112	150	107	102
23	219	195	172	148	168	180	124	145	111	147	107	102
24	219	198	171	148	167	177	119	144	110	138	107	96
25	218	197	169	150	168	178	114	144	112	131	107	93
26	217	202	167	150	167	180	114	148	110	123	107	92
27	216	199	167	149	167	177	116	156	111	122	107	86
28	215	195	165	155	166	174	117	155	110	120	107	93
29	213	195	163	151	---	172	116	152	113	119	108	95
30	216	193	163	152	---	170	118	150	117	118	105	98
31	216	---	162	153	---	171	---	146	---	114	104	---
TOTAL	7137	6074	5465	4725	4693	6131	4237	4145	3507	3951	3302	3055
MEAN	230	202	176	152	168	198	141	134	117	127	107	102
MAX	251	214	191	166	208	242	171	156	141	152	112	109
MIN	213	193	162	125	154	167	114	118	108	114	99	86
AC-FT	14160	12050	10840	9370	9310	12160	8400	8220	6960	7840	6550	6060

CAL YR 1986 TOTAL 68272 MEAN 187 MAX 385 MIN 111 AC-FT 135400
WTR YR 1987 TOTAL 56422 MEAN 155 MAX 251 MIN 86 AC-FT 111900

e Estimated

MICROFILMED
APR 10 1997

13130 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PI[illegible]O, ID

LOCATION.--Lat 43°19'22", long 114°06'29", in SE¼NW¼ sec. 20, T. 1 S., R. 20 E., Blaine County, Hydrologic Unit 17040221, on right bank at sportsman access road crossing to campground, 0.6 mi downstream from State Highway 68 crossing, 2.3 mi northwest of Picabo, and 4.3 mi southeast of Gannett.

DRAINAGE AREA.--70 mi^2, approximately.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.-- Estimated daily discharges: Nov. 17-28, Dec. 10 to Jan. 8, Jan. 12, 21, 26, Feb. 5-10. Records fair except for estimated daily discharges, which are poor. No regulation. Several diversions above station for irrigation.

AVERAGE DISCHARGE.--12 years, 176 ft^3/s, 127,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 566 ft^3/s Apr. 10, 1985, gage height, 8.82 ft; minimum daily, 69 ft^3/s June 30, July 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 401 ft^3/s Feb. 19, gage height, 8.34 ft; minimum daily, 111 ft^3/s June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	175	163	160	182	282	196	178	118	128	158	180
2	181	173	171	160	187	273	197	172	118	132	159	177
3	181	171	172	165	190	272	193	177	119	125	164	171
4	176	173	166	160	185	261	192	179	119	126	169	170
5	178	171	166	165	182	253	191	179	119	130	169	166
6	181	171	166	168	180	248	191	184	126	139	170	163
7	182	174	167	165	168	246	191	189	130	146	174	164
8	177	175	173	168	160	306	195	195	141	136	175	162
9	180	173	170	170	165	339	199	191	143	134	184	167
10	183	167	165	170	170	300	197	188	142	135	181	176
11	183	168	145	167	175	297	194	183	135	138	180	182
12	190	171	130	167	176	289	195	178	133	137	182	184
13	183	171	125	167	181	261	196	175	136	133	186	189
14	181	172	130	166	177	245	192	162	135	129	191	196
15	180	174	135	167	196	235	190	151	134	130	192	219
16	180	174	140	168	222	234	190	145	130	132	188	219
17	179	174	140	180	258	240	187	145	126	130	184	213
18	179	174	145	177	305	242	186	142	125	130	186	211
19	186	170	150	177	385	228	184	141	123	129	185	211
20	177	170	155	177	369	223	183	132	118	130	181	215
21	175	165	160	175	311	219	183	129	112	132	187	216
22	175	160	160	174	276	215	182	135	111	135	190	215
23	189	150	160	176	280	211	180	135	113	133	192	215
24	193	140	155	174	346	208	179	132	115	139	198	216
25	190	145	155	172	371	203	181	130	119	141	201	220
26	185	150	155	172	337	201	179	128	119	146	191	225
27	183	160	155	171	312	199	178	126	117	152	191	238
28	180	165	150	172	291	198	182	123	119	156	191	242
29	177	167	150	172	---	197	181	119	119	158	186	240
30	177	165	155	172	---	196	179	117	122	158	183	243
31	175	---	155	177	---	195	---	119	---	161	183	---
TOTAL	5617	5008	4784	5271	6737	7516	5643	4779	3738	4261	5651	6005
MEAN	181	167	154	170	241	242	188	154	125	137	182	200
MAX	193	175	173	180	385	339	199	195	143	161	201	243
MIN	175	140	125	160	160	195	178	117	111	125	158	162
AC-FT	11140	9930	9490	10460	13360	14910	11190	9480	7410	8450	11210	11910

CAL YR 1985	TOTAL	60366	MEAN	165	MAX	530	MIN	83	AC-FT	119700
WTR YR 1986	TOTAL	65008	MEAN	178	MAX	385	MIN	111	AC-FT	128900

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Attachment 2

13-1505. Silver Creek near Picabo, Idaho

Location.--Lat 43°17', long 114°01', in sec.1, T.2 S., R.20 E., on left bank 1½ miles downstream from drain ditch of Blaine County Drainage District No. 1 and 3 miles southeast of Picabo.

Drainage area.--88 sq mi, approximately.

Records available.--May 1920 to December 1962, discontinued (1923-35 irrigation seasons only).

Gage.--Water-stage recorder. Altitude of gage is 4,790 ft (by barometer).

Average discharge.--29 years (1920-22, 1935-62), 152 cfs (110,000 acre-ft per year).

Extremes.--Maximum and minimum discharges for October 1960 to December 1962 are contained in the following table:

Water year	Maximum			Minimum		
	Date	Discharge (cfs)	Gage height (feet)	Date	Discharge (cfs)	Gage height (feet)
1961	Feb. 12, 1961	204	a 2.43	Aug. 3, 1961	70	1.05
1962	Apr. 6, 1962	282	b 3.13	Jan. 22, 1962	c 43	-
1963	Dec. 4, 1962	217	2.58	Nov. 25, 1962	168	2.15

a Maximum gage height for year, 2.75 ft Jan. 6, 1961, ice jam.
b Maximum gage height for year, 3.84 ft Jan. 24, 1962, ice jam.
c Minimum daily.

1920-62: Maximum discharge recorded, 357 cfs Dec. 24, 1955 (gage height, 3.70 ft); maximum gage height recorded, 4.57 ft Jan. 22, 1950 (ice jam); minimum discharge, 26 cfs June 2, 1920 (gage height, 0.48 ft).

Remarks.--Records good except those for winter periods, which are poor. Diversions for irrigation of about 9,000 acres (1950 determination) above station. Two small canals bypass station. Silver Creek receives considerable return flow resulting from Big Wood River irrigation. Records of discharge do not include water bypassed around station at times by slough on right bank from which there is some diversion for irrigation.

Discharge measurements, in cubic feet per second, of slough, October 1960 to December 1962

Oct. 17, 1960	12.4	Apr. 24, 1961	9.89	Nov. 8, 1961	10.0	Aug. 21, 1962	21.2
Dec. 7	11.2	May 29	1.92	Mar. 27, 1962	27.2	Oct. 1	23.5
Jan. 9, 1961	10.6	July 10	.67	Apr. 23	12.5	Nov. 6	23.1
Feb. 15	6.42	Aug. 14	2.21	May 28	11.6	Dec. 10	14.2
Mar. 21	15.6	Sept. 18	4.50	July 9	3.58		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1961

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	103	130	137	91	100	126	138	95	94	98	73	85
2	112	127	138	122	100	126	137	93	82	92	74	88
3	114	127	138	120	114	125	137	95	89	88	72	87
4	117	127	136	110	110	125	133	91	85	89	72	84
5	122	127	134	119	111	125	132	86	87	94	73	85
6	117	127	103	110	111	126	132	86	88	96	75	85
7	118	130	134	120	112	122	130	85	84	93	80	86
8	116	131	132	121	113	121	130	83	84	90	86	88
9	120	128	131	119	114	121	128	80	85	86	87	88
10	131	127	130	116	134	123	127	74	87	85	84	98
11	139	131	129	115	155	122	124	76	86	84	83	105
12	144	139	126	115	152	121	129	79	87	84	85	104
13	142	146	125	113	157	123	132	81	89	82	85	100
14	141	152	123	113	138	137	126	81	88	79	86	100
15	141	145	122	112	140	160	125	79	88	78	87	101
16	139	142	121	112	142	173	127	80	89	77	87	98
17	136	141	116	111	139	165	127	86	87	78	85	94
18	135	144	119	110	131	156	132	81	87	79	82	96
19	134	146	123	109	126	146	138	78	87	80	81	101
20	134	145	119	109	124	147	134	76	98	82	79	102
21	133	142	121	109	130	141	131	78	86	82	76	98
22	133	141	120	108	145	139	124	76	87	82	77	92
23	131	139	119	108	148	138	121	80	85	80	76	92
24	131	144	117	107	138	140	119	80	86	79	76	93
25	130	146	117	107	135	140	109	76	86	77	76	93
26	130	144	117	106	133	134	103	77	88	78	76	95
27	128	147	116	105	130	140	100	75	90	80	74	97
28	128	144	116	103	127	141	97	75	85	81	76	101
29	130	140	116	106	------	140	99	75	84	80	80	105
30	128	138	116	108	------	140	98	81	85	78	82	115
31	128	------	112	108	------	135	------	90	------	77	85	------
TOTAL	3,989	4,139	3,826	3,460	3,667	4,229	3,719	2,529	2,574	2,576	2,474	2,851
MEAN	129	138	123	112	131	136	124	81.6	86.5	83.1	79.8	95.0
MAX.	144	152	138	122	152	173	138	95	98	96	88	115
MIN.	109	127	103	91	109	121	97	74	82	77	72	83
AC-FT.	7,910	8,210	7,590	6,860	7,270	8,390	7,380	5,020	5,150	5,110	4,910	5,650

WY 1960: TOTAL 45,883 MEAN 125 MAX 270 MIN 82 AC-FT 91,010
WY 1961: TOTAL 40,053 MEAN 110 MAX 192 MIN 72 AC-FT 79,440

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13-1505. Silver Creek near Picabo, Idaho--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	124	138	142	125	115	142	220	132	145	145	152	153
2	126	138	141	122	115	142	252	128	145	141	153	150
3	127	138	144	120	120	114	269	126	146	138	150	145
4	127	144	143	120	120	132	273	124	150	138	152	148
5	127	134	141	120	120	125	272	118	139	135	157	146
6	126	138	139	122	125	123	274	116	132	133	159	146
7	126	138	131	125	125	126	272	115	124	136	166	145
8	128	137	130	140	130	127	265	109	119	135	172	143
9	128	137	120	130	130	125	236	107	113	137	170	139
10	130	137	100	95	140	126	209	104	115	136	170	143
11	132	134	90	105	150	123	198	104	119	138	168	146
12	132	138	120	125	155	123	187	96	118	131	164	150
13	132	137	135	120	160	121	178	94	115	133	158	154
14	132	136	145	120	165	122	173	91	117	143	148	154
15	131	136	145	120	160	123	167	90	118	152	145	155
16	130	139	140	120	155	122	163	112	125	144	138	148
17	130	137	140	130	150	123	160	95	133	153	130	147
18	130	136	140	130	145	124	157	97	135	154	123	147
19	128	135	140	130	145	126	153	103	136	153	123	145
20	127	137	140	120	145	130	148	123	130	152	123	140
21	132	136	130	65	138	132	146	133	133	146	126	137
22	137	137	95	43	136	130	143	132	133	144	124	140
23	135	143	100	50	133	128	140	128	139	146	120	139
24	135	145	110	80	130	124	133	131	141	147	126	142
25	134	141	110	100	128	127	132	140	144	146	134	143
26	133	142	105	105	104	140	132	143	143	144	140	139
27	138	144	110	110	120	160	130	141	142	146	143	134
28	144	144	115	115	130	181	142	146	143	146	144	136
29	143	144	120	120	------	188	142	148	144	145	152	146
30	137	143	125	125	------	186	136	145	147	146	157	140
31	137	------	126	120	------	192	------	145	------	148	156	------
TOTAL	4,078	4,173	3,912	3,472	3,789	4,207	5,602	3,730	3,978	4,436	4,545	4,355
MEAN	132	139	126	112	135	136	187	120	133	143	147	145
MAX	144	145	145	140	165	192	274	148	150	154	172	160
MIN	124	134	90	43	104	114	130	91	113	131	120	134
AC-FT	8,090	8,280	7,760	6,890	7,520	8,340	11,110	7,400	7,890	8,800	9,010	8,640

CAL YR 1961: TOTAL 40,262 MEAN 110 MAX 192 MIN 72 AC-FT 79,860
WAT YR 1962: TOTAL 50,277 MEAN 138 MAX 274 MIN 43 AC-FT 99,720

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER TO DECEMBER 1962

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	163	169	180									
2	162	168	181									
3	161	166	194									
4	164	168	209									
5	170	168	195									
6	172	170	181									
7	170	170	178									
8	170	169	175									
9	172	170	172									
10	172	174	-									
11	168	178	-									
12	172	175	-									
13	172	175	-									
14	172	175	-									
15	176	177	-									
16	180	181	-									
17	177	177	-									
18	175	174	-									
19	175	173	-									
20	174	174	-									
21	173	176	-									
22	173	181	-									
23	172	175	-									
24	170	170	-									
25	170	168	-									
26	170	172	-									
27	170	197	-									
28	169	203	-									
29	169	197	-		------							
30	169	186	-		------							
31	169	------	-		------		------		------			------
TOTAL	5,271	5,268	-									
MEAN	171	176	-									
MAX	180	203	-									
MIN	161	168	-									
AC-FT	10,490	10,450	-									

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Location.--Lat 43°03
from Byrns Slough
14 miles downstre

Drainage area.--570

Records available.--
1913, 1921.

Gage.--Water-stage r
staff gage at sit
staff gage and Ap
datum 0.08 ft hi

Average discharge.--

Extremes.--Maximum a
table:

Water year	Date
1961	Feb. 12, 13,
1962	May 28, 1962
1963	Feb. 5, 1963
1964	June 19, 1964
1965	Dec. 24, 1964

a Maximum gage heigh
b May have been high
c Maximum gage heigh
d Maximum daily,
e Maximum gage heigh
f Minimum daily,
g Maximum recorded g

1911-65: Maxi
then in use); max
recorded, 7.6 cfs

Remarks.--Records go
ods, which are po
station. Flow pa
voir (capacity, 7
capacity, 690 acr
nel losses and i

DISCHA

DAY	OCT.	NOV.
1	53	11
2	55	11
3	66	11
4	73	12
5	61	12
6	77	12
7	77	12
8	78	12
9	76	12
10	84	12
11	91	12
12	98	12
13	100	13
14	102	13
15	107	13
16	106	13
17	113	13
18	112	13
19	106	14
20	108	13
21	108	13
22	107	13
23	107	13
24	106	13
25	106	14
26	110	14
27	112	14
28	112	13
29	113	13
30	112	13
31	112	------
TOTAL	2,972	3,90
MEAN	95.9	13
MAX	113	14
MIN	53	11
AC-FT	5,890	7,74

CAL YR 1960: TOTAL 36,
WAT YR 1961: TOTAL 31,

M13-1504.5 Silver Creek near Picabo, Idaho
Tributary to Little Wood River

LOCATION.--Lat 43°19'40", long 114°04'30", about NW¼ sec.22, T.1 S., R.20 E., about 2 miles north of Picabo.

Date	Discharge	Date	Discharge
June 10, 1915	a141	Aug. 16, 1920	141
16	a109	May 21, 1954	b103
June 12, 1920	114	Sept. 25	c163

13-1505. Silver Creek near Picabo, Idaho
Tributary to Little Wood River

LOCATION.--Lat 43°17', long 114°01', near center sec.36, T.1 S., R.20 E., at State Highway 23 crossing 2 miles southeast of Picabo (former gaging station in sec.1, T.2 S., R.20 E., 1.5 miles downstream from drain ditch of Blaine County Drainage District No. 1, and 3 miles southeast of Picabo).
DRAINAGE AREA.--88 sq mi, approximately
OTHER RECORDS AVAILABLE.--Daily record at site in sec.1 published in WSP, May 1920 to September 1960 (1923-35 irrigation seasons only); in SWRI, October 1960 to December 1962.

Date	Discharge
Feb. 4, 1963	d757

13-1506. Silver Creek near Tikura, Idaho
Tributary to Little Wood River

LOCATION.--Lat 43°13'10", long 113°59'50", in W½ sec.29, T.2 S., R.21 E., about 1 mile east of Tikura.

Date	Discharge
June 10, 1915	a93.4
16	a75.0

13-1509. Little Wood River above Byrns Slough, near Richfield, Idaho
Tributary to Big Wood River

LOCATION.--Lat 43°04', long 114°06', in sec.20, T.4 S., R.20 E., 2 miles upstream from Byrns Slough and heading of Dietrich Canal, and about 3 miles northeast of Richfield.

Date	Discharge
May 4, 1954	89.9

13-1511. Byrns Slough at Richfield, Idaho[e]
Tributary to Little Wood River

LOCATION.--Lat 43°03'00", long 114°08'30", in NE¼ sec.25, T.4 S., R.19 E., at U.S. Highway 20 crossing 0.5 mile east of Richfield.

Date	Discharge	Date	Discharge
Feb. 12, 1962	†1,520	Feb. 3, 1963	828
Feb. 1, 1963	†1,000	Dec. 23, 1964	†1,600

M13-1512. Little Wood River below Byrns Slough, near Richfield, Idaho
Tributary to Big Wood River

LOCATION.--Lat 43°00'50", long 114°02'40", about sec.25, T.4 S., R.19 E., below Byrns Slough and Richfield diversion about 0.5 mile south of Richfield.

Date	Discharge
July 17, 1916	f698

13-1520. Little Wood River at Gooding (Topanis), Idaho
Tributary to Big Wood River

LOCATION.--Lat 42°56'10", long 114°43'40", in NW¼NW¼ sec.5, T.6 S., R.15 E., at Gooding-Wendell highway bridge 0.2 mile west of Gooding.
DRAINAGE AREA.--680 sq mi, approximately.
OTHER RECORDS AVAILABLE.--Daily record published in WSP June to September 1896 and 1897, March to September 1899.

† Peak flow.
a Furnished by Idaho Irrigation Co.
b NE¼ sec.35, 1.5 miles east of Picabo.
c NW¼ sec.36, 500 ft upstream from highway bridge.
d Result of discharge measurement believed to be near peak.
e Formerly published as "Jim Byrnes Slough".
f 10 cfs diverted above bridge for irrigation.

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Discharge measurements made at miscellaneous sites during water year 1963

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Rock Creek basin--Continued						
Rock Creek.....	Snake River.....	SW¼ sec.6, T.10 S., R.31 E., at west edge of Rockland.	216	-	2-11-62	†2,120
Rocky Hollow tributary.	Rocky Hollow....	SW¼ sec.17, T.9 S., R.31 E., 300 ft downstream from Highway 37 crossing and 4.4 miles north of Rockland.	2.26	-	5-30-63	(†d)
Rock Creek.....	Snake River.....	SW¼ sec.12, T.9 S., R.29 E., at U.S. Highway 37 crossing 12 miles southwest of American Falls.	320	-	2-11-62	†3,300
Raft River basin						
Heglar Canyon....	Raft River.....	SE¼ sec.11, T.11 S., R.28 E., at road crossing 0.1 mile upstream from tributary to Heglar Canyon and 16 miles southwest of Rockland.	a45	-	2-11-62	†153
Heglar Canyon tributary.	Heglar Canyon...	Operated as a crest-stage station. See Station No. 13-798.	7.72	1961-62	2- 2-63 4-28-63 8- 7-63 8- 8-63	0 0 0 0
Goose Creek basin						
Birch Creek diversion.	Birch Creek.....	NE¼ sec.29, T.14 S., R.22 E., at county road crossing 1½ miles southeast of Oakley Dam and 4½ miles south of Oakley.	-	-	2-12-63	b30
Salmon Falls Creek basin						
Salmon Falls tributary.	Salmon Falls Creek.	Operated as a crest-stage station. See Station No. 13-1053.	a4.0	1962	2-17-63 4-28-63 6- 9-63 7-14-63 8-19-63	0 0 0 0 0
Mud Lake-Lost River basins						
Huntley Canyon...	Beaver Creek....	Operated as a crest-stage station. See Station No. 13-1129.	3.91	1962	4-15-63	b.8
Main Fork.....	Sawmill Creek...	Operated as a crest-stage station. See Station No. 13-1172.	15.6	1960-62	5-25-63	75.6
Wet Creek.....	Little Lost River	Operated as a crest-stage station. See Station No. 13-1184.	11.2	1959-62	11- 4-62 5-25-63	4.53 17.7
Cedar Creek above diversions.	Big Lost River..	Operated as a crest-stage station. See Station No. 13-1289.	8.26	-	9-26-62 4-24-63 5-23-63 7-14-63	12.2 2.82 47.1 54.3
Big Lost River tributary.	.....do.....	SW¼SE¼ sec.11, T.2 N., R.30 E., at U.S. Highway 20 crossing 40 miles west of Idaho Falls.	20	-	2-11-62	†190
Big Lost River tributary No. 2	.....do.....	SE¼SW¼ sec.29, T.3 N., R.33 E., at U.S. Highway 20 crossing 29 miles west of Idaho Falls.	a8.7	-	2-11-62	†424
Big Wood River basin						
Prairie Creek....	Big Wood River..	Operated as a crest-stage station. See Station No. 13-1352.	a18	1962	11-11-62 5-27-63 6-19-63 7- 9-63	12.4 113 141 65.4
Adams Gulch.....	.....do.....	Operated as a crest-stage station. See Station No. 13-1358.	10.9	1962	11-11-62 5-27-63 9-25-63	b.5 17.0 *.67
Big Wood River tributary.	.....do.....	NW¼ sec.34, T.2 S., R.18 E., at U.S. Highway 93 crossing and 20 miles north of Shoshone.	15.8	-	2-12-62	†226
Deer Creek.....	Camas Creek.....	Operated as a crest-stage station. See Station No. 13-1414.	13.2	1961-62	12- 3-62 4-30-63 5-28-63	.51 11.0 3.92
Schooler Creek...	Thorn Creek.....	Operated as a crest-stage station. See Station No. 13-1457.	2.22	1961-62	12-10-62 2- 3-63 4-30-63 5-30-63 9-23-63	0 48.1 0 0 0
Thorn Creek.....	Big Wood River..	NE¼NW¼ sec.25, T.4 S., R.15 E., 1.4 miles northwest of Moody Ranch and 8.6 miles northeast of Gooding.	a46	-	2-11-62	†647
Preacher Creek...	Thorn Creek.....	SW¼NE¼ sec.30, T.4 S., R.16 E., 1.3 miles above mouth and 8.9 miles northeast of Gooding.	a26	-	2-10-62	†646
Dry Creek.....	Big Wood River..	N½ sec.10, T.5 S., R.14 E., at county road crossing 6 miles northwest of Gooding.	a84	-	2-10-62	†1,390
Silver Creek.....	Little Wood River	Near center sec.36, T.1 S., R.20 E., at State Highway 23 crossing 2 miles southeast of Picabo.	a88	1920-62‡	2- 4-63	757
Jim Byrnes Slough	.....do.....	NE¼ sec.25, T.4 S., R.19 E., at U.S. Highway 20 crossing and 1 mile east of Richfield.	(g)	-	2-12-62 2- 1-63	†1,520 (†d)
Muldoon Creek....	Copper Creek....	Operated as a crest-stage station. See Station No. 13-1474.	12.2	-	9-24-62 5-23-63	*2.34 63.6

* Base flow.
† Peak flow.
‡ Operated as a continuous-record gaging station.
a Approximately.
b Estimated.
d Computation not completed.
g Drainage area indeterminate.

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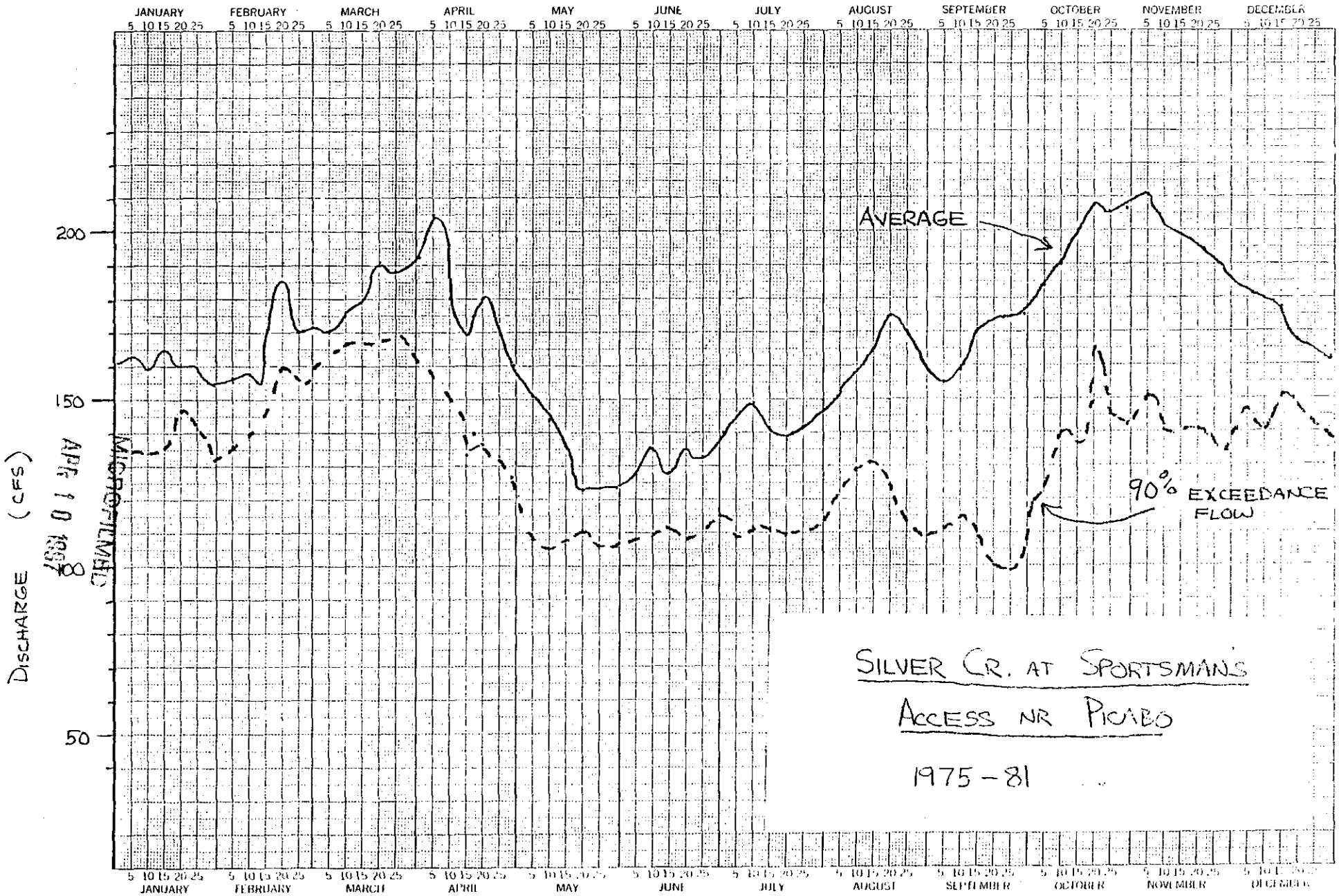
Discharge measurements made at miscellaneous sites during water year 1969

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Mud Lake-Lost River basins--Continued						
Birch Creek diversion.....	from Birch Creek.	Lat 44°08'40", long 112°54'10", in NE¼SE¼ sec.5, T.9 N., R.30 E., Clark County, near head on left bank, about 0.5 mile downstream from State Highway 28 bridge south of Blue Dome Inn, and 33.4 miles west of Dubois.	-	1968	5-26-69 6-26-69 7-30-60 9- 3-69	4.90 4.30 3.77 3.27
Main Fork.....	Sawmill Creek...	Operated as a crest-stage station. See Station No. 13-1172.	15.6	1960-68	4-26-69 5-29-69	a29 109
Wet Creek.....	Little Lost River.	Operated as a crest-stage station. See Station No. 13-1184.	11.2	1959-68	5-29-69 6-26-69	a17.3 a8.1
Tributaries to Snake River from Thousand Springs to Big Wood River						
Sand Springs Creek.	Snake River.....	Lat 42°43'36", long 114°50'00", in SE¼ sec.17, T.8 S., R.14 E., Gooding County, 0.5 mile upstream from mouth, on right bank of the Snake River, and 7 miles southeast of Hagerman.	-	1902, 1912-13, 1917-21, 1924-25, 1932, 1954-59, 1963-68	4-14-69	d85.2
Thousand Springs	.....do.....	Lat 42°45', long 114°51'. Springs enter right bank of Snake River between mile 154.05 on river profile, near line between secs.17 and 20, T.8 S., R.14 E., and mile 151.15 on river profile, about 200 ft upstream from line between sec.1, T.8 S., R.13 E., and sec.6, T.8 S., R.14 E., Gooding County, 6 miles southwest of Hagerman.		1920, 1950-59, 1963-68	4- 9-68	e1,115
Riley Creek.....	.....do.....	Lat 42°45'46", long 114°51'31", in SW¼NE¼ sec.6, T.8 S., R.14 E., Gooding County, at Hagerman Hatchery of U.S. Fish & Wildlife Service, 100 ft downstream from small unnamed spring entering from right, 260 ft upstream from Riley Creek below Lewis Spring gaging station, 300 ft downstream from mouth of Lewis Creek, about 2 miles upstream from mouth, and 4.2 miles southeast of Hagerman.	-	1950-59, 1963-68	4-13-69	d61.2
Billingsley Creek	.....do.....	Lat 42°46'35", long 114°50'55", in SW¼SW¼NW¼ sec.32, T.7 S., R.14 E., Gooding County, 0.1 mile downstream from head of creek, 3.8 miles southeast of Hagerman, and about 7.5 miles upstream from mouth.	-	1902, 1917, 1931 1950-59, 1963-68	4-14-69	d38.7
Do.....	.....do.....	Lat 42°50'10", long 114°53'40", in SW¼NE¼ sec. 11, T.7 S., R.13 E., Gooding County, 700 ft northwest of U.S. Highway 30 bridge and 1.4 miles north of Hagerman.	-	1917, 1919 1950-59, 1963-68	4-14-69	145
Birch Creek.....	.....do.....	Lat 42°51'10", long 114°53'30", in SE¼SE¼ sec.34, T.6 S., R.13 E., Gooding County, just downstream from left bank tributary, 0.5 mile upstream from entry to right bank of Snake River, 0.8 mile south of Big Wood River, and 2.5 miles north of Hagerman.	-	1917-1919 1950-59, 1963-68	4-14-69	d8.95
Big Wood River basin						
Prairie Creek...	Big Wood River.	Operated as a crest-stage station. See Station No. 13-1352.	b18	1962-68	5-27-69 6-24-69	a216 a101
Adams Gulch.....	.....do.....	Operated as a crest-stage station. See Station No. 13-1358.	10.9	1962-68	5-27-69 6-24-69	a29.2 a7.2
Deer Creek.....	Camas Creek....	Operated as a crest-stage station. See Station No. 13-1414.	13.2	1961-68	4- 9-69 4-21-69 5-26-69	48.4 56.4 a15
Schooler Creek..	Thorn Creek....	Operated as a crest-stage station. See Station No. 13-1457.	2.22	1961-67	4-27-69	a2.1
Muldoon Creek...	Copper Creek...	Operated as a crest-stage station. See Station No. 13-1473.	12.2	1962-67	5-30-69 6-25-69	72.0 a35
Silver Creek....	Little Wood River.	Lat 42°14'10", long 114°59'10", in NW¼ sec.20, T.2 S., R.21 E., Blaine County, at highway crossing 5.4 miles south of Carey.	-	-	4- 4-69	430
Little Wood River.	Big Wood River.	Lat 42°56'10", long 114°24'10", in sec.2, T.6 S., R.17 E., Lincoln County, at old gaging station site 400 ft upstream from bridge in Shoshone.	b620	1922-60±	4- 5-69	802
Cove Creek.....	Big Wood River.	Lat 42°52'01", long 114°52'06", in SW¼SW¼SW¼ sec.25, T.6 S., R.13 E., Gooding County, at walkway across outlet of Cove Creek.	-	-	5-23-69 9- 9-69	63.4 63.1

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K•E 1 YEAR BY DAYS X 250 DIVISIONS
KEUFFEL & ESSER CO MADE IN U.S.A.

Attachment 3



Graph supplied by W. Ondrechen, Hydrology Section to D. Tuthill, Water Allocation Section, IDWR, memo dated 9/20/83

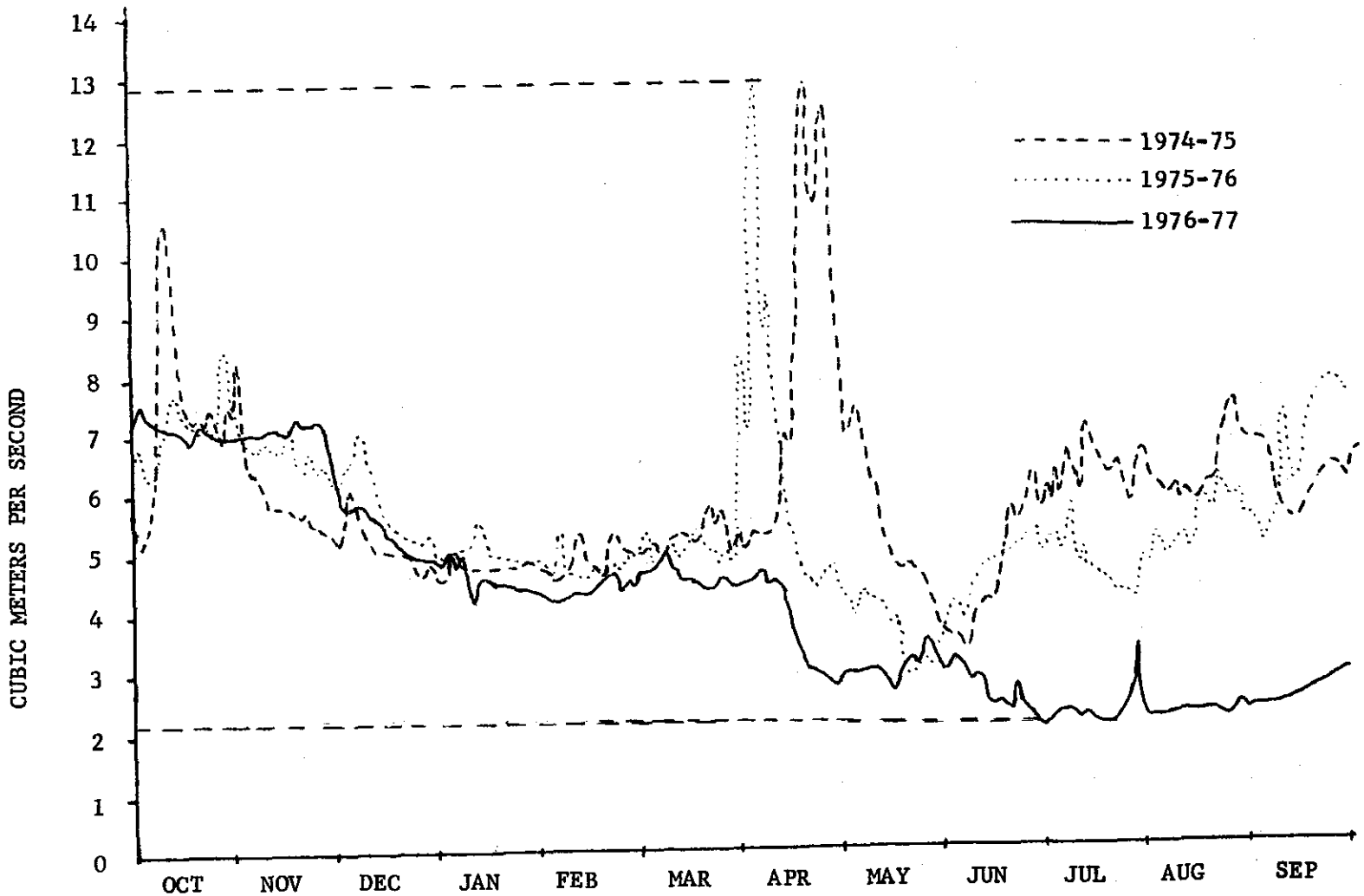
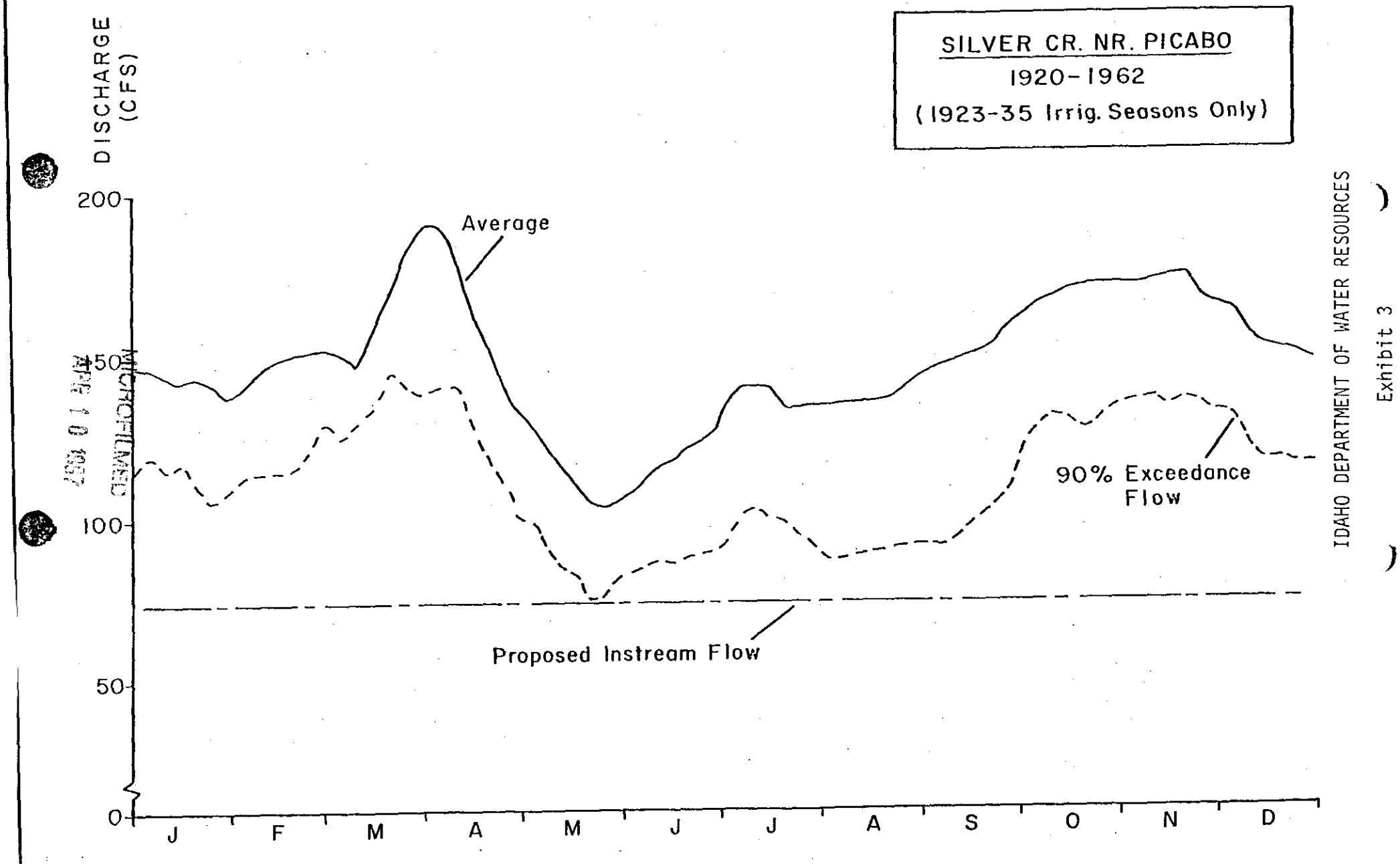


Figure 6. Silver Creek discharge at Picabo, Idaho, October 1974 to September 1977.

From: L.J. Francis and T.C. Bjornn. Fish, Wildlife and Range Experiment Station, Technical Report #9. June 1979. University of Idaho.

SUMMARY HYDROGRAPH DATA, SILVER CREEK



IDWR Exhibit #3, presented at MSF Hearing for 37-7849, on 11/10/83.

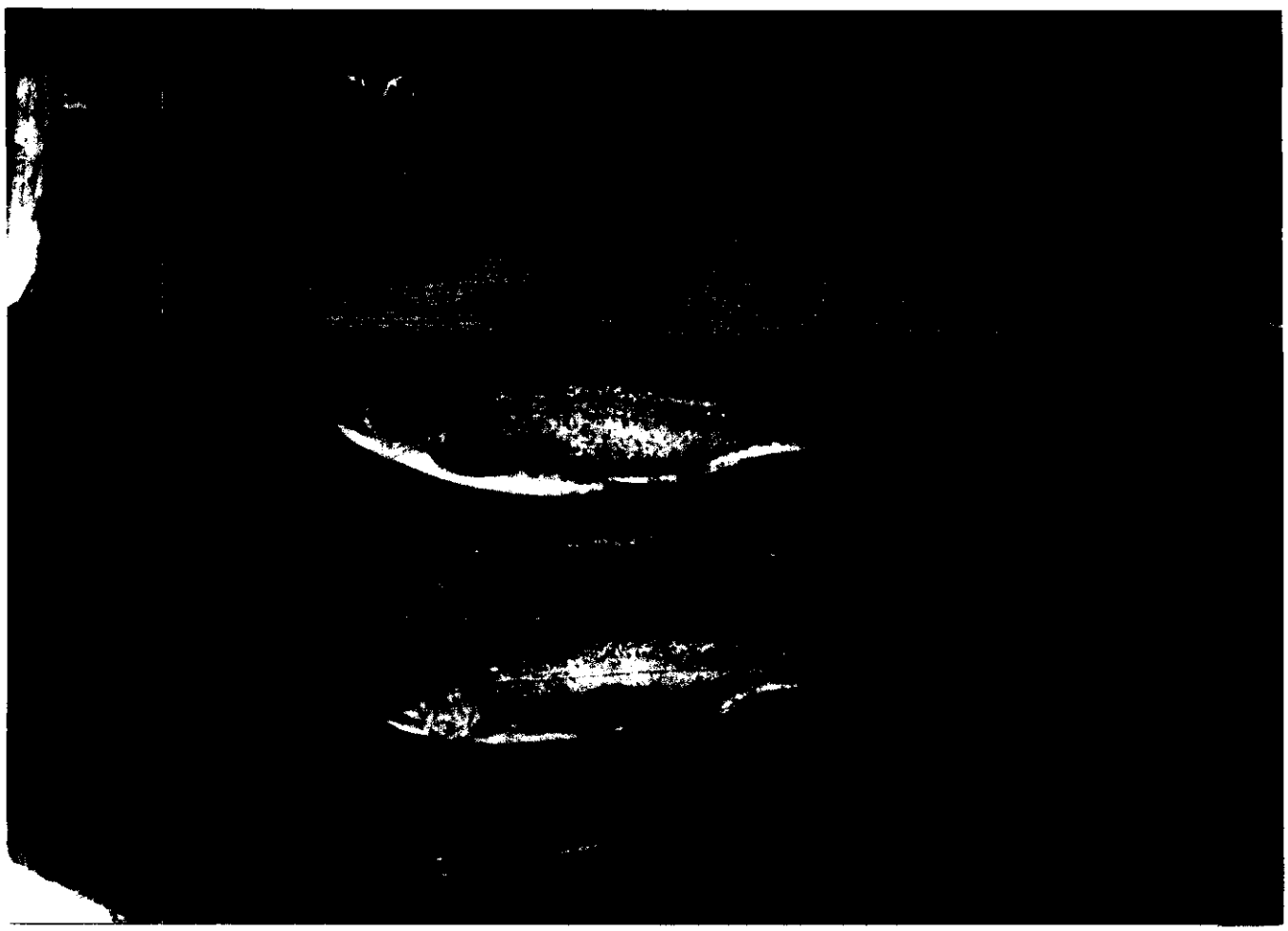
EXHIBIT NO. 1



Nice brown trout caught by anglers in the Priest Campground access site on Silver Creek located less than one mile above Highway 93, the upper end on the minimum stream flow reach. Photo taken by Stu Murrell, Regional Conservation Educator, Idaho Department of Fish and Game on May 26, 1984.

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EXHIBIT NO. 2



Wild rainbow trout in excellent body condition obtained by electrofishing in the "Bear Track" Williams study area on the Little Wood River during fall population estimates. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

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APR 1 6 1992

EXHIBIT NO. 3



Brown trout ranging in size from 11 to 16 inches obtained by electrofishing in the "Bear Track" Williams study site on the Little Wood River. Holes in tails of two lower fish are marks to indicate fish which were marked in the preceding week and are used to estimate total fish population. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

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APR 10 1997

EXHIBIT NO. 4



Two nice brown trout from the "Bear Track" Williams area of the Little Wood River displayed by Idaho Department of Fish and Game fishery technicians Christie Cockerham and Jane Mauser. Fish obtained by electrofishing during fall population estimate studies. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

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APR 10 1997

EXHIBIT NO. 5



Nongame forage fish (sucker, dace and redside shiner) obtained from the "Bear Track" Williams access site on the Little Wood River. Fish sampled by electrofishing when doing fish population studies. Photo taken by Fred Partridge, Regional Fishery Biologist, Idaho Department of Fish and Game on October 16, 1991.

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APR 10 1992

November 22, 1991

STATE OF IDAHO
IDAHO WATER RESOURCE BOARD
STATEHOUSE
BOISE ID 83720

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 37-07849

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

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DEC 10 1991

Hawn DeGuerre

[redacted]

October 31, 1991

STATE OF IDAHO
IDAHO WATER RESOURCE BOARD
STATEHOUSE
BOISE ID 83720

PROOF DUE NOTICE

RE: PERMIT NO. 37-07849

Dear Permit Holder:

One of the conditions of approval of the above referenced water permit was that proof of the extent of your beneficial use must be submitted to this office on or before January 1, 1992. (See last page of your approved permit or your last approved extension request.) Enclosed is a form which when accompanied by the license examination fee or a complete field examination report prepared by a certified water right examiner may be used to submit the required proof.

If you have not fully completed your project, and you or a previous owner of this permit have not received a prior extension of time, you may request an extension of time if the delay is for reasonable cause as provided in Section 42-204, Idaho Code. If you have been prevented from proceeding by a governmental agency or by litigation which might bring title to the water in question, more than one extension of time can be granted. An extension of time request form is enclosed for your convenience.

Either an acceptable proof of beneficial use submittal or an acceptable request for an extension of time must be received by this department on or before the above described proof due date. If neither is received, the department will send you a lapse notice. Within sixty (60) days of the mailing of the lapse notice, the permit will no longer be of any force nor effect.

SINCERELY,

Nina Shields
Secretary/Records Manager

Enclosures

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DEC 10 1991

(H.C.R. No. 8)

A CONCURRENT RESOLUTION
APPROVING AN APPLICATION TO APPROPRIATE WATER FOR MINIMUM STREAMFLOW.

Be It Resolved by the Legislature of the State of Idaho:

WHEREAS, the Water Resources Board may apply for a permit to appropriate unappropriated waters of any stream for minimum streamflow; and

WHEREAS, under the provisions of section 42-1503, Idaho Code, no permit shall become finally effective until affirmatively acted upon by the Legislature.

NOW, THEREFORE, BE IT RESOLVED by the members of the First Regular Session of the Forty-ninth Idaho Legislature, the Senate and the House of Representatives concurring therein, that the approved application for a permit of the Water Resource Board to appropriate the unappropriated waters of the Big Wood River for minimum streamflow purposes, which permit No. 37-7919 was approved by the Director of the Department of Water Resources in an Amended Memorandum Decision and Order dated January 16, 1987, authorizing the appropriation of seventy cubic feet per second on the reach of the Big Wood River from the point of diversion of the Bellevue Canal located in the SW1/4, NW1/4, Section 36, Township 2 North, Range 18 East B.M., upstream approximately eighteen miles to the confluence with Warm Springs Creek in the SE1/4, NW1/4, Section 13, Township 4 North, Range 17 East, B.M., Blaine County, and the same is hereby subject to the conditions and limitations contained in the Amended Memorandum Decision and Order of the Director of the Department of Water Resources dated January 16, 1987.

Adopted by the House March 2, 1987.
Adopted by the Senate March 24, 1987.

(H.C.R. No. 9)

A CONCURRENT RESOLUTION
APPROVING AN APPLICATION TO APPROPRIATE WATER FOR MINIMUM STREAMFLOW.

Be It Resolved by the Legislature of the State of Idaho:

WHEREAS, the Water Resources Board may apply for a permit to appropriate unappropriated waters of any stream for minimum streamflow; and

WHEREAS, under the provisions of section 42-1503, Idaho Code, no permit shall become finally effective until affirmatively acted upon by the Legislature.

NOW, THEREFORE, BE IT RESOLVED by the members of the First Regular Session of the Forty-ninth Idaho Legislature, the Senate and the House

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DEC 10 1991

of Representatives concurring therein, that the approved application for a permit of the Water Resource Board to appropriate the unappropriated waters of Silver Creek for minimum streamflow purposes, which Permit No. 37-7849 was approved by the Director of the Department of Water Resources in a Memorandum Decision and Order dated January 16, 1987, authorizing the appropriation of seventy-four cubic feet per second on the reach of Silver Creek which extends from the point where it crosses U.S. Highway No. 93 in the NW1/4, SE1/4, Section 20, Township 2 South, Range 21 East, B.M., downstream to the confluence of Silver Creek and the Little Wood River in Lot 5, Section 6, Township 3 South, Range 21 East, B.M., Blaine County, and the same is hereby approved subject to conditions and limitations contained in the Memorandum Decision and Order of the Director of the Department of Water Resources dated January 16, 1987.

Adopted by the House March 2, 1987.
Adopted by the Senate March 25, 1987.

(H.C.R. No. 12)

A CONCURRENT RESOLUTION
STATING FINDINGS OF THE LEGISLATURE CONCERNING USAGE OF STATE PARKS BY IDAHO RESIDENTS.

Be It Resolved by the Legislature of the State of Idaho:

WHEREAS, Idaho's state parks are one of the many benefits enjoyed by persons residing in the State of Idaho; and

WHEREAS, Idaho residents wishing to stay overnight in some of Idaho's state parks are finding it more and more difficult to do so; and

WHEREAS, it should be the goal of the State of Idaho to encourage tourism but not at the expense of totally depriving Idaho residents from using our state parks.

NOW, THEREFORE, BE IT RESOLVED by the members of the First Regular Session of the Forty-ninth Idaho Legislature, the House of Representatives and the Senate concurring therein, that we hereby request the Idaho Parks and Recreation Board and the Department of Parks and Recreation to promulgate rules and regulations setting up a reservation by mail system which would allow Idaho residents first consideration in obtaining reservations over nonresidents whose request for reservations is received on the same date. Such preference would continue for the first three calendar months of the year, after which all reservations will be handled on a first come, first served basis.

Adopted by the House March 4, 1987.
Adopted by the Senate March 24, 1987.

DEC 10 1991

868 East Main, Box 428
Jerome, Idaho 83338

TO: Department of Water Resources
Date: March 27, 1987

RE: Outline of Plans to Document Beneficial Use of Minimum Stream Flows in Silver Creek (37-7849) and Big Wood River (37-7919).

A. BIG WOOD RIVER

In 1986, the Idaho Department of Fish and Game initiated a research project on the Big Wood River drainage in order to assist in the development of a comprehensive management plan. Russell F. Thurow, Senior Fishery Research Biologist, is assigned to the project and will be conducting research through the 1988 field season. The specific objectives of the study are:

1. To assess the abundance, distribution and age structure of fish stocks in the Big Wood River and principal tributaries.

2. To characterize movement patterns of the spawning and rearing phases of fish stocks in the Big Wood River.

3. To estimate angler effort and harvest on the Big Wood River.

4. To survey angler opinions and preferences on the Big Wood River.

5. To compare fish populations within special regulation sections with fish populations in general regulation sections of similar habitat.

6. To compare angler effort, catch and angler opinions within special regulation and general regulation stream sections.

7. To evaluate movements of fish stocks between special regulation and general regulation stream sections.

8. To assess the impact of unscreened irrigation diversions on fish populations in the Big Wood River.

9. To evaluate the feasibility of screening diversions if they adversely impact fish populations.

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10. To evaluate stream reaches in the Big Wood River which have been degraded.

These data will allow the Department of Fish and Game to assess the current status of fish populations and angler effort, and to estimate the annual economic value of the Big Wood River fishery.

B. SILVER CREEK

In 1986, the Idaho Department of Fish and Game entered into a cooperative research project on Silver Creek with the Nature Conservancy and Idaho State University in order to assist in the development of a comprehensive management plan. Graduate students attending Idaho State University involved with the project are Blaine Parker and Michael Riehle. The students will be conducting research through 1988. The specific objectives of the study are:

1. Assess the species composition, size and abundance of trout species in both general regulation and special regulation sections of Silver Creek.

2. Assess angler effort, harvest and opinions on Silver Creek.

3. Quantify rainbow trout activity budgets and habitat utilization in Silver Creek and principal tributaries.

These data will allow the Department of Fish and Game to assess the current status of fish populations and angler effort, and to estimate the annual economic value of the Silver Creek fishery.

Submitted by:

Robert J. Bell, Regional Fishery Manager
Scott A. Grunder, Regional Fishery Biologist

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MAY 12 1987

IN THE HOUSE OF REPRESENTATIVES

HOUSE CONCURRENT RESOLUTION NO. 9

BY RESOURCES AND CONSERVATION COMMITTEE

A CONCURRENT RESOLUTION
APPROVING AN APPLICATION TO APPROPRIATE WATER FOR MINIMUM STREAMFLOW.

Be It Resolved by the Legislature of the State of Idaho:

WHEREAS, the Water Resources Board may apply for a permit to appropriate unappropriated waters of any stream for minimum streamflow; and

WHEREAS, under the provisions of section 42-1503, Idaho Code, no permit shall become finally effective until affirmatively acted upon by the Legislature.

NOW, THEREFORE, BE IT RESOLVED by the members of the First Regular Session of the Forty-ninth Idaho Legislature, the Senate and the House of Representatives concurring therein, that the approved application for a permit of the Water Resource Board to appropriate the unappropriated waters of Silver Creek for minimum streamflow purposes, which Permit No. 37-7849 was approved by the Director of the Department of Water Resources in a Memorandum Decision and Order dated January 16, 1987, authorizing the appropriation of seventy-four cubic feet per second on the reach of Silver Creek which extends from the point where it crosses U.S. Highway No. 93 in the NW1/4, SE1/4, Section 20, Township 2 South, Range 21 East, B.M., downstream to the confluence of Silver Creek and the Little Wood River in Lot 5, Section 6, Township 3 South, Range 21 East, B.M., Blaine County, and the same is hereby approved subject to conditions and limitations contained in the Memorandum Decision and Order of the Director of the Department of Water Resources dated January 16, 1987.

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APR 13 1987

MEMORANDUM

February 5, 1987

TO: Norman Young

FROM: L. Glen Saxton LGS

RE: Testimony Relative to R.S. 20008, Minimum Stream Flow - Silver Creek

In the waning moments of testimony before the House Resources and Conservation Committee today, a question was asked whether there were any hydropower water right filings in the reach of Silver Creek being considered for a minimum stream flow. Your response was something to the effect that to your knowledge there was not.

Upon checking department records, I determined there is one (1) protested water right application for power purposes within the reach of Silver Creek being considered. The application, however, in the name of Silver Falls Ranch predates the minimum stream flow and if developed, would not be affected by the minimum stream flow.

Additional information relative to the hydropower filing includes the following:

Identification No. 37-7850
Applicant: Silver Falls Ranch
Source: Silver Creek
Rate: 39.0 cfs
Use: Hydropower
Season: 1-1 to 12-31
Priority: 8-25-1980
Protested by Fish and Game
P/D & P/U - near midsection of minimum stream flow reach

While this information isn't particularly significant to the committee's review of the R.S., the department may want to advise the committee of the application so there will be no future misunderstanding.

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

January 16, 1987

Honorable Tom Boyd
Speaker of the House
Statehouse
Boise, ID 83720

Re: Water Right Application for Permit for Minimum Streamflow No. 37-7849, Silver Creek.

Dear Mr. Speaker:

Enclosed please find a copy of the above referenced application for permit, including the Memorandum Decision and Order which was issued on January 16, 1987, and a draft legislative resolution approving the application.

As you are aware, Idaho Code § 42-1503 requires that the application must be reviewed by the legislature. As defined by statute, each application "(i) shall not become finally effective until affirmatively acted upon by concurrent resolution of the Idaho Legislature; or (ii) except that if the legislature fails to act prior to the end of the regular session to which the application submitted, the application shall be considered approved."

Copies of the Memorandum Decision and Order were mailed to full parties and interested parties on January 16, 1986. Any person aggrieved by the Amended Memorandum Decision and Order is entitled to request rehearing before the Director within twenty (20) days, or to appeal the decision to the district court within thirty (30) days of the date that the decision was made.

This letter constitutes submittal of the application to the legislature for approval. Please advise me if you desire further information or presentation on the nature of the application.

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APR 13 1987

Sincerely,

A. KENNETH DUNN, Director
Dept. of Water Resources

GS:jf
CC: Legislative Council

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

January 16, 1987

Senator James Risch, President
Senate Pro Tem
Statehouse
Boise, ID 83720

Re: Water Right Application for Permit for Minimum Streamflow No. 37-7849, Silver Creek.

Dear Senator Risch:

Enclosed please find a copy of the above referenced application for permit, including the Memorandum Decision and Order which was issued on January 16, 1987, and a draft legislative resolution approving the application.

As you are aware, Idaho Code § 42-1503 requires that the application must be reviewed by the legislature. As defined by statute, each application "(i) shall not become finally effective until affirmatively acted upon by concurrent resolution of the Idaho Legislature; or (ii) except that if the legislature fails to act prior to the end of the regular session to which the application submitted, the application shall be considered approved."

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This letter constitutes submittal of the application to the legislature for approval. Please advise me if you desire further information or presentation on the nature of the application.

Sincerely,

A. KENNETH DUNN, Director
Dept. of Water Resources

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APR 13 1987

GS:jf
CC: Legislative Council

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

December 10, 1984

Idaho Department of Fish and Game
Attn: Steve Goddard and Virgil Moore
600 S. Walnut
Boise, ID 83706

Re: Application for Permit No. 37-7849, Silver Creek

Gentlemen:

The purpose of this letter is to advise you regarding the status of the above-referenced application for permit, so that the files on this matter in your office and in this office will be properly documented.

As we have discussed, items that are currently on appeal in the matter of the Pahsimeroi River minimum stream flow application have a bearing on this application as well. Therefore, an answer to the Exceptions to the Proposed Memorandum Decision submitted by your agency for the above-referenced matter will not be forthcoming until the Court rules on the Pahsimeroi River matter.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT/ls

cc: Southern Region

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APR 13 1987

M E M O R A N D U M

TO: Glen Saxton, Norm Young

FROM: Dave Tuthill DRT

DATE: October 15, 1984

RE: Idaho Department of Fish and Game (IDFG) Exceptions to the Proposed Memorandum Decision for Minimum Streamflow Application No. 37-7849, Silver Creek

The purpose of this memorandum is to briefly summarize the exceptions provided by the IDFG in the above-described matter, and to explain why I would recommend that we not proceed with additional action on this file at this time.

The IDFG has submitted three primary exceptions to our proposed Memorandum Decision and Order. The first exception relates to our finding that "The flow requested is generally capable of being maintained." They would like us to change the language to show that the flows are indeed capable of being maintained and not "generally capable" of being maintained. Regarding the exception, the testimony at the hearing indicated that at some times the irrigation diversions within the minimum streamflow reach deplete the flows to below the requested amounts. Therefore, it is my view that the language that is currently in the proposed Memorandum Decision is accurate and should not be changed. Our response to this exception could be in the form of an explanatory cover letter to accompany the final decision.

The second IDFG exception pertains to the relationship between the minimum streamflow water right and upstream claimed water rights. The applicant, the Idaho Water Resource Board, has in several instances expressed an intent to not affect historic upstream water delivery practices as a result of the approval of a minimum streamflow water right. Therefore, subordination of the MSF water right to upstream claimed rights is made with the expressed approval of the applicant. This same issue is one of the primary issues which has been appealed to the district court in the case of the Pahsimeroi River MSF approval. Currently, transcripts are being prepared for that case, and the decision on this point will likely apply not only to the Pahsimeroi River but also to other streams throughout the state. Therefore, our legal staff advises that we should not proceed with answering this objection at this time, but rather should delay a response based on the outcome of the Pahsimeroi River MSF court proceeding.

The third exception raised by the IDFG refers to the term condition of the permit. This condition is also a primary issue in the Pahsimeroi River MSF proceeding. Response on it also has been recommended to be delayed pending the outcome of that proceeding.

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APR 1 5 1987

Phil Rassier has indicated that the transcripts for the Pahsimeroi River MSF action are currently being completed, and soon thereafter briefs will be submitted by both the IDFG and our Department. He estimated that a District Court decision could conceivably be forthcoming in as little as 120 days. However, this time period may be extended for the District Court, and the possibility of further appeal is available. Although a delay in our response on this Silver Creek MSF application could be lengthy pending the results of the Pahsimeroi River MSF proceeding, such a delay appears to be the preferable action at this point, due to the similarity of issues. If you concur with this analysis, we will return this file to the vault, pending the outcome of the Pahsimeroi River MSF proceedings.

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APR 1 5 1987

RECEIVED
JUL 12 1984
Department of Water Resources

JIM JONES
Attorney General
State of Idaho
Statehouse, Room 210
Boise, Idaho 83720
Telephone: (208) 334-2400

STEPHEN V. GODDARD
Deputy Attorney General
Idaho Department of Fish and Game
P. O. Box 25
Boise, Idaho 83707
Telephone (208) 334-3715

BEFORE THE DIRECTOR OF THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

In the Matter of Application for Permit No. 37-7849 to Establish A Minimum Stream Flow in Silver Creek in the Name of the Idaho Water Resources Board	EXCEPTIONS TO THE PROPOSED MEMORANDUM DECISION AND ORDER

COMES NOW the Idaho Department of Fish and Game, hereafter Fish and Game, who takes exception to the proposed memorandum decision and order in the proceeding referenced above.

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APR 1 6 1987

EXCEPTIONS

Fish and Game takes exception to Finding of Fact #9 ". . .that the flow requested is generally capable of being maintained." The records of the Idaho Department of Water Resources, hereafter Water Resources, clearly indicate that the flows are capable of being maintained and not " generally capable of being maintained. (See Water

Resources summarys of flows near Picabo, Sportsmen's access near Picabo and Ondrechen, Memoranda of September 20, 1983 and December 22, 1983. The hearing officer recognized the correlation between the flows measured at the two stations when he said:

> Based on recent flow records available on Silver Creek, the Department concludes that if the data from the measurement station located two miles upstream from the reach were to be extended for twenty years beyond 1962, no significant change in flows would be identifiable.

(Proposed Memorandum Decision and Order at 3).

While it is true that the flows are available at the measuring devices, the testimony indicated that irrigation diversions within the MSF Reach deplete the flows to below the requested amounts at certain times during certain summers. DRT

2

Fish and Game takes exception to Conclusion of Law No. 2, as it pertains to water being used or claimed but not proven water rights. This conclusion is contrary to Idaho law. In Idaho, the law is clear, water rights can only be obtained by following the statutory procedure found in Title 42, Idaho Code. Provisions are available for filing constitutional claims but these claims must be proven or adjudicated to become valid rights entitled to a priority right. A water right for an instream flow has the same legal status or priority as any other water right and cannot be subordinated to any "claimed right." (See 42-1501, et. seq., Idaho Code).

while this is true in a technical sense, in a practical sense to not protect claimed rights would force expensive supplemental adjudications of upstream claimed rights. The applicant, the IWRB, has been in favor of subordination to "reasonable" upstream claimed water rts, to prevent undue hardship on upstream water users. DRT

The law in regard to the distribution of water is clearly delineated in Section 42-607, Idaho Code, which states:

> . . .that any person or corporation claiming the right to the use of the waters of the stream or water supply comprising a water district, but not owning or having the use of an adjudicated or decreed right therein, or right therein evidenced by

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APR 13 1987

JIM JONES
Attorney General
State of Idaho
Statehouse, Room 210
Boise, Idaho 83720
Telephone: (208) 334-2400

> permit or license issued by the department of water resources, shall, for the purposes of distribution during the scarcity of water, be held to have a right subsequent to any adjudicated, decreed, permit, or licensed right in such stream or water supply, and the watermaster shall close all headgates of ditches or other diversions having no adjudicated, decreed, permit or licensed right if necessary to supply adjudicated, decreed, permit or licensed right in such stream or water supply.

It is undisputed that a minimum stream flow right once approved is a vested right. Therefore, this licensed right cannot be subordinated to a right which is "merely claimed." If minimum stream flow rights could be subordinated to "claimed rights", then so could other adjudicated, decreed, licensed or permit rights. This is contrary to Idaho law and would throw the entire priority system into chaos.

See response above.

Fish and Game takes exception to condition #6 of the Order which provides:

> This minimum stream flow permit shall be considered in the evaluation of Applications for Permit on Silver Creek and tributaries filed after August 26, 1980, but shall not cause alterations in historic water delivery practices in Water District 37-M, Little Wood River and tributaries.

Once the minimum stream flow right has been approved, it is a vested legal right and as such if must be more than considered in evaluating subsequent applications. (Section 42-1505, I.C.). As such, the water must be delivered or allowed to remain in the stream and cannot be subordinated to a "claimed but not proven or adjudicated right." This condition of the permit is unlawful and therefore null and void. Section 42-1503, I.C., provides approval of the application

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Boise, Idaho 83720
Telephone: (208) 334-2400

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APR 13 1987

must be made upon a finding that appropriation of the minimum stream flow will not interfere any vested water right, permit or application with an earlier date. This finding has appropriately been made. (Proposed Memorandum Decision and Order at 4). Section 42-1503, I.C., does not mention "claimed rights." The minimum stream flow right must be accorded the same status as any other adjudicated, decreed, licensed or permit right.

The applicant has been expressly in agreement with Condition # 6.

3 Fish and Game takes exception to condition #7 of the Order which states:

> The Director retains jurisdiction to review and amend any and all parameters of this permit and subsequent license upon his determination that the public interest is no longer served by the minimum stream flow as established. The Director will review the permit and subsequent license 10 years after issuance of the permit or upon petition of 50 percent or more of the registered voters residing within the Silver Creek Basin.

There are several grounds for Fish and Game's exceptions. First, Section 42-1503, I.C., permits the Director to set conditions. It does not empower him to review, amend any and all parameters of this permit or subsequent license upon his determination that the public interest is no longer served. If this is what the legislature had intended, they would have said so and provided guidelines for the Director. Second, the legislature has not nor is Fish and Game aware that the Director is conditioning other permits or applications for water rights (except for the Pahsimeroi River minimum stream flow, which is on appeal in District Court). The Director has granted

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Boise, Idaho 83720
Telephone: (208) 334-2400

several minimum stream flow permits in the past without this condition. These permits all received approval by the legislature. Section 42-203, I.C., provides that the Director may condition a permit if "it will conflict with the local public interest, where the local public interest is defined as the affairs of the people in the area directly affected by the proposed use." (emphasis added). Fish and Game is not aware of any instance where the Director has conditioned an application for a water right (other than minimum stream flows) so that it may be amended if at any time in the future if it conflicts with the public interest. Third, there is no statutory authority for the Director's setting a 10 year time period for review or for a mandatory review of any other water right upon a petition by 50 percent or more of the registered voters residing within the Basin. This condition makes a minimum stream flow water right worthless or, at best, extremely transitory. In essence, this condition is contrary to the interest of Idaho voters who approved the minimum stream flow referendum and the intent of the Idaho legislature. The legislative intent is clearly delineated in Section 42-1501, I.C., which states:

> The legislature of the state of Idaho hereby declares that the public health, safety and welfare require that the streams of this state and their environments be protected against loss of water supply to preserve the minimum stream flows required for the protection of fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation and navigation values, and water quality. The preservation of the water of the streams of this state for such purposes when made pursuant to this act is necessary and desirable for all the inhabitants of this state, is in the public interest and is hereby declared to be a beneficial use of such water.

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Lastly, Section 42-203, I.C., defines the public interest as being "the affairs of the people in the area directly affected by the proposed use." This statute clearly does not limit consideration of the public interest to only 50 percent of the registered voters in the basin. Silver Creek is renowned throughout Idaho and the world as trout fishery. Obviously, the area directly affected in this case will extend way beyond the limits of the basin and involves the interests of more Idaho citizens than just 50 percent of the registered voters in that confined area.

CONCLUSION

For the reasons given above, Fish and Game respectfully requests Water Resources to amend and modify its proposed memorandum decision and order consistent with the exceptions discussed above.

DATED This 11th day of July, 1984.

Stephen Goddard

Stephen V. Goddard
Deputy Attorney General

JIM JONES
Attorney General
State of Idaho
Statehouse, Room 210
Boise, Idaho 83720
Telephone: (208) 334-2400

CERTIFICATE OF SERVICE

I HEREBY CERTIFY That on this the 11th day of July, 1984, true and correct copies of the foregoing EXCEPTIONS TO THE PROPOSED MEMORANDUM DECISION AND ORDER were mailed, postage prepaid to:

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APR 13 1987

Donald R. Kramer, Chairman
Idaho Water Resources Board
Route 1
Castleford, ID 83321

Joe Sorenson
SAM Airport, Inc.
Twin Falls, ID 83330

Tim Cochnauer
Idaho Dept. of Fish and Game
2320 Government Way
Coeur d'Alene, ID 83814

Paul Valcarce
Idaho Dept. of Fish and Game
Box 662
Picabo, ID 83348

A. Kenneth Dunn, Director
Idaho Dept. of Water Resources
450 W. State Street
Boise, ID 83720

Loren Strode
Carey, ID 83320

Reid Newby
Route T
Shoshone, ID 83352

Stephen Goddard
Stephen V. Goddard
Deputy Attorney General

JIM JONES
Attorney General
State of Idaho
Statehouse, Room 210
Boise, Idaho 83720
Telephone: (208) 334-2400

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INTER-DEPARTMENT MEMO — 1

FROM D. Tuthill

DATE 1/5/84

TO MSF Application - Silver Cr. 37-7849

SUBJECT

Send a copy of proposed memo decision to:

Jim Shull
KLIX Radio
315 Falls Ave
Twin Falls

Sent 12-27-84

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APR 1 0 1991

SIGNATURE

DOVE SPRINGS AND THE NARROWS WATER DISTRICT

Telephone (208) 324-5110
Route 4, Box 4634
Jerome, ID 83338

November 18, 1983

TO: Idaho Power Lawsuit Defendants 01-7021, 02-7128, 02-7138
Water Right Number(s): 36-7822, 36-7818-22, 37-7727+28+34+39, 37-7849 37-7892, 37-7920, 61-7373 22-7369

We are writing this letter to request that you join with us in a matter of great importance to our area as well as the State of Idaho. You have by now heard of the "Swan Falls decision" and you are probably aware that the Idaho Department of Water Resources has declared a moratorium on further processing of water rights, either surface or underground, in the entire Snake River Drainage, including your area.

You may not be aware that last March, Idaho Power Company filed a lawsuit against 7500 water right holders. Idaho Power is seeking damages and an injunction against further use of all our water rights with priority dates later than January 17, 1900. Only one water user defendant has been served so far. It appears that Idaho Power desires to keep publicity at a minimum until it can implement legislation which will prevent any future water development in the Snake River Drainage Basin, upstream from Swan Falls.

We feel the Governor responded correctly to the action challenging the constitutionality of Senate Bill 1180 by refusing to sign the contract until the litigation is concluded. This makes it imperative that we move as soon as possible to protect ourselves and our water rights in the litigation brought against all of us by Idaho Power.

You and we have both been named as defendants in the lawsuit. We have asked Kent W. Foster of Holden, Kidwell, Hahn & Crapo and R. W. Rigby of Rigby, Thatcher, Anderson & Barton to defend our interests in the litigation. We are enclosing a copy of an opinion letter we obtained from Mr. Foster which explains the issues and the background.

We are convinced that a unified effort to defend this litigation is essential. We have a great deal more impact together than individually, and if we all participate, we stand a better chance of being able to bear the economic burden of defending a lawsuit brought by an organization with the resources of the Idaho Power Company.

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APR 13 1984

We are suggesting that we informally organize a group of the named defendants and other interested individuals to help fund our lawsuit defense. There are other groups and individuals throughout the Snake River Valley doing the same thing. I have arranged for meetings to be held at the following time and places:

November 28, Monday, Idaho Falls, West Bank, 7:30 PM
November 29, Tuesday, Twin Falls, Holiday Inn, 7:30 PM
November 30, Wednesday, Boise, Airport Holiday Inn, 7:30 PM

Kent Foster has agreed to be there to discuss the legal issues and help answer questions.

If you have received more than one letter, feel that Idaho Power has listed your water right--right number shown at the top of this letter--incorrectly, or that you should not be a defendant in this case, please call (208) 324-5110 so that we may correct our records.

In summary, what has happened leaves it up to us to protect our existing rights and future opportunities. We will look forward to seeing you at the meeting.

Yours very truly,

DOVE SPRINGS

Elaine Martin

Elaine Martin

Thomas K. Schafer, Manager
Canyonview Irrigation Co.

Terry G. Martin, President
The Narrows Water District

G. Keith Munsee

William J. Lanting

Enclosure

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APR 13 1987

WILLIAM S. HOLDEN
R. VERN KIDWELL, P.A.
FRED J. HAHN
KENT W. FOSTER
ROBERT E. FARNAM
WILLIAM D. FALER, P.A.
STEPHEN E. MARTIN
CHARLES A. HOMER
GARY L. MEIKLE
CURT R. THOMSEN
RANDALL K. BARTON
MICHAEL D. CRAPO

JAMES D. HOLMAN
GAYLE A. SORENSON
DONALD L. HARRIS
BRUCE T. SMITH

LAW OFFICES
HOLDEN, KIDWELL, HAHN & CRAPO
IDAHO FIRST NATIONAL BANK BUILDING
P.O. BOX 129
IDAHO FALLS, IDAHO 83402

TELEPHONE 523-0620
AREA CODE 208

ARTHUR W. HOLDEN (1877-1967)
ROBERT B. HOLDEN (1911-1971)
TERRY L. CRAPO (1939-1982)

November 5, 1983

Mrs. Elaine Martin
Dove Springs Irrigation
Route 4, Box 4634
Jerome, ID 83338

RE: Swan Falls Issue

Dear Elaine:

We are writing this letter at your request for a brief statement of the problem and our views in the Swan Falls matter. Although the letter may seem lengthy, it really covers only the bare bones of the matter. The issues, background and history are so complex that it would take a very lengthy letter indeed to fully address all facets of the problem, how it developed, and what we think can and should be done with regard to it. We trust the following will be both understandable and sufficiently brief to be helpful.

In 1977 a group of rate payers filed a complaint with Idaho Public Utilities Commission alleging that Idaho Power Company had failed to protect its water rights at its Swan Falls Power Plant and that Idaho Power's rate payers had been over charged. Idaho Power Company responded by filing suit in the Ada County District Court seeking a declaratory judgment, among other things, that its Swan Falls rights were not subject to up stream depletion. On motions for summary judgment, the District Court found that because of a clause in Idaho Power Company's Hell's Canyon Federal Power License, all of Idaho Power Company's water rights were subordinated to future up stream depletion by use of water from Snake River and its tributaries for out of stream consumptive uses. On November 19, 1982, the Supreme Court of Idaho reversed the decision of the District Court and decided that because there was no "subordination clause" in either the State of Idaho water rights documents relating to the Swan Falls plant or the Federal Power License for that plant, the Swan Falls rights were not subordinated.

The case was remanded by the Supreme Court to the District Court for a decision on certain other issues concerning the Swan Falls rights, such as abandonment, forfeiture, adverse possession, estoppel, waiver and laches. However, no further action has yet been taken on the remand.

Upon the filing of the Supreme Court decision, the Idaho Department of Water Resources stopped processing all applications for permits for ground or surface water up stream from Swan Falls in the entire Snake River Water Shed. The Department's concern is that if the Swan Falls rights are not subordinated, all rights to the use of surface or ground waters which are tributary to the Snake River flows at Swan Falls, subsequent in priority to the Swan Falls priorities, (the earliest of which may be January 17, 1900) are in jeopardy and may have to be cut to supply required flows at Swan Falls. Since flows at Swan Falls typically fall below 8400 cubic feet per second, the amount of Idaho Power rights during much of each summer, it appears there is no supply of water available for any future appropriations, except for non-consumptive uses.

Legislation was introduced in the 1983 legislature which would have subordinated all water rights for power production to out of stream consumptive uses such as irrigation. Idaho Power Company was able (by a margin of one vote in the Senate) to defeat this legislation. On the other hand, Idaho Power Company was successful in getting its own bill, S.B. 1180, passed.

On March 30, 1983, Idaho Power Company filed suit against some 7500 holders of water rights above its Swan Falls, Bliss, Lower Salmon Falls, and Upper Salmon Falls power plants. Although the water user defendants have not been served in this suit, the suit seeks damages from them and an injunction against further use of their water rights. S.B. 1180 was then introduced which, among other things, permits the governor to enter into a contract with Idaho Power Company under the terms of which Idaho Power Company is to agree to dismiss its law suit against a number of the named defendants in exchange for a

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MAR 13 1987

provision which deprives the Idaho Public Utilities Commission of jurisdiction to grant Idaho Power Company rate payers any relief in their pending action or any similar action.

The proposed contract would amount to an agreement by Idaho Power that certain water rights holders who have a decree or license a pending permit or application for permit, or have either beneficially used water or have a substantial investment in a well and irrigation equipment prior to November 19, 1982, become the holders of water rights to which Idaho Power's Swan Falls rights are subordinated. The number of those who might fit into this category is said to be about 5,000. We have discovered that no decreed rights or statutory claims, or even very many licenses, with priorities subsequent to 1900 were listed in the "7500" law suit. This statutory-contractual scheme does not appear to help the 2,000 to 2500 named defendants in the law suit who will not be dismissed, any of the numerous water rights holders who were not named, or those who have used water for many years, but have no permit or recorded evidence of their rights.

The major problem with this statutory-contractual approach is that it leaves the state in an untenable position; there can be no further development which is dependent upon a so called consumptive use of either surface or underground water in any of the Snake River water shed or plain up stream from Swan Falls. That area comprises most of the State of Idaho which is or can be developed for irrigated agriculture. From the date of the execution of the contract, any further water use in this area of the State for irrigation or other agricultural uses, municipal or industrial uses would depend upon whether Idaho Power Company was willing to part with a portion of its water rights, and if so, whether the proposed water use would be economically feasible in light of the price.

Whether there should or should not be any further development of surface or ground water in the major portion of this state where it is still possible, is a policy issue of such significance that it ought not to be decided in this manner. Certain of our clients have already instructed us to take the necessary action on their behalf to challenge the constitutionality of S.B. 1180. Their position is basically that past water development has resulted in increased power production at Swan Falls because of increased low flows so that there is no detriment to Idaho Power Company; that continued future development in a manner similar to what has occurred in the past is part of the Idaho State Water Plan; that such development is unlikely to significantly deplete Snake River flows at Swan Falls in the forseeable future; and that in any event, the value of the benefits to the State of Idaho which will result from such future development far exceeds the monetary value of any detriments which Idaho Power Company might experience as a result.

Regardless of what the legislature may do with respect to S.B. 1180 or any proposed subordination bill in the coming session, we think it is essential that the pending litigation, that is, the remand of the Supreme Court decision and the Idaho Power law suit against some 7500 water users, should proceed to its conclusion. There appears to be a substantial argument that all of Idaho Power's water rights are subordinated to future appropriations from the Snake River and its tributaries for irrigation and other so called consumptive out of stream uses, on grounds other than those upon which the November 19, 1982 decision is based. This argument in favor of subordination certainly seems consistent with a long course of conduct on the part of water rights appropriators, the State of Idaho, and even Idaho Power Company itself, which not only acquiesced in the continued development since 1900, but has encouraged much of the ground water pumping development.

Those who legally can and should pursue this litigation to its proper conclusion include not only the named defendants in the two pending law suits, but all water rights holders similarly situated who are holders of a decree, license, permit, application for permit or statutory claim for, or who, although there is no document of record, nevertheless claim a right to the use of surface or underground water within the Snake River water shed or plain up stream from Swan Falls, and whose priority date may be later than January 17, 1900.

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13 1984

We would be pleased to discuss this matter in greater depth with you at your convenience.

Yours very truly,

Kent W. Foster

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 11, 1983

Robert L. Meinen, Deputy Director
Idaho Dept. of Parks and Recreation
Statehouse Mail
Boise, ID 83720

RE: Minimum Stream Flows

Dear Bob:

The purpose of this letter is to apprise you of the current status of minimum stream flow applications for permit pending action this fall.

As you are aware, one of the items on the agenda of the Idaho Water Resource board meeting on October 7, 1983, was minimum stream flows. The Board reviewed the status of the six minimum stream flow applications currently pending action. Discussion and information presented for five of the applications resulted in the adoption of a resolution calling for the Director of the Idaho Dept. of Water Resources to proceed with administrative actions on each of the applications. A copy of this resolution, which describes the water right numbers and the respective streams, is enclosed for your information. Note that Application No. 37-7892 on the Malad River, for which your agency was the requesting agency, is included in this group.

Discussion and information presented for Application No. 37-7919, Big Wood River, included the reading into the record of your letter dated October 6, 1983. Also, Mr. Ted Divine briefly presented his proposal to develop a hydropower site with a point of diversion about 1½ miles upstream from the lower end of the proposed minimum stream flow reach. Based on this information as well as the public input at the informal public meeting in Hailey on September 22, the Board resolved to hold this application pending further investigation (copy of resolution enclosed). I anticipate that Mr. Gray will be contacting you to explore the possibility of further studies on this stream.

In your letter dated October 6, 1983, you indicated that your agency was not advised of the minimum stream flow filing on the Big Wood River. Our standard processing checklist for a minimum stream flow

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APR 13 1987

application calls for our regional office to send your agency a copy of any minimum stream flow application as soon as it is received. I checked on this one in particular and found that in fact it had not been so distributed. In the future we will insure that this distribution is accomplished.

The next administrative action for each of the five applications on which we have been requested to proceed is a hearing by the Director or his representative. These hearings have been tentatively scheduled as follows:

App. No.	Source	Date	Time	Location
37-7892	Malad River	Nov. 9	1:30 pm	Gooding
37-7920	"	"	"	"
37-7849	Silver Creek	Nov. 10	9:00 am	Hailey
37-7979	Lightning Cr.	Nov. 17	9:00 am	Sandpoint
37-7980	Grouse Creek	"	"	"

I will notify you when the details of these hearings have been confirmed.

Sincerely,

Dave

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosure

cc: Gene Gray

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APR 13 1987

STATE OF IDAHO

DEPARTMENT OF FISH AND GAME

600 SO. WALNUT ST. — P.O. BOX 25
BOISE, IDAHO 83707

November 17, 1981

RECEIVED
NOV 20 1981
Department of Water Resources

Mr. Dave Tuthill DRT
Supervisor, Water Rights Section
Idaho Department of Water Resources
Statehouse
Boise, Idaho 83720

Dear Dave:

The attached memo lists the riparian land owners on Lower Silver Creek and their comments relative to the proposed instream flow. It appears that there is little opposition to the proposal.

Sincerely,

Herb Pollard
State Fishery Manager

Attachment

MICROFILMED
APR 1 5 1987

NOV 16 1981

INTER-DEPARTMENT MEMO

DATE: 11/13/81

FROM: Bob Bell

TO: Bill Webb

SUBJECT: Silver Creek Instream Flow Request 37-7849

CC: Bob Salter, Herb Pollard, file

All the landowners on the section of Silver Creek covered in this application (from the Highway 93 Bridge downstream to the mouth) have been contacted by either Paul Valcarce, myself or both of us to inform them of the nature and intent of the application and to get their opinion of the instream flow request. None of the six landowners involved voiced objections to the proposed instream flows after the intent was explained. These contacts are summarized below starting from the Highway 93 Bridge and working downstream.

	Landowner	Comments
1.	Richard Payne Box 113 Carey, ID 83320 Phone: 823-4377	No objection to instream flow.
2.	Andy Payne 103 East B Shoshone, ID 83352 Phone: 886-2008 (home) 886-2373 (office)	No objection to instream flow.
3.	Bill Molyneaux Picabo, ID 83348 Phone: 823-4491	In favor of instream flow.
4.	John Durfee Rt #1 Box 65A Carey, ID 83320 Phone: 823-4562	In favor of instream flow. Currently has his property up for sale.
5.	Henry Jones Box 87 Carey, ID 83320	Henry (landowner) does not object to instream flow. His son, Carl, is against instream flow.
6.	Joseph B. Sorenson c/o S.A.M. Twin Falls Airport Twin Falls, ID 83301 Phone: 733-4490	Highly in favor of requested instream flow and will fully support. Would like to be put on mailing list for any matters concerning instream flows on Silver Creek.

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APR 13 1987

STATE OF IDAHO

DEPARTMENT OF FISH AND GAME

600 SO. WALNUT ST. — P.O. BOX 25
BOISE, IDAHO 83707

RECEIVED
OCT 23 1981
Department of Water Resources

October 20, 1981

Mr. David R. Tuthill, Jr., P.E.
Supervisor, Water Allocation Section
Idaho Department of Water Resources
Statehouse Mail
Boise, ID 83720

Dear Dave:

The following work has been done on Minimum Stream Flows in 1981:

95-7874 - Wolf Lodge Creek
96-7771 - Granite Creek
96-7772 - Sullivan Springs

Region 1 reports that staff gauges were installed and calibrated on these waters this summer. Periodic readings and recalibrations will be recorded.

73-7045 - Pahsimeroi River

We have collected stream flow measurements at 12 sites on the Pahsimeroi monthly since May and at two week intervals during some of the peak irrigation times. A report is being prepared which will include an aerial photo-map indicating the flow volume, inflows and withdrawals at the different sites and times. We hope to have the data completed and summarized in the next two months.

37-7849 - Silver Creek, lower end

The Regional office is supposed to be making contact with the riparian land owners this week and a report will be forwarded to you.

Sincerely,

Herb Pollard
State Fishery Manager
Bureau of Fisheries

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APR 13 1987

EQUAL OPPORTUNITY EMPLOYER

CONVERSATION MEMORANDUM

DATE 9-9-83

FILE 37-7849

NAME OF PARTY Reid Newby

EMPLOYEE Roberta Garrett

RE: diversions within reach. SESW, 30, 6S, 14E to SESE, 25, 6S, 13E -- Water st. numbers, present owners & addresses:

37-0006 A. W. Molyneux
37-0007 Box 400, Bellevue 83313
37-0008

37-0006 John Durfee
37-0007 Casey 83320
37-0008
37-0318
37-0319

37-0317 Henry Jones
37-0318 Box 87, Casey 83320
37-0367
37-7850 (power appr) Silver Heels Ranch.

37-0317 Joe Sorenson
37-0367 S.A.V. Airport, Inc.
Twin Falls 83330

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APR 1 0 1981

CONVERSATION MEMORANDU

DATE 6/8/81

FILE 37-7849

NAME OF PARTY HERB POLLARD (3791)

EMPLOYEE DAVE TUTHILL

RE: SETTING UP A HEARING

HERB WILL CONTACT THE PEOPLE IN THE F&G REGIONAL OFFICE RE: CONTACTING THE RIPARIAN LANDOWNERS.

I WILL CALL HIM ON JULY 1 TO SET UP A HEARING FOR LATE AUG. (Coorinate also w/ Board & Region) yes

DRT

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APR 13 1981

MINIMUM STREAMFLOW REQUEST/APPLICATION

PROCESSING CHECKLIST

	ASSIGNED TO	INITIALS/DATE
1. Request received and checklist attached.	Receptionist	Jg 9/1980
2. Request indexed.	Records Chief	Rg 9/1980
3. Preliminary review. Application prepared for signature.	Section Supv.	DRS 9/1980
4. Streamflow information requested from hydrology.	Section Supv.	Available from L. Wood R
5. Region advised of request.	Section Supv.	Dnr 9/1980
6. Acknowledgment letter sent.	Section Supv.	Unnecessary: Hand delivered
7. Copy of request routed to: Reg. Off. Bur. Chief; Oper. Bur. Chief; Admin.; Director.	Records Chief	RG 9/1980
8. Copy of request routed to Administrator, Resources Analysis Division for placement on Board Agenda.	Records Chief	Rg 9/1980
9. Water Rights researched & abstracted.	Records Chief	Rg 8-22-1980
10. Visual aid request prepared.	Section Supv.	
11. Visual aid reviewed.	Section Supv.	
12. Request and related data presented to Board.	Administrator, Res. Admin. Div.	8-26-1980
13. Filed or Rejected by Board.	Sec. Supv. et.al.	8-26-1980
14. Board action indexed.	Records Chief	Rg 9/1980
15. Original application sent to region.	Records Chief	Rg 9/1980
16. Copy of application sent to F&G, H&W, Parks & Recreation (mandatory)	Region	9/1980
17. Notice sent to each water right holder or applicant on MSF reach.	Sec. Supv.	
18. Application advertised w/o hearing date.	Region	
19. Personal contact made with riparian land owners.	Requestor	Per Letter Dnr 9/1/83
20. Need for informal public meeting determined. If yes, proceed with step 21. If no, skip to step 24.	Both Administrators & IWRB	8/15/1983
21. Informal public meeting advertised in legal notices.	Region	
22. Notification of informal public meeting sent to:		
a. IWRB members	Section Supv.	Dnr 8/15/1983
b. Local Legislators	Section Supv.	Dnr 9/13/1983
c. Watermaster	Section Supv.	Dnr 9/1/1983
d. Department Personnel	Section Supv.	Dnr 8/15/1983

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APR 13 1987

e. Local TV & Radio Stations	Section Supv.	KW 9/13/1983
f. Water Right Holders	Requestor	DMS 9/14/83
g. Riparian Owners	Requestor	DMS 9/14/83
23. Information provided to IWRB for decision to proceed, modify, or abondon.	Section Supv.	
24. Notice of formal hearing advertised in legal notices.	Region	
25. Notification of formal hearing sent to:		
a. IWRB members	Section Supv.	
b. Local Legislators	Section Supv.	
c. Watermaster	Section Supv.	
d. Department Personnel	Section Supv.	
e. Local TV & Radio Stations	Section Supv.	
f. Water right holders	Section Supv.	
g. Attendees of informal public meetings.	Section Supv.	
h. Riparian Owners	Requestor	
26. Hearing held (mandatory).	Hearing Officer & Regional Rep.	
27. Standard approval procedure for memorandum decision.	Hearing Officer	
28. If application is approved, Legislative approval procedure attached.	Records Chief	

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APR 13 1987

January 28, 1981

Idaho Department of Fish and Game
Statehouse
ATTN: Herb Pollard
Boise, Idaho 83720

Dear Herb:

Enclosed please find a copy of the new Idaho Water Resource Board Guidelines on Minimum Streamflow Applications. Note that some of the procedures have been changed substantially.

We are now looking at continued processing of the Board's latest Silver Creek filing, No. 37-7849. Item No. 4 of the new procedures indicates that:

> "The public agency making the request should determine the identity of owners of real property adjacent to the reach of the stream potentially affected by the proposed minimum flow and notice shall be given to such individuals. The public agency should make personal contact with the owners to explain the nature and intent of the preservation of minimum flows in that area".

If personnel from your agency will make a list of the affected property owners, we will work with you on a course of action for mailing the notice.

Please take a look at the guidelines, Herb, and give me a call (4104) so we can work out a time schedule.

Sincerely,

DAVID R. TUTHILL JR. P. E.
Supervisor, Water Allocation Section

DRT:jg

Enclosure

MICROFILMED
APR 13 1981

October 13, 1983

Wood River Journal
P. O. Box 988
Hailey, Idaho 83333

Re: Notice of Public Meeting - Application for Postream Water Rights No. 37-7920
37-7892

Gentlemen:

Enclosed you will find a legal notice which we wish to have published once a week for two consecutive weekly issues of your newspaper. We have inserted the publication dates allowing ample time for you to submit us a galley proof for review before publication.

After sending us a galley proof, proceed with the publication on the dates we have inserted, assuming the notice is correct. If we have any corrections, we will notify you before the first publication. If you cannot publish the notice on the proposed dates, please contact us immediately.

In order to receive payment, an affidavit of publication must be submitted to the Department along with the publication bill.

Sincerely,

Mary A. Newby
Sec/Office Coord.

Encl:

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APR 13 1987

Bill submitted: _____

NOTICE OF PUBLIC MEETING

APPLICATIONS FOR INSTREAM WATER RIGHTS

No. 37-7849 - 37-7919

Notice is hereby given that the Idaho Water Resource Board will conduct a public meeting on Thursday, September 22, 1983, at 7:30 p.m., in the Hailey High School, Fox Acre Road, Hailey, Idaho.

The meeting will held to present information and receive public comment on applications for permit to appropriate water for instream flows in the Big Wood River between Ketchum and Bellevue and in Silver Creek between Highway 93 and the confluence with Little Wood River.

Published in Wood River Journal - September 15 and September 22, 1983

Published in Lincoln County Journal - September 15 and September 22, 1983

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APR 13 1987

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION

John V. Evans
Governor

C. Stephen Allred
Director

1041 Blue Lakes Blvd. North
Twin Falls, Idaho 83301
(208) 734-3578

January 28, 1981

Mr. Alex Schaefer
Department of Health & Welfare
Division of Environment
P. O. Box 1626
Twin Falls, Idaho 83301

Re: Application for Permit No. 37-7849

Dear Mr. Schaefer:

Please find enclosed a copy of the above referenced application for permit for your information and files.

Sincerely,

Mary A. Hill
Secretary

for

Loren O. Holmes
Southern Region Supervisor

Encl:

MICROFILMED
APR 13 1981

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION

John V. Evans
Governor

C. Stephen Allred
Director

1041 Blue Lakes Blvd. North
Twin Falls, Idaho 83301
(208) 734-3578

January 28, 1981

Dale R. Christiansen - Director
Department of Parks & Recreation
2177 Warm Springs Ave.
Boise, Idaho 83720

Re: Application for Permit No. 37-7849

Dear Mr. Christiansen:

Please find enclosed a copy of the above referenced application for permit for your information and files.

Sincerely,

Mary A. Hill
Sr. Secretary

for

Loren O. Holmes
Southern Region Supervisor

Encl:

MICROFILMED

APR 1 3 1981

NOTICE OF APPLICATION FOR WATER RIGHT

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

37-7849

IDAHO WATER RESOURCE BOARD

STATEHOUSE, BOISE, ID 83720

Source: SILVER CREEK tributary to LITTLE WOOD RIVER

Date Filed: 08/26/1980

Amount: 74.00 CFS

Diversion Point: NWSE Sec 20 T 02S R 21E
LOT 05 Sec 06 T 03S R 21E, BLAINE Co.

Use: MINIMUM INSTREAM FLOW (74.00 CFS) from 01/01 to 12/31

Place of Use: NWSE Sec 20 T 02S R 21E LOT 05 Sec 06 T 03S R 21E

Diversion Means: INSTREAM FLOW

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 1041 Blue Lakes Blvd. North, Twin Falls, Idaho 83301 and received on or before OCTOBER 6, 1980.

C. STEPHEN ALLRED

Director

FILMED

APR 13 1987

Published 9/18 & 9/25/80.

3Z=2849_

IDAHO WATER RESOURCE BOARD

STATEHOUSE, BOISE, ID 83720

Source: SILVER CREEK tributary to LITTLE WOOD RIVER

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Use: MINIMUM INSTREAM FLOW (74.00 CFS) from 01/01 to 12/31

Place of Use: NWSE Sec 20 T 02S R 21E LOT 05 Sec 06 T 03S R 21E

Diversion Means: INSTREAM FLOW

do not advertise 9/4/80

MICROFILMED
APR 13 1987

3/79

IDENT. NO. 37-7849

IDAHO DEPARTMENT OF WATER RESOURCES

WATER RIGHT DATA ENTRY LOG

Initials	Date	Item
mary	9/4/80	Original form entered
		Edit Report Correct
		Date Protested
		Date of Hearing
		Date Approved/Denied (Proof due date, stage and/or status, conditions of approval, water district)
		Record Verified
		Amendment Approved
		Extension Approved
		Partial Proof
		Proof Complete
		Field Exam Received
		Field Exam Accepted and changes entered
		License Signed
		Transfer Approved
		Keypunched by State Office

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION

John V. Evans
Governor

C. Stephen Allred
Director

1041 Blue Lakes Blvd. North
Twin Falls, Idaho 83301
(208) 734-3578

August 28, 1980

Mr. Bob Bell, Regional Fisheries Biologist
Idaho Fish & Game Department
Region #4
P. O. Box 428
Jerome, Idaho 83338

Re: Application for Permit No.

Dear Mr. Bell:

Please find enclosed a copy of the above referenced application for permit for your information and files.

Sincerely,

Mary A. Hill
Secretary

for

Loren O. Holmes
Southern Region Supervisor

Encl:

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APR 13 1981

Form No. 202a
3/79

State of Idaho

Department of Water Resources

IDAHO WATER RESOURCE BOARD

APPLICATION FOR PERMIT ANALYSIS SHEET

INITIAL REVIEW BY: JC Stanton APPLICATION NUMBER: 37-7849

CHECK:

- ☒ Source.
- ☒ Point of diversion.
- ☒ County.
- ☒ Quantity of water and period of use.
- ☒ Description of diverting works.
- ☒ Time required for beneficial use of water.
- ☒ Place of use or acres irrigated.
- ☒ Map.
- ☒ Signature.
- ☒ Fee.

Field check by: _____
Date: _____
Comments: _____

- ☐ Yes ☒ No Field check required.
- ☐ Yes ☒ No Critical groundwater area.
- ☐ Yes ☒ No Request dam safety information. Sent by: _____ Date: _____
- ☒ Yes ☐ No* In form to receipt.

*REQUEST THE FOLLOWING ADDITIONAL INFORMATION FROM THE APPLICANT: _____

SEND COPIES TO:

☒ Idaho State Health Department.	Copies sent by: marcya	Date: 1/28/81
☒ Idaho Fish and Game Department.	marcya	8/28/80
☐ Idaho Department of Lands.		
☐ U.S. Bureau of Land Management.		
☐ U.S. Forest Service.		
☒ Other Parks & Recreation	marcya	1/28/81

PROCESSING:

- ☐ Yes ☒ No Platted by: JS Map No. Y-76, Y-77, Z-29
- ☐ Yes ☒ No Other rights on same place of use. none for instream flow
- ☐ Yes ☐ No* In form for advertising.
  Final date for protests: _____
- ☐ Yes ☐ No Protests received. If yes, record information on 4th page of application.

FINAL REGIONAL PROCESSING REVIEW:

- ☐ Affidavit of publication received. Date: _____
- ☐ Application published correctly. If not, record action taken: _____
- ☐ Fee amount, receipt date & number, recorded on application.
- ☐ Publication dates and paper, recorded on application.
- ☐ Protests, dates, withdrawal, etc., recorded on application.
- ☐ Recommendation & initial, recorded on application.
- ☐ Yes ☐ No Measuring device required.
- ☐ Yes ☐ No Access port required.
- ☐ Yes ☐ No Will water be delivered by watermaster? If yes, what district? _____
  _____ Date of priority recommended.

Special conditions of approval or cover letter. _____

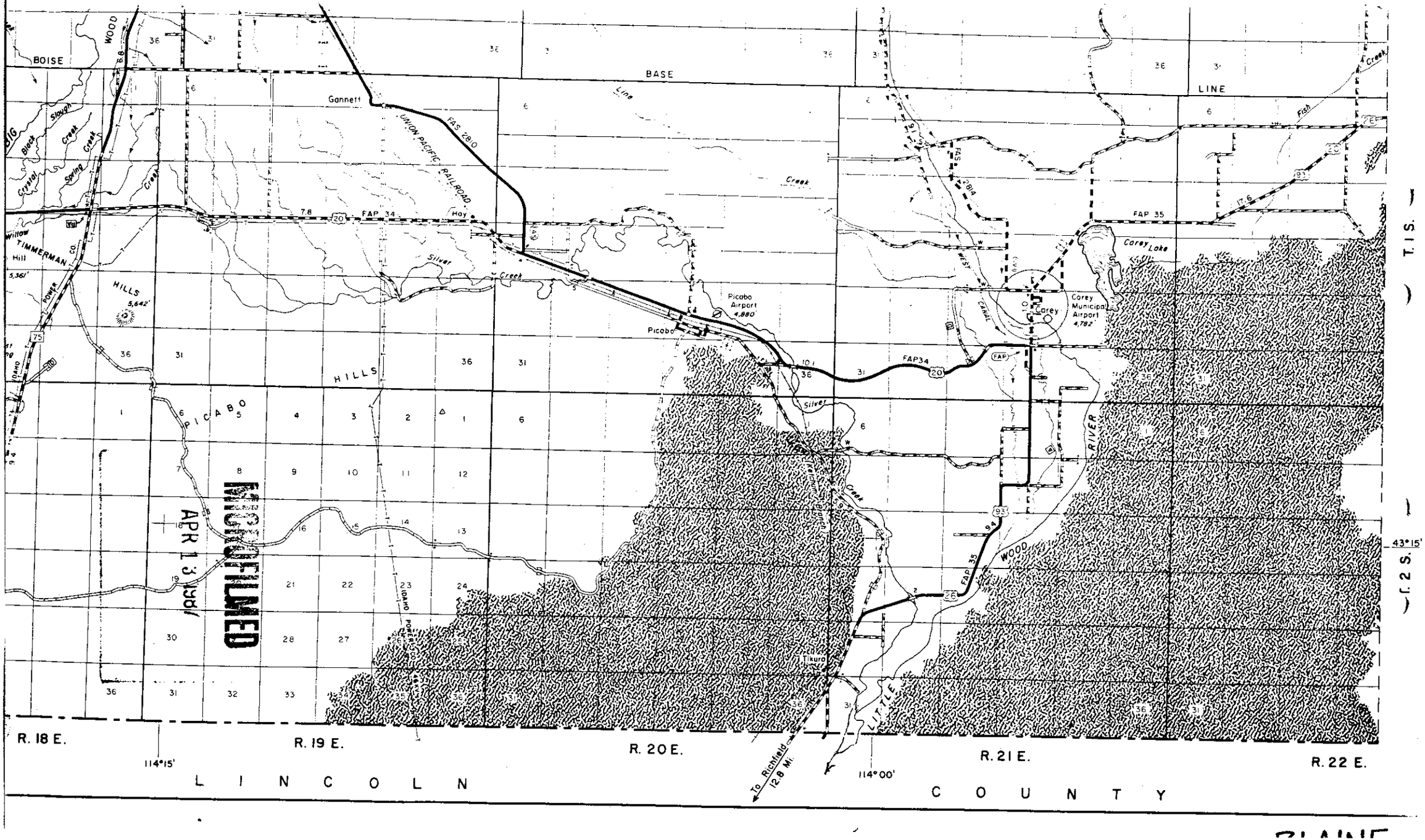
MICROFILMED
APR 13 1981

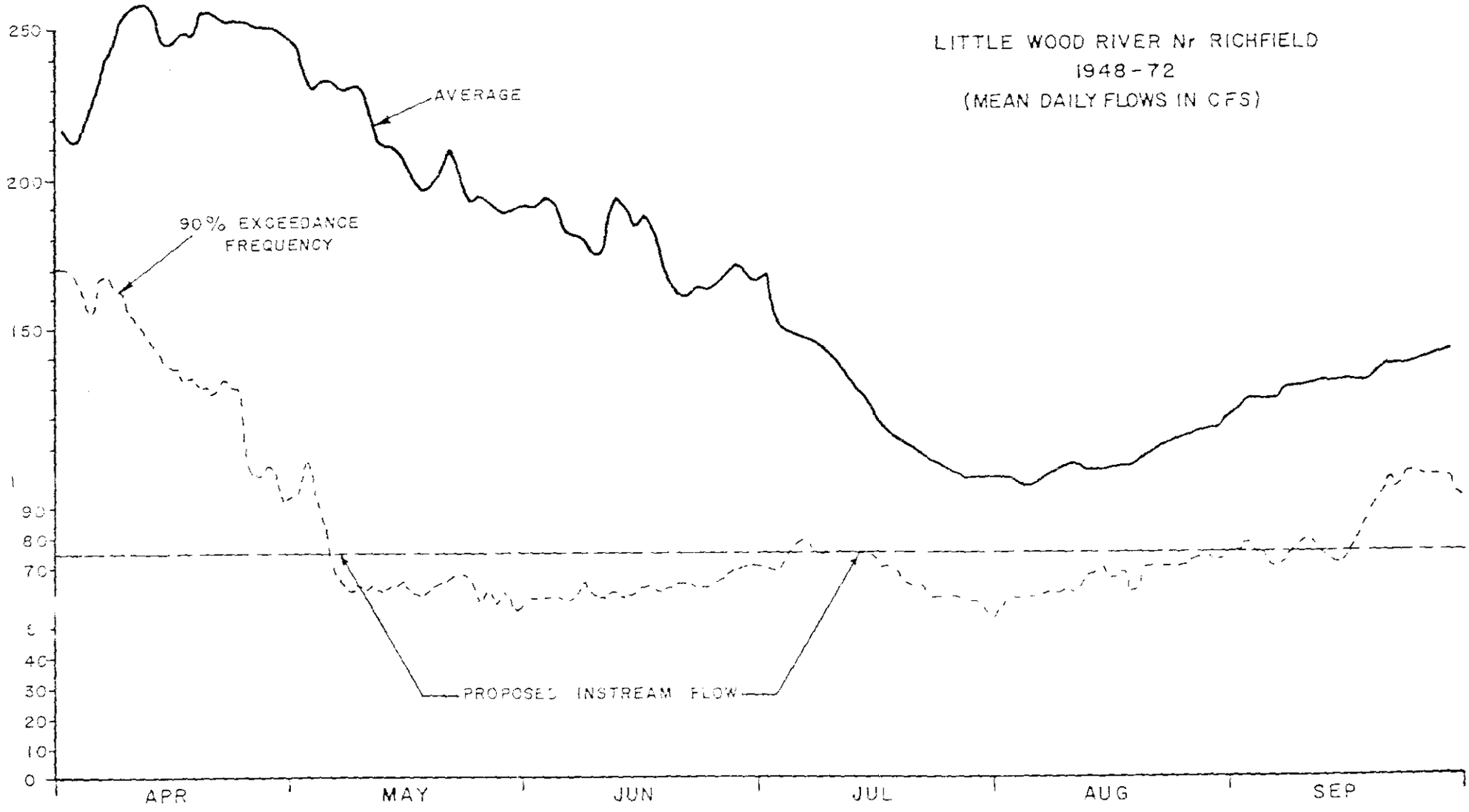
By: _____ Date: _____

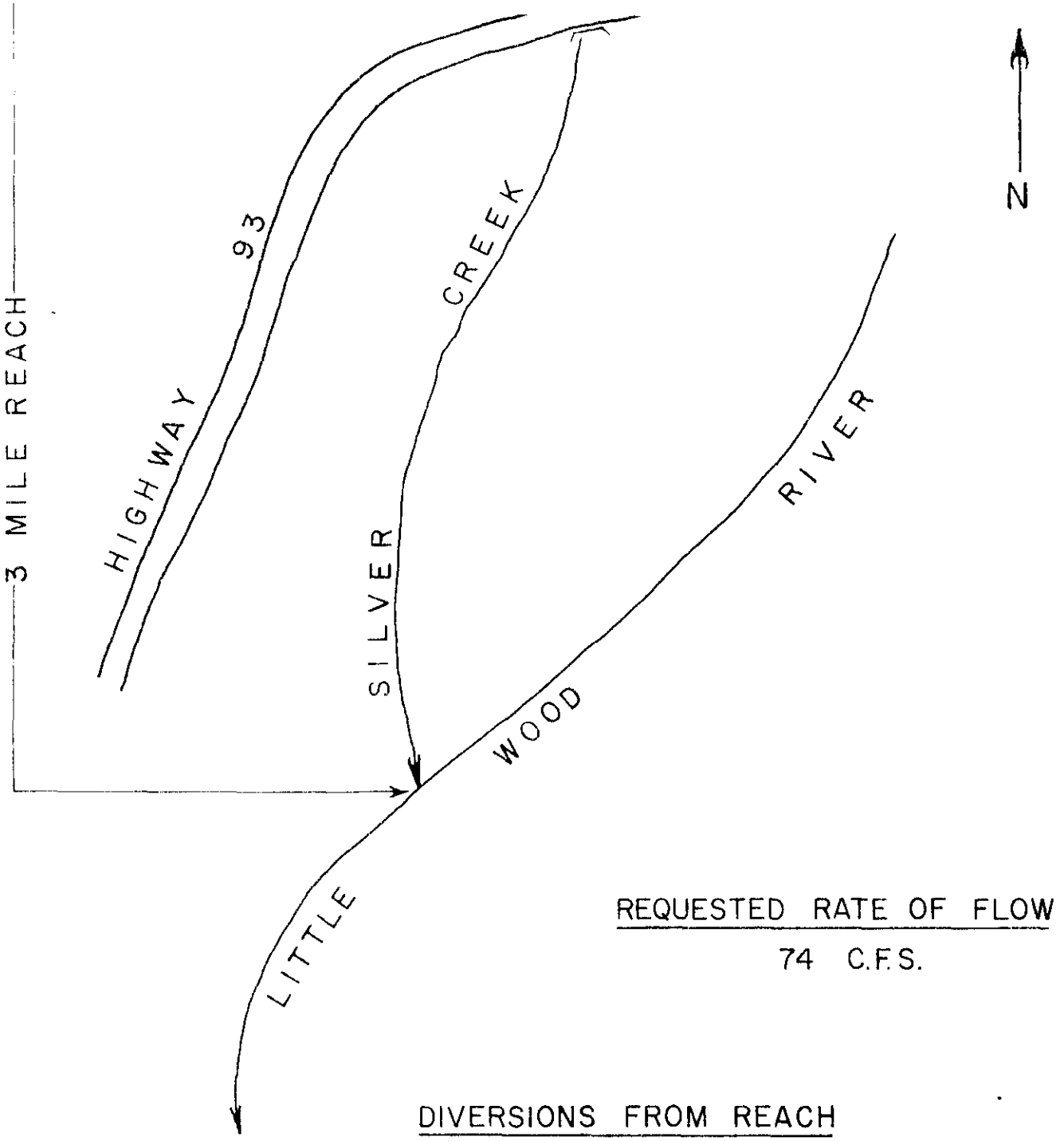
STATE OFFICE REVIEW:

☐ See attached sheet for more information.

By: _____ Date: _____


BOISE
BASE
LINE
Gannett
UNION PACIFIC RAILROAD
FAS 2810
FAP 34
FAP 35
Hay
Silver Creek
Big Wood
Black Creek
Crystal Spring Creek
Willow Hill
TIMMERMAN HILLS
5,642'
5,361'
HILLS
PICABO HILLS
Picabo
Picabo Airport
4,880'
Corey
Corey Lake
Corey Municipal Airport
4,782'
Richfield Canal
Little Wood River
Fish Creek
Tikura Branch
IDAHO POWER CO.
To Richfield
12.8 Mi.
R. 18 E.
R. 19 E.
R. 20 E.
R. 21 E.
R. 22 E.
T. 1 S.
T. 2 S.
43°15'
114°15'
114°00'
LINCOLN COUNTY
BLAINE
APR 13 1981
MICROFILMED


LITTLE WOOD RIVER Nr RICHFIELD
1948 - 72
(MEAN DAILY FLOWS IN CFS)
AVERAGE
90% EXCEEDANCE FREQUENCY
PROPOSED INSTREAM FLOW
250
200
150
90
80
70
40
30
20
10
0
APR
MAY
JUN
JUL
AUG
SEP



REQUESTED RATE OF FLOW

74 C.F.S.

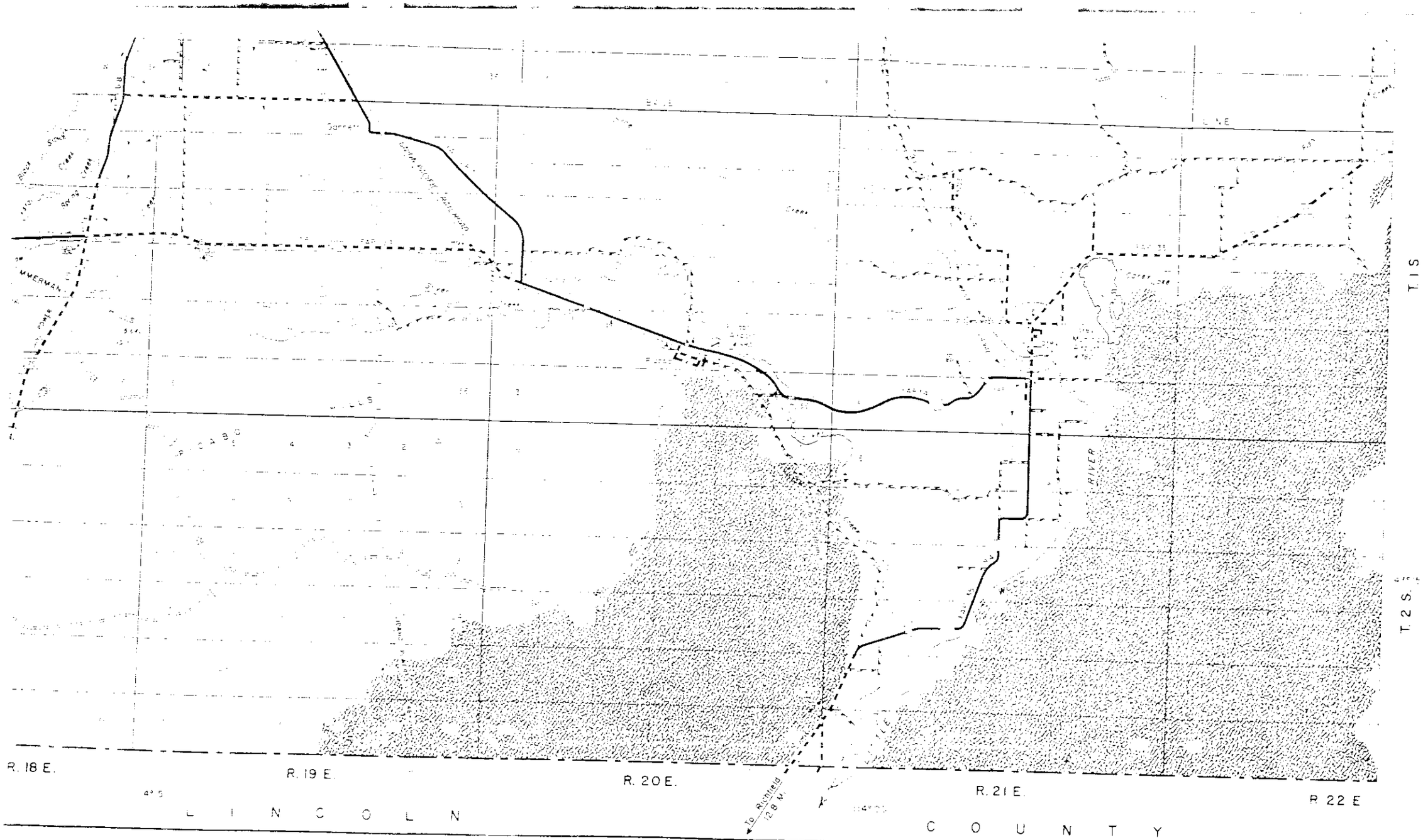
DIVERSIONS FROM REACH

APPLICATIONS = 0

PERMITS = 0

LICENSES = 1.36 C.F.S., 140 AF

DECREES = 17.2 C.F.S.


R. 18 E.
R. 19 E.
R. 20 E.
R. 21 E.
R. 22 E
T. 2 S.
T 1 S
B L A I N E
L I N C O L N
C O U N T Y
RIVER
To Richfield
12 M.

CONVERSATION MEMORANDUM

DATE: August 22, 1980

FILE: Minimum Streamflow Request - Silver Cr.

NAME OF PARTY: Reid Newby, Watermaster

EMPLOYEE: Roberta Garrett

SUBJECT: Headgate diversion points of decreed rights identified by Watermaster Reid Newby -- the reach of Silver Creek from the point where it crosses Highway 93 in NWSE, S. 20, T. 2 S., R. 21 E. downstream to confluence of Silver Creek and Little Wood River in Lot 5, Sec. 6, T. 3 S., R. 21 E.

Mc Glockin Headgate 36-A

37-0006	Jacob Adams, decreed owner A. W. Molyneux, present owner	1.5 cfs	05-01-1881
37-0007	Jacob Adams, decreed owner A. W. Molyneux, present owner	1.25 cfs	04-01-1885
37-0008	Jacob Adams, decreed owner A. W. Molyneux, present owner	0.3 cfs	04-01-1887

Mc Glockin Headgate 38 & 39

1520 ft. east and 1720 ft. north of west quarter corner of Sec. 29, T. 2 S., R. 21 E.

T. 2286 37-0006	Jacob Adams, decreed owner Oris Durfee, present owner	1.5 cfs	05-01-1881
T. 2286 37-0007	Jacob Adams, decreed owner Oris Durfee, present owner	1.25 cfs	04-01-1885
T. 2286 37-0008	Jacob Adams, decreed owner Oris Durfee, present owner	0.3 cfs	04-01-1887

Cook Headgate 40

15 ft. north of west quarter corner of Sec. 29, T. 2 S., R. 21 E.

T. 499, 1703 37-0317	W. A. Hodgman, decreed owner Henry Jones, present owner	1.5 cfs	06-14-1883
T. 564 37-0318	Adelaide Hodgman, decreed owner Henry Jones, present owner	1.8 cfs	06-14-1883
T. 499, 1703 37-0267	Frank R. Gooding, decreed owner Henry Jones, present owner	1.5 cfs	05-15-1884

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APR 13 1981

Cook Headgate 40-A

(A diversion point for purpose of water savings -- Oris Durfee.)

Cook Headgate 41

180 ft. north and 100 ft. west of west quarter corner of Sec. 29, T. 2 S., R. 21 E.

37-0318	Adelaide Hodgman, decreed owner Oris Durfee, present owner	1.8	cfs	06-14-1883
37-0319	Adelaide Hodgman, decreed owner Oris Durfee, present owner	1.0	cfs	05-15-1885

Ragsdale Headgate 44-P-1 & 44-P-2

T. 499, 1703 37-0317	W. A. Hodgman, decreed owner Joe Sorenson, present owner (Two diversion points.)	1.5	cfs	06-14-1883
T. 499, 1703 37-0267	Frank R. Gooding, decreed owner Joe Sorenson, present owner	2.0	cfs	05-15-1884

MICROFILMED
APR 13 1987

TITLE OF CASE: vs. Alturas Water Company

WATER DIST. 37-M | COUNTY Blaine and Lincoln

JUDICAL DIST. 4th | JUDGE Alfred Budge

DATE OF DECREE Oct. 6, 1909 | RECORDED IN BOOK NO. ____ AT PAGE NO. ____ FILE NO. ____

	P.N.	D.N.	DECREED OWNER NAME PRESENT OWNER	AMT. INCHES □ SEC. FT. □	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP.	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
	37	0282	Gooding, Thomas H.	1.0	4-1-77					E½NW¼, NE¼SW¼, Sec. 5; NE¼SW¼, NW¼SE¼, S½SW¼, SE¼NW¼ Sec. 32; T5S-R15E; N½SW¼ Sec. 1 SE¼, N½SW¼, Sec.2; Lots 3, 4, 5, SE¼NW¼, SEc. 6-T6S-R15E	
A	37	0952	Woodworth, N. R.	2.0	4-1-77					S½SE¼, SE¼SW¼, Sec. 32; T5S-R15E; Lots 2&3, SW¼NE¼ NE¼SW¼, NW¼SE¼, NE¼NE¼, SE¼NW¼, Sec5 T6S-R15E	
	37	0708	Woodworth, E. L.	1.0	4-1-77					W½SW¼, SW¼NW¼, Lot 4, Sec. 5 T5S-R15E; W½NE¼ sec.5 T6S-R15E	
	37	0405	Lawson, Martin	0.3	8-1-80					E½Nw¼, W½NE¼, Sec. 28 T1S-R21E	
			, ,	1.6							
	37	0650	Taylor, Goodwin P.	1.6	5-15-80					S½NW¼, W½SW¼, SE¼SW¼, SW¼SE¼, SW¼SW¼ Sec.21 T1S-R21E	
A	37	1008	Billingsley, A. H.	1.6	5-15-80					S½NW¼, N½SW¼, Sec 21, T1S-R21E	
A	37	1021	Morrison, B. F.	0.3	8-1-80					E½NW¼, W½NE¼, Sec. 28, T1S-R21E	
	37	0406	Lawson, Martin	1.6	4-1-81					See Above	
	7	1022	Morrison, B. F.	1.6	4-1-81					See Above	
	37	0006	Adams, Jacob Silver Creek	1.5 (3.0)	5-1-81	NWSE	30	2S	21E	NW¼ Sec. 20; SW¼ Sec. 29; T2S-R21E	
			Trans #2286 Durfee, Oris C.	1.5	5-1-81	N½NW	29			Same as 37-0006 above	
	37	0633	Smith, Joseph A.	0.7	5-1-81					W½NW¼ Sec. 27; E½NE¼ Sec. 28; T1S-R21E	

MICROFILMED
APR 1 0 1987

LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

TITLE OF CASE: S. C. FROST vs. ALTURAS WATER COMPANY

WATER DIST. 37-M | COUNTY Blaineand Lincoln | JUDICAL DIST. 4th | JUDGE Alfred Budge | DATE OF DECREE Oct 6, 1909 | RECORDED IN BOOK NO. ____ AT PAGE NO. ____ FILE NO. ____

	P.N.	D.N.	DECREED OWNER / PRESENT OWNER	AMT. INCHES □ SEC. FT. □	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP.	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
	37	0547	Phippen, Mary S.	2.0	5-26-83					NE¼ Sec. 9 T2S-R21E	
A	37	1036	Phippen, Joseph	2.0	5-26-83					NW¼ Sec. 11 T2S-R21E	
	37	0370	Kelly, David	2.8	5-31-83					N½NE¼, SE¼NE¼, NE¼SE¼, Sec. 8 T2S-R21E	
A	37	1089	Larsen, N.C.	2.8	5-31-83					N½NE¼, SE¼NE¼, NE¼SE¼, Sec. 28 T2S-R21E	
A	37	1031	Anthony , Frank	0.8	6-10-83					NE¼, N½SE¼. SW¼SE¼, Sec. 29; NW¼NW¼ Sec. 28; N½SW¼, NW¼ Sec. 9; T2S-R21E	
	37	0528	Silver Creek Payne Brothers	0.8	6-10-83					E½SW¼, Sec. 20 NE¼, N½SE¼. SW¼SE¼, Sec. 29; NW¼NW¼, Sec.28; T2S-R21E	
	37	0318	Hodgman, Adelaide B.	1.8 (3.6)	6-14-83					S½NE¼, SE¼, Sec. 30 T2S-R21E	
S			Howard, Hugh E.	1.4 (1.8)	6-14-83					S½SE¼ Sec 30, T2S-R21E	
			Trans 564 Howard, Hugh E.	0.4	6-14-83					NE¼SE¼ Sec. 31 T2S-R21E	
	37	0317	Silver Creek Hodgman, W. A.	0 (3.0)	6-14-83					NE¼, Sec. 31 T2S-R21E	
			Trans 499 Union Central Life Ins. Co.	1.5	6-14-83					S½NW¼, SW¼, Sec. 31 T2S-R21E; N½NW¼, NW¼NE¼, Sec. 6 T3S-R21E	
			Trans 1703 Berger, Raymond	1.5	6-14-83	Lot 4	6	3S	21E	S½NW¼, SW¼ Sec. 31 T2S-R21E; NW¼NE¼, S½NE¼, NW¼ N½SE¼, Sec. 6 T3S-R21E	
	37	0011	Ainsworth, James	1.6	6-20-83					S½NW¼, Lots 3 & 4, N½SW¼, Sec. 2 T2S-R21E	

MICROFILMED APR 1 5 1981

LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

TITLE OF CASE: S. C. Frost vs. ALTURAS WATER COMPANY

WATER DIST. 37-M | COUNTY Blaine and Lincoln

JUDICAL DIST. 4th | JUDGE Alfred Budge

DATE OF DECREE Oct. 6, 1909 | RECORDED IN BOOK NO. ____ AT PAGE NO. ____ FILE NO. ____

	P.N.	D.N.	DECREED OWNER NAME PRESENT OWNER	AMT. INCHES □ SEC. FT. □	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP.	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
	37	0561	Ranson, Sarah A.	1.3	5-2-84					SW¼SW¼, Sec. 3; W½NW¼, SE¼SW¼, Sec. 10 T2S-R21E	
A	37	0989	Ennis, John	1.3	5-5-84					N½NE¼, SE¼NE¼, NE¼SE¼, Sec. 35 T5S-R17E	
A	37	0990	Ennis, Rose	1.3	5-5-84					SE¼NE¼, NE¼SE¼, Sec. 35 T5S-R17E	
	37	0698	White, J. F. Estate	1.3	5-5-84					SE¼NE¼, NE¼SE¼, N½NE¼, Sec. 35; SW¼SW¼, Sec. 25 S½SE¼ Sec. 26, NW¼ Sec. 36 T5S-R17E	
	37	0699	White, J. F. Estate	3.6	5-5-84					N½NE¼, SE¼NE¼, NE¼SE¼, Sec. 35 T5S-R17E	
	37	0700	White, J. F. Estate	1.3	5-5-84					N½NE¼, SE¼NE¼, NE¼SE¼ Sec. 35 T5S-R17E	
A	37	1061	Pergier, Joseph	3.5	5-15-84					SW¼ Sec. 31 T2S-R21E	
	37	0127	Carey, James	1.6	5-15-84					S½NE¼, N½SE¼ Sec. 21 T1S-R21E	
	37	0267	Gooding, Frank R. T 499, T 1738	1.3 (4.8)	5-15-84					E½SE¼, Sec. 29, N½SW¼, Sec. 28, T4N-R18E; W½NW¼ Sec. 11 T2S-R21E; W½SW¼, E½SE¼, Sec. 31 T5S-R15E SE¼NE¼, Lot 1, NE¼ Sec. 6 T6S-R15E. S½SW¼, N½SW¼, Sec. 35, T1S-R21E; SE¼ Sec 6 T5S-R15E; W½NW¼, SW¼, Sec. 8, E½NE¼, Sec. 7 T6S-R15E	NW¼SE¼,
			Trans 499 Union Central Life Ins. Co.	1.5	5-15-84					NE¼ Sec. 31 T2S-R21E	
			Trans 1738 Berger, Raymond	2.0	5-15-84	NWNE Lot 4	31 6	2S 3S	21E 21E	S½NW¼, SW¼, Sec. 31 T2S-R21E. NW¼NE¼, S½NE¼, NW¼, N½SE¼, Sec. 6 T3S-R21E	

MICROFILMED APR 13 1981

LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

TITLE OF CASE: S. C. FROST vs. ALTURAS WATER COMPANY

WATER DIST. 37-M | COUNTY Blaine and Lincoln

JUDICAL DIST. 4th | JUDGE Alfred Budge

DATE OF DECREE Oct. 6, 1909 | RECORDED IN BOOK NO. ___ AT PAGE NO. ___ FILE NO. ___

	P.N.	D.N.	DECREED OWNER / NAME / PRESENT OWNER	AMT INCHES □ SEC. FT. □	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
A	37	1023	Goodman, Douglas, H.	0.6	6-30-84					N½SE¼, S½NE¼, Sec. 27 T2N-R21E	
	37	0442	Mantey, Julius, & Emma — Butte Creek	1.6	7-8-84					SE¼ Sec. 13; E½NW¼, Sec. 24; S½NE¼, NW¼SE¼ Sec. 12 T1S-R19E	
A	37	1082	Thomas, Douglas	2.0 (2.4)	7-8-84					E½SE¼, Sec. 13, N½NE¼, Sec. 24 T1S-R19E	
			Trans 668 Neal, H.H.	0.4	7-8-84					S½SW¼, SW¼SE¼, Sec. 17, SE¼SE¼, Sec. 18 T1s-R20E	
	37	0461	McFall, Matt	1.4	7-17-84					SW¼SE¼, SE¼SW¼, Sec. 24; N½NW¼, NE¼, SE¼NW¼, NW¼SE¼ Sec. 25 T5S-R16E	
A	37	0976	Mullins, B. C.	1.4	7-17-84					S½NE¼, SE¼NW¼, NW¼SE¼, Sec. 25 T5S-R16E	
	37	0007	Adams, Jacob — Silver Cr.	1.25 (2.5)	4-1-85					NW¼, Sec. 20 SW¼, Sec. 29 T2S-R21E	
			Trans #2286 Durfee, Oris C.	1.25	4-1-85	NWSE N½NW	30 29	2S	21E	Same as 37-0007 above	
A	37	0979	Bowman, James W.	1.0	4-1-85					NE¼SE¼, SE¼NE¼, Sec. 5 T6S-R15E	
A	37	1084	Roncaglion, Rose	1.6	4-1-85					N½SW¼, S½NW¼, Sec. 22; N½SE¼, S½NE¼, Sec. 21 T1S-R20E	
	37	0213	Fator, Charles H. — Silver Creek	0 (0.8)	4-1-85					S½NW¼, N½SE¼, Sec. 21 T1S-R20E	
			Trans 201 Kilpatrick Brothers	0.75 (0.8)	4-1-85					S½ Sec. 20 S½, S½NE¼, Sec. 21, S½NW¼, SW¼, Sec. 22, SW¼NW¼, SW¼, Sec. 26; All Sec 27 & 28, NE¼, N½SE¼ SE¼SE¼, NW¼, NE¼SW¼, Sec. 29 S½NE¼, N½SE¼, Sec. 30 NW¼NW¼, Sec. 35 All in T1S-R20E	
			Trans 303 Mercier, Leo	0.05	4-1-85					E½NE¼, Sec. 19 T1S-R20E	

MICROFILMED APR 13 19

LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

TITLE OF CASE: S.C. FROST vs. ALTURAS WATER COMPANY

WATER DIST. 37-M | COUNTY Blaine and Lincoln

JUDICAL DIST. 4th | JUDGE Alfred Budge

DATE OF DECREE Oct. 6, 1909 | RECORDED IN BOOK NO. ___ AT PAGE NO. ___ FILE NO. ___

	P.N.	D.N.	DECREED OWNER / PRESENT OWNER	AMT. INCHES / SEC. FT.	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP.	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
	37	0691	Wheeler, James A. V	1.7 (3.0)	4-1-85					~~S½NE¼, S½SW¼, Sec. 35, 5S, 17E~~ ~~N½NE¼, NW¼SW¼, Sec. 22; E½NE¼, NE¼SE¼ Sec. 21 T1S-R19E~~	
			PD Trans 279 Gooding Mott Ditch Assn.	1.3	4-1-85	SESE	35	5S	17E	S½NE¼, S½SW¼, Sec. 35, 5S, 17E ~~N½NE¼, NW¼SW¼, Sec. 22; E½NE¼, NE¼SE¼, Sec. 21 T1S-R19E~~	
A	37	1019	Womack, Asa L.	0.5	4-1-85					W½NE¼, NW¼SE¼, Sec. 15; SW¼SE¼, Sec. 10 T2N-R20E	
	37	0283	Gooding, Thomas H.	2.0	4-5-85					E½NW¼, NE¼SW¼ Sec. 5 T6S-R15E; S½SW¼, NW¼SE¼, NE¼SW¼, SE¼NW¼, Sec. 32 T5S R15E; N½SW¼, Sec. 1 sE¼, N½SW¼, Sec. 2 Lots 3, 4, 5, SE¼NW¼ Sec. 6 T6S-R15E	
	37	0432	Mabbutt, William	2.6	4-15-85					NW¼, Sec. 34; E½NE¼, Sec. 33 S½SE¼, Sec 28 T5S-R17E	
A	37	0992	Nusgen, Gustave	1.8	4-15-85					SE¼ Sec. 36 T5S-R17E	
	37	0319	Silver Creek Hodgman, Adelaide B.	1.0	5-15-85					S½NE¼, SE¼, Sec. 30 T2S-R21E	
	37	0375	Kelly, W. B.	1.2	5-15-85					Lot 4-1, Lots 1, 2, SW¼NE¼ Sec. 2 T6S-R15E	
A	37	1055	Cushing, Henry S.	2.2	5-20-85					N½SW¼, S½NW¼ Sec. 26 T2N-R21E	
	37	0407	Silver Cr. Lawson, M. S.	0 (2.0)	5-31-85					E½NW¼, NW¼NE¼, Sec. 6 T2S-R21E; SW¼SE¼, SE¼SW¼ Sec. 31 T1S-R21E	
			Trans 1023 Baldwin, Donnie D. & Wayne	2.0	5-31-85	SESE	35	1S	20E	T1S-R21E Sec. 31 SW¼SE¼, SE¼SW¼, S½NE¼ Sec. 32 W½NW¼SW¼ T2S-R21E Sec 6, E½NW¼, NW¼NE¼	

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LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

TITLE OF CASE: S. C. FROST vs. ALTURAS WATER COMPANY

WATER DIST. 37-M | COUNTY Blaine and Lincoln

JUDICAL DIST. 4th | JUDGE Alfred Budge

DATE OF DECREE Oct. 6, 1909 | RECORDED IN BOOK NO. ____ AT PAGE NO. ____ FILE NO. ____

	P.N.	D.N.	DECREED OWNER / PRESENT OWNER	AMT. INCHES □ SEC. FT. □	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP.	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
A	37	1080	Ellison, G. S.	0.4	7-1-86					S½SW¼, S½SE¼, Sec. 21 T1S-R20E	
A	37	1042	Vaughn, William B.	1.0	7-9-86					S½NW¼, Sec. 26; S½NE¼ Sec. 27 T1S-R21E	
	37	0017	Albrethson, Albert	1.0	7-9-86					S½NW¼, Sec. 26; S½NE¼, Sec. 27 T1S-R21E. SW¼NE¼, SE¼NW¼, Lot 3-2 SE¼SW¼, Sec. 35 T2N-R20E	
	37	0545	Phippen, A. S.	2.0	12-1-86					W½NW¼, NE¼, NW¼, Sec. 34 T1S-R21E	
			Silver Creek	0.3							
	37	0008	Adams, Jacob	(0.6)	4-1-87					NW¼, Sec. 20 SW¼, Sec. 29 T2S-R21E	
			Trans #2286 Durfee, Oris C.	0.3	4-1-87	NWSE N½NW	30 29	2S	21E	Same as 37-0008 above	
A	37	0988	Brown, J. C.	2.2	4-1-87					N½NE¼, E½NW¼, Sec. 27 T3S-R18E	
A	37	1070	Carpenter, James C.	2.5	4-1-87					NW¼ Sec. 21 T1S-R20E	
			Silver Creek	0							
	37	0214	Fator, Charles, H.	(1.0)	4-1-87					N½SW¼, S½SW¼, Sec. 22; N½SE¼, S½NE¼, Sec. 21 T1S-R20	
			Trans 201 Kilpatrick Brothers	1.0	4-1-87					S½ Sec. 20, S½, S½NE¼ Sec. 21 S½NW¼, SW¼, Sec. 22, SW¼NW¼, SW¼, Sec. 26 All Sec. 27 & 28, NE¼, N½SE¼, SE¼SE¼, NW¼, NE¼SW¼, Sec. 29 S½NE¼, N½SE¼, Sec. 30 NW¼NW¼ Sec. 35 All in T1S-R20E	
			Silver Cr.	0							
	37	0217	Fator, John A.	(1.0)	4-1-87					S½NW¼, N½SW¼, Sec. 22; SW¼NW¼, Sec. 20 T1S-R20E	
			Trans 201, Kilpatrick Brothers	1.0	4-1-87					Same as Above	

MICROFILMED APR 13 1981

LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

NOTICE OF HEARING - APPLICATION FOR INSTREAM WATER RIGHT

Notice is hereby given that the Idaho Water Resources Board has on August 26, 1980 submitted an application for permit to the Department of Water Resources proposing the appropriation of water to perserve the minimum streamflow from Silver Creek tributary to the Little Wood River and further described as follows:

37-7849

Source: Silver Creek tributary to Little Wood River

Point of Minimum Streamflow: The reach of Silver Creek fro m the point where it crosses Highway 93 in NWSE, Sec. 20 T 2S R21E. Downstream to the confluence of Silver Creek and the Little Wood River in Lt 5, Sec. 6, T 3S, R21E

Rate of Flow: 74.00 Cubic F-et Per Second

Season of Use: January 1 to December 31

Use: To preserve fish populations and aesthetics

The Director of the Department of Water Resources will hold a public hearing on the application at 9:00 a.m., Thursday, November 10, 1983 in the Planning and Zoning Meeting Room of the Old County Courthouse, 206 First Avenue South, Hailey, Idaho, for the purpose of hearing evidence in regard to the application. The hearing will be held pursuant to the provision of Sec. 42-1503, IDAHO CODE. If issued, this permit will be subject to all prior water rights. Any party who wishes to formally appear in this proceeding for the purpose of examining witnesses should file a notice of appearance with the Director, Department of Water Resources, Statehouse, Boise, Idaho five days (5) prior to the hearing. Other parties will be given an opportunity to informally present their views and comments without the necessity of filing a notice of appearance.

A. KEN DUNN - Director

Published in Wood River Journal on October 20 and October 27, 1983.

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APR 13 1987

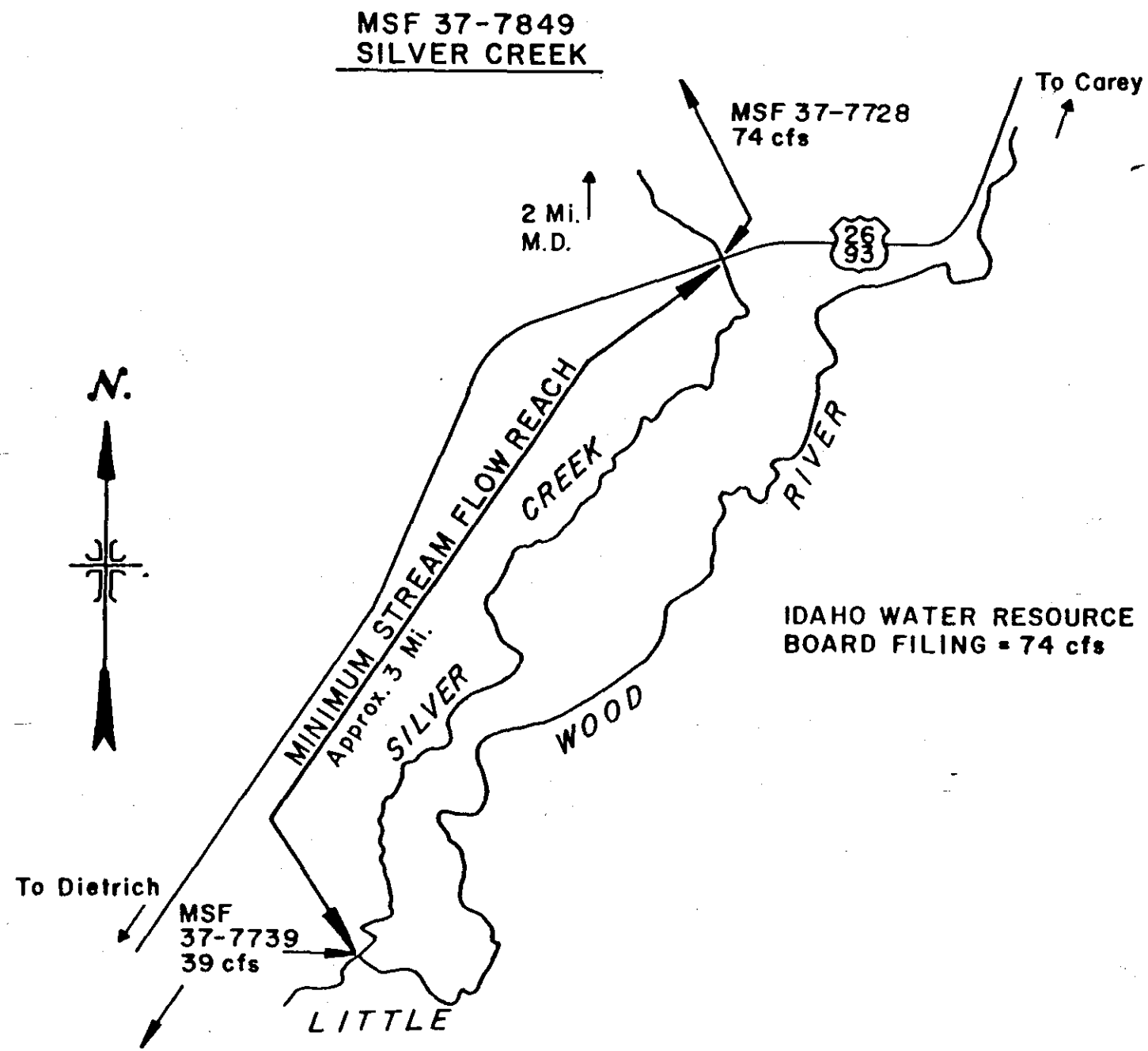
ATTENDANCE ROSTER

MSF-Silver Creek 37-7849
Hearing
November 10, 1983

NAME	ADDRESS	REPRESENTING
Ted Quisine	Box 133	self
J R Sepich	Box 608 Hailey	Idaho Power Co.
Jon Rosenau	Carey	
Tim Cochrane	2320 Govt Way CDA	IDFG
Paul Valcarce	Box 662, Picabo, Id.	IDFG
Reed L Newby	Box T Shoshone	Water Dist 37M
Dick Creeds	~~Fairfield~~ Box C Shoshone, Ida	Big Wood Canal
Jim Holcomb	BOX 113 [illegible]	
Bob Bell	816 16th ave E.	IDFG Jerome
Loren Strode	Carey Id	

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APR 13 1987

37-7849 SLIDES



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APR 13 1981

MINIMUM STREAM FLOW

SILVER CREEK

37-7849

HCR-9

General Notes

- License No. 37-7727 is the upper Silver Creek minimum flow
  - Rate - 99 cfs
  - Priority - September 13, 1978
  - Reach - From confluence of Grove Creek and Stalker Creek downstream to Picabo Bridge

- License No. 37-7728 is the mid-section Silver Creek minimum flow
  - Rate - 74 cfs
  - Priority - September 13, 1978
  - Reach - From Picabo Bridge downstream to the Highway 93 Bridge

- Permit No. 37-7849 is the lower Silver Creek minimum flow
  - Rate - 74 cfs
  - Priority - August 26, 1980
  - Reach - From Highway 93 Bridge downstream to confluence of Silver Creek and Little Wood River

- License No. 37-7739 Little Wood River
  - Rate - 39 cfs
  - Priority - September 29, 1978
  - Reach - From confluence with Silver Creek downstream to USGS stream gage station No. 13-1510

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APR 13 1987

Specific Notes - 37-7849

- Applicant: Idaho Water Resource Board
- Sponsor: Department of Fish and Game
- Application filed: August 26, 1980
- Rate: 74 cfs thru 3 mile reach
- Purpose: wild trout rearing, spawning and migration
- Public information meeting: September 22, 1983 at Hailey, Idaho
- Public hearing: November 10, 1983 at Hailey, Idaho attended by 10 people
- Proposed decision issued: June, 1984
- Department of Fish and Game filed exceptions: same as Big Wood River
- Final order issued: January 16, 1987
- Submitted to legislature: January 16, 1987
- Special Conditions:
  - ... minimum stream flow permit ... shall not cause alterations in historic water delivery practices in Water District 37-M ...
  - Director retains jurisdiction to review the permit and subsequent license after 15 years after issuance of permit.

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APR 13 1987

MINIMUM STREAM FLOW

[redacted]

37-7849

HCR-9

General Notes

- License No. 37-7727 is the upper Silver Creek minimum flow
  - Rate - 99 cfs
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  - Reach - From confluence of Grove Creek and Stalker Creek downstream to Picabo Bridge.

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  - Reach - From Highway 93 bridge downstream to confluence of Silver Creek and Little Wood River

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  - Reach - From confluence with Silver Creek downstream to USGS stream gage station No. 13-1510

MICROFILMED

APR 13 1987

Specific Notes - 37-7849

- Applicant - IWRB
- Sponsor: Department of Fish and Game
- Application filed: August 26, 1980
- Rate: 74 cfs thru 3 mile reach
- Purpose: wild trout rearing, spawning and migration
- Public information meeting - September 22, 1983 at Hailey (15 people signed roster)
- Public hearing: November 10, 1983 at Hailey, Idaho attended by 10 people

- proposed decision issued June 1984
- F&G filed exceptions - same as B. J. Wood.
- Final order issued 11/16/87. submitted to legislature on 1/16/87

Special Conditions -

- ... minimum stream flow permit ... shall not cause alterations in historic water delivery practices in Water District 37-M ...

retain jurisdiction to

- Director ~~will~~ review the permit and subsequent license after 15 years after issuance of permit ~~or upon petition of 50% or more of the registered voters in the Silver Creek Basin.~~

Clarification of ~~other~~ hydro rights
Silver Falls Ranch
37 cfs
priority earlier than the min. flow
PD near mid section of reach

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 3, 1984

Joe Sorenson
SAM Airport, Inc.
Twin Falls, ID 83330

RE: Minimum Stream Flow Application No. 37-7849, Silver Creek

Dear Full Party:

Please find enclosed copies of information obtained from the files and records of this Department, which will be utilized in the analysis of the above-referenced minimum stream flow application.

Please submit any comments or response no later than June 1, 1984.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:ns

Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 3, 1984

Idaho Department of Fish & Game
Attn: Steve Goddard
600 S. Walnut
Boise, ID 83706

RE: Minimum Stream Flow Application No. 37-7849, Silver Creek

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APR 13 1987

State of Idaho
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STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 3, 1984

Loren Stroad
Carey, ID 83320

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APR 13 1987

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DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 3, 1984

Gene M. Gray
Route 1, Box 46-A
Payette, ID 83661

RE: Minimum Stream Flow Application No. 37-7849, Silver Creek

Dear Full Party:

Please find enclosed copies of information obtained from the files and records of this Department, which will be utilized in the analysis of the above-referenced minimum stream flow application.

Please submit any comments or response no later than June 1, 1984.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:ns

Enclosures

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APR 13 1987

CONVERSATION MEMORANDUM

DATE 12/20/83

FILE 37-7849

NAME OF PARTY Bill Ondrechen

EMPLOYEE Dave Tuthill

RE: Flows in Silver Creek - Supplemental Info

Attached are additional data items that further explain flows in Silver Creek, provided by Bill Ondrechen, as follows:

- Average flows at the new gauge, Silver Cr @ Sportsman's Access near Picabo, 1975-1981. Shows flows hovering in the 150 cfs range. Bill indicated that irrigation diversions between this gauge and the older gauge at Silver Cr near Picabo, about 8 miles downstream, total about 30 cfs.

- Average flows at Silver Cr. near Picabo - Summary hydrograph data (1920-1962)

- Average flows at Silver Cr @ Sportsman's Access near Picabo, 1975-1981 - numerical summary.

Bill has indicated that any trend of decreasing flows in Silver Creek is not yet significant enough to be documented or discerned in the flow records.

Also attached is a map which shows the locations of the two gauge sites.

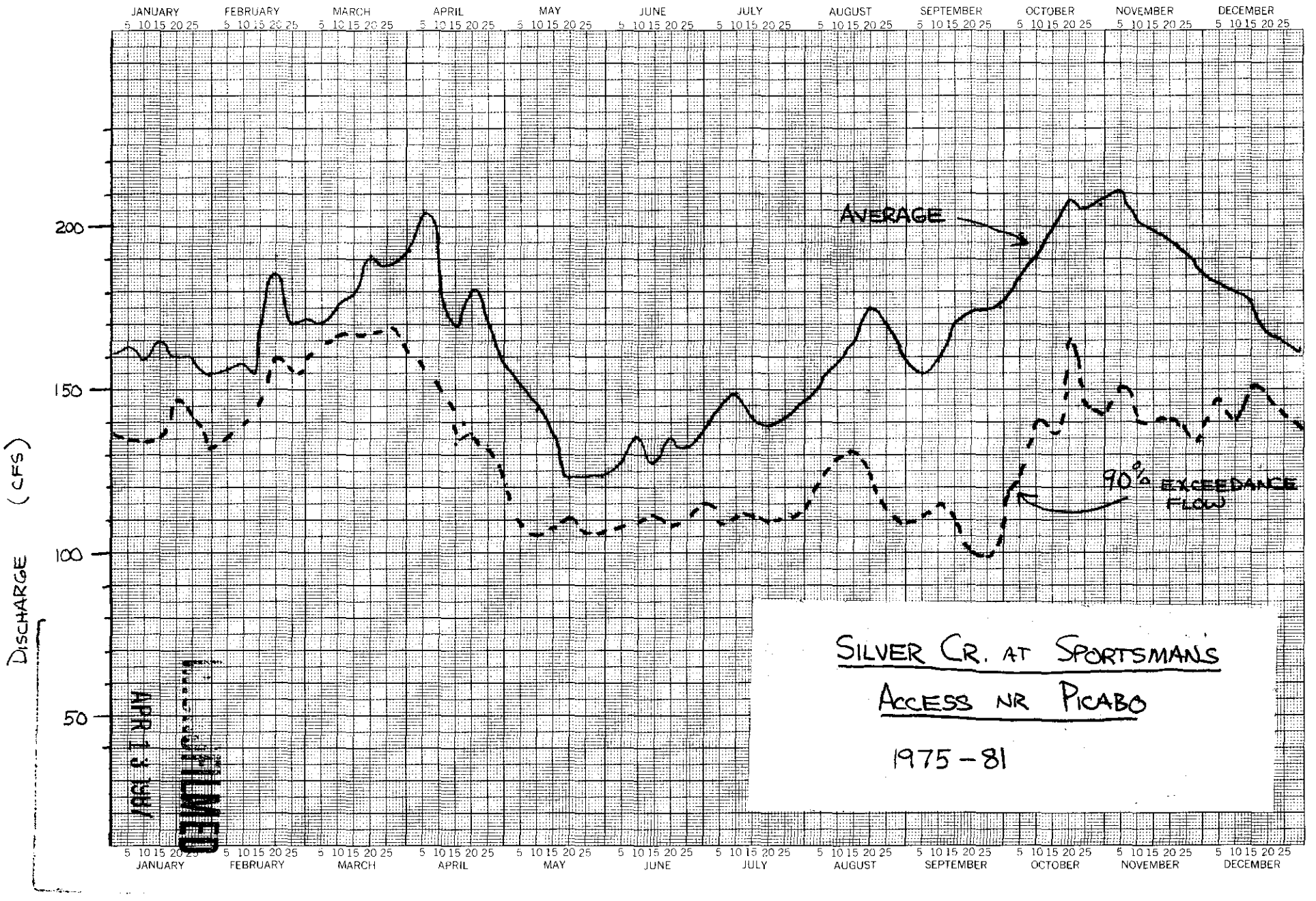
DRT

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APR 13 1981

K+E 1 YEAR BY DAYS X 250 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 2890



IDAHO DEPARTMENT OF WATER RESOURCES — SUMMARY HYDROGRAPH DATA

SILVER CREEK NR PICABO — 13150500

***** MEAN DAILY FLOW BY MONTH *****

MONTH	MAXIMUM	YEAR	DAY	MINIMUM	YEAR	DAY	AVERAGE	COUNT
JAN	230.	1943	23	43.	1962	22	142.	899
FEB	320.	1957	27	88.	1936	25	146.	819
MAR	300.	1957	1	69.	1922	5	167.	899
APR	311.	1952	15	78.	1934	11	161.	1140
MAY	267.	1957	20	36.	1932	27	113.	1302
JUN	288.	1952	28	28.	1920	2	115.	1290
JUL	260.	1952	1	41.	1920	4	135.	1333
AUG	229.	1951	9	71.	1934	5	136.	1333
SEP	225.	1951	2	63.	1934	9	148.	1290
OCT	236.	1944	30	88.	1938	8	168.	930
NOV	235.	1951	20	80.	1956	17	172.	900
DEC	351.	1956	24	90.	1962	11	156.	899

***** YEARLY FLOW DATA *****

MAXIMUM	YEAR	MINIMUM	YEAR	AVERAGE	COUNT
351.	1956	28.	1920	144.	13034

***** MEAN MONTHLY FLOW DATA *****

MONTH	MAXIMUM	YEAR	MINIMUM	YEAR
JAN	184.	1953	107.	1938
FEB	192.	1957	109.	1938
MAR	210.	1957	121.	1936
APR	234.	1952	90.	1934
MAY	187.	1957	82.	1961
JUN	192.	1952	64.	1927
JUL	219.	1952	79.	1934
AUG	213.	1951	74.	1931
SEP	214.	1943	69.	1934
OCT	219.	1944	109.	1938
NOV	209.	1944	119.	1938
DEC	187.	1951	115.	1921

***** MEAN ANNUAL FLOW DATA *****

MAXIMUM	YEAR	MINIMUM	YEAR
192.	1952	110.	1961

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APR 13 1987

IDAHO DEPARTMENT OF WATER RESOURCES — SUMMARY HYDROGRAPH DATA

SILVER CR AT SPORTSMANS ACCESS, NR PICABO — 13150430

***** MEAN DAILY FLOW BY MONTH *****

MONTH	MAXIMUM	YEAR	DAY	MINIMUM	YEAR	DAY	AVERAGE	COUNT
JAN	233.	1980	12	128.	1978	27	162.	217
FEB	352.	1980	19	127.	1978	1	167.	196
MAR	335.	1979	16	128.	1978	1	183.	217
APR	460.	1976	6	94.	1977	29	181.	210
MAY	262.	1975	5	96.	1979	16	130.	217
JUN	221.	1975	27	69.	1977	30	133.	210
JUL	253.	1975	13	69.	1977	17	143.	217
AUG	265.	1975	28	74.	1977	4	163.	217
SEP	270.	1978	7	80.	1977	9	168.	210
OCT	375.	1975	10	102.	1978	1	201.	217
NOV	291.	1975	2	123.	1978	3	199.	210
DEC	249.	1976	7	130.	1980	13	176.	217

***** YEARLY FLOW DATA *****

MAXIMUM	YEAR	MINIMUM	YEAR	AVERAGE	COUNT
460.	1976	69.	1977	167.	2557

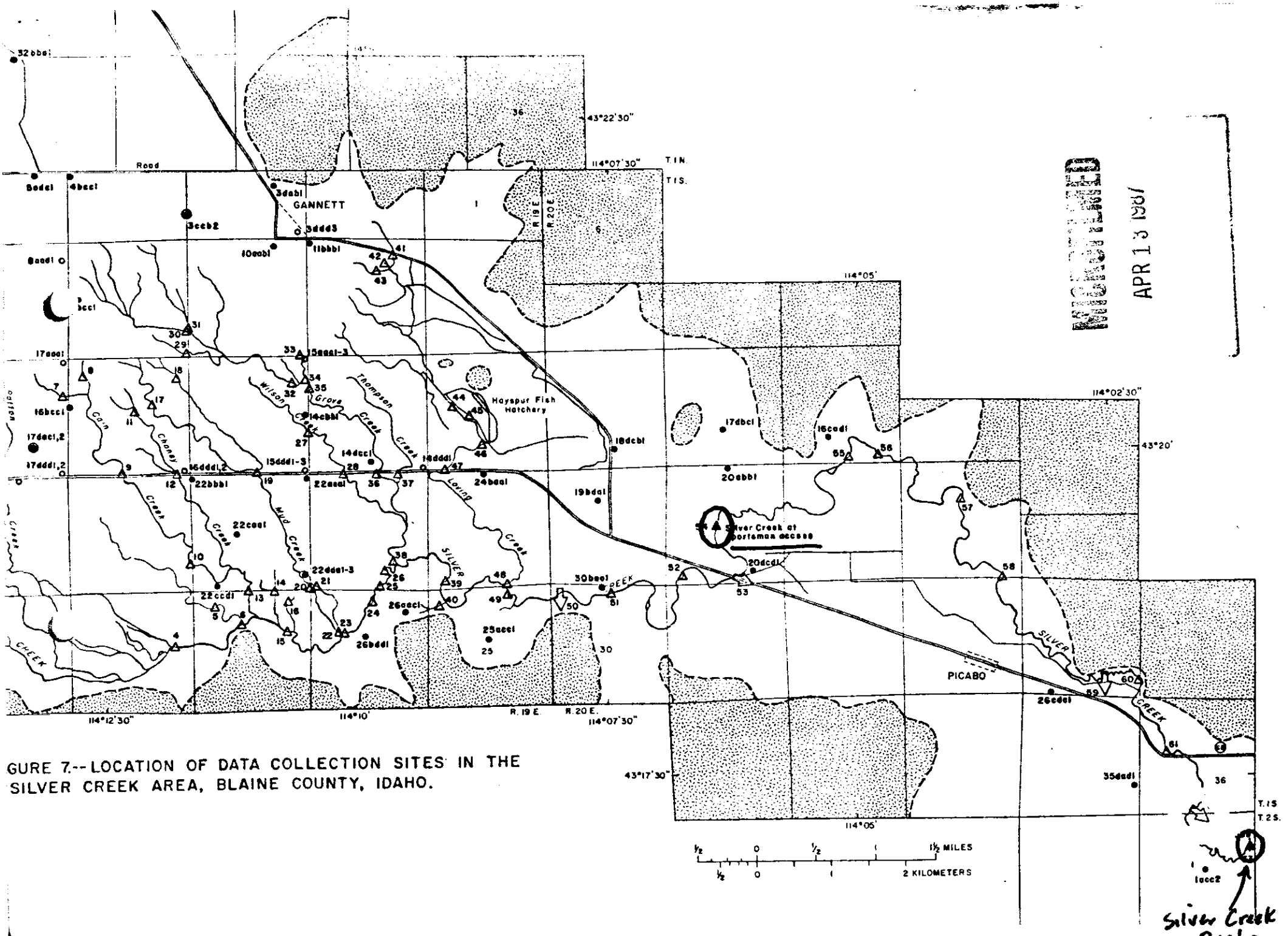
***** MEAN MONTHLY FLOW DATA *****

MONTH	MAXIMUM	YEAR	MINIMUM	YEAR
JAN	179.	1981	135.	1978
FEB	204.	1981	134.	1978
MAR	202.	1979	160.	1977
APR	288.	1975	129.	1977
MAY	184.	1975	109.	1977
JUN	164.	1976	91.	1977
JUL	224.	1975	79.	1977
AUG	222.	1975	79.	1977
SEP	228.	1976	87.	1977
OCT	254.	1976	115.	1978
NOV	249.	1977	130.	1978
DEC	207.	1976	133.	1980

***** MEAN ANNUAL FLOW DATA *****

MAXIMUM	YEAR	MINIMUM	YEAR
207.	1975	145.	1977

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APR 13 1987



GURE 7.--LOCATION OF DATA COLLECTION SITES IN THE SILVER CREEK AREA, BLAINE COUNTY, IDAHO.

APR 13 1981

Silver Creek nr Picabo

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

December 22, 1983

MEMO

TO: Dave Tuthill, DET Water Allocation Section

FROM: Bill Ondrechen, Hydrology Section WJO

SUBJECT: EVALUATION OF SILVER CREEK DATA FOR EVIDENCE OF DECLINE IN GROUND WATER DISCHARGE

Determination of any trend in Silver Creek discharge is made difficult because of the fact that the flow at the present gaging station is not exactly identical with that of the former gaging site. Extending either gaging record by correlation is limited by the fact that there is no overlap of the records. Correlation with the flow of the Big Wood River at Hailey is possible (explains 67% of the variance of Silver Creek annual discharge), but is not sufficient to detect a change in discharge because the error in the prediction is large relative to the change in discharge.

Ground water data show a somewhat different situation than the surface water data. The USGS study, "Ground Water - Surface Water Relations in the Silver Creek Area, Blaine County, Idaho" by Joe Moreland (Water Information Bulletin No. 45) describes the close relation between surface and ground waters. The illustrated relation shown in Figure 11 (attached) suggests that a reasonable approximation of base flow in Silver Creek can be obtained from ground water level measurements. However, the author cautions -

> "Records from one well would be insufficient to accurately compute flow because of the variations in water level fluctuations and timing of peaks in various parts of the aquifer."

Plotted in the lower half of the attached Figure A are the annual highs and lows for well 1S 19E 3CCB2 for the period 1963-82. In addition to the obvious effect of dry years like 1977 and 1966 on maximum water levels, there seems to be a trend of slightly reduced maximum water levels in the last five years.

RECEIVED
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Also plotted in Figure A are the annual diversion volumes for the District 45 Canal. The service area of this canal comprises 55 percent of the irrigated land in the Bellevue Triangle. As discussed by Brockway and Grover in the report "Evaluation of Urbanization and Changes in Land Use on the Water Resources of Mountain Valleys" (IWRRI, 1978), the major component of ground water recharge in the area is water diverted for irrigation. Apparent in the plot of annual diversions is a pattern of reduced diversions in 1978-82. Conversion of flood irrigated land to sprinkler irrigation might be one reason diversions have declined in recent years, since water supply or water rights were probably not limiting during these years.

In Brockway and Grover's ground water model study performed with 1974-75 data, one alternative evaluated was conversion of gravity irrigated land to sprinkler irrigated. The effect of a complete conversion of remaining surface irrigated land to sprinkler resulted in a decrease in diversions of about 50 percent and a corresponding decline in the average annual discharge of Silver Creek of 51 cfs. No doubt some continued conversion to sprinklers is continuing from levels in the mid 1970's, but just how fast the conversion is occurring is unknown.

In conclusion, data from one observation well indicate a slight decline in maximum ground water levels, which would correspond to a reduced ground water discharge to Silver Creek. One plausible explanation is the reduction in diversions associated with conversion to sprinkler irrigation. There is not sufficient data to quantify the apparent reduction in discharge.

WO:mb

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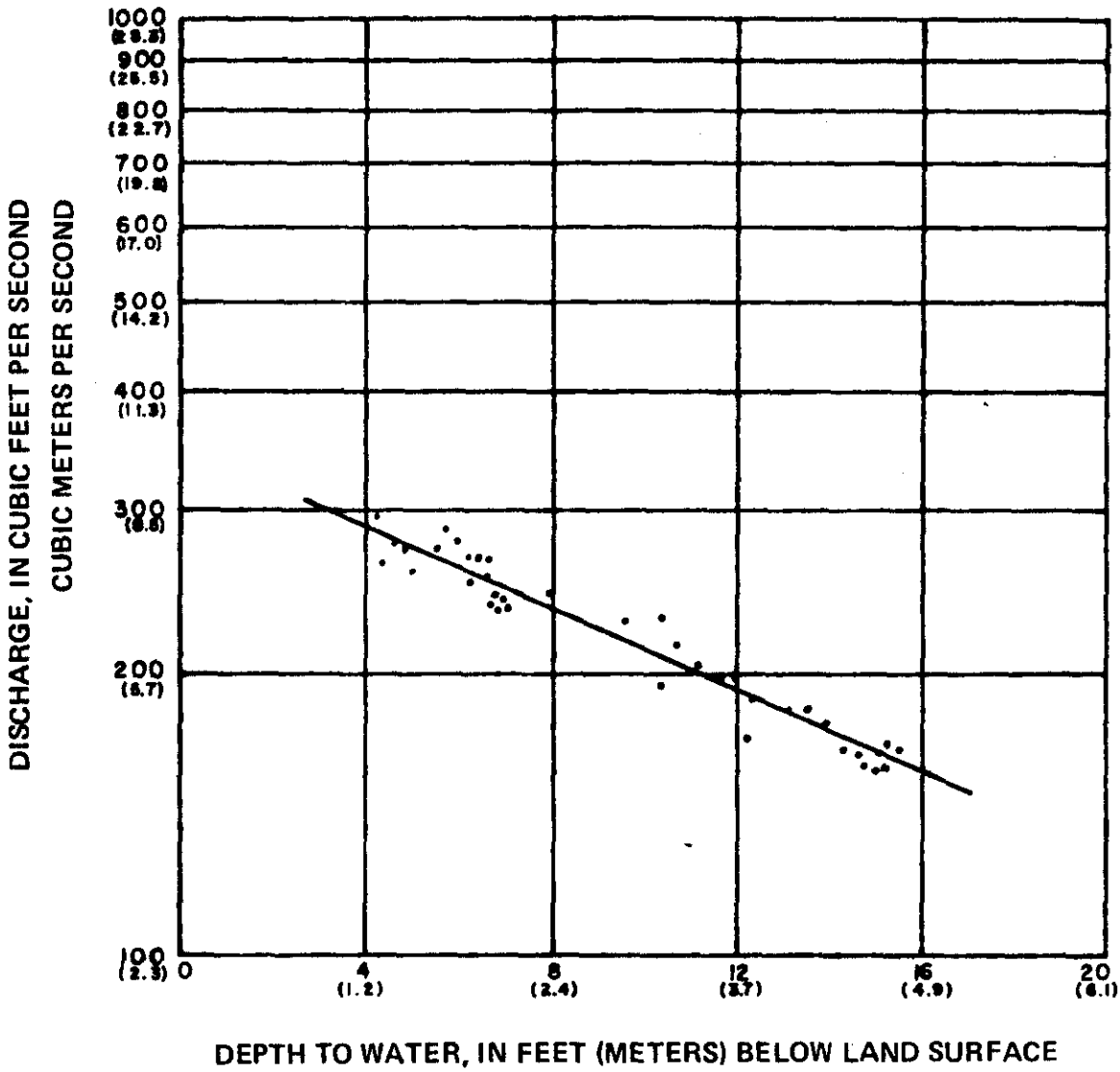


FIGURE 11. Stage-discharge relation between depth to water in well 1S-19E-3ccb2 and adjusted base flow in Silver Creek.

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APR 13 1987

FIGURE A. HYDROGRAPH OF WELL 1S 19E 3CCB2 AND ANNUAL DIVERSION OF DISTRICT CANAL

47 3850

K&E 20 YEARS BY MONTHS X 110 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

ANNUAL DIVERSION, 1000 AC-FT

DISTRICT #45 CANAL
ANNUAL DIVERSION

20 YEAR AVERAGE

HYDROGRAPH OF WELL 1S 19E 3CCB2

DEPTH TO WATER, FT. BELOW LAND SURFACE

Mar. June Sept. Dec.

1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

December 1, 1983

Joe Sorenson
SAM Airport, Inc.
Twin Falls, ID 83330

RE: Minimum Stream Flow Application No. 37-7849

Dear Full Party:

At the hearing on the above-referenced matter on November 10, 1983, the hearing officer Mr. Norman C. Young indicated that each full party would be mailed a copy of each of the Idaho Department of Water Resources exhibits presented at the hearing. Enclosed please find a complete set of IDWR Exhibits 1, 2 and 3.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:ns

Enclosures

MICROFILMED
APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

December 1, 1983

Idaho Department of Fish & Game
Attn: Steve Goddard
600 S. Walnut
Boise, ID 83706

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Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

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Enclosures

MICROFILMED
APR 13 1987

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STATE OFFICE, 450 W. State Street, Boise, Idaho

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A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

December 1, 1983

Loren Stroad
Carey, ID 83320

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DRT:ns

Enclosures

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APR 13 1987

SUN VALLEY FLY FISHERS
P. O. BOX ~~387~~ 895 SUN VALLEY, IDAHO 83353

NOV 10 1983

November 8, 1983

MR. DAVID R. TUTHILL JR. P.E.
DEPARTMENT OF WATER RESOURCES
STATEHOUSE
BOISE, IDAHO 83720

SILVER CREEK
MINIMUM FLOW
#37-7849

Dear Mr. Tuthill,

I will not be able to attend the Public Meeting to be held by the Department on Nov. 10th concerning the minimum flow application for Silver Creek. I would like to submit this letter as testimony on behalf of the Sun Valley Fly Fishers.

As you are aware: As it was pointed out at the Sept. 22, meeting, this minimum flow will provide minimum flows from the time it is established, but would have no effect upon early rights. We believe this is fair and feel that the Idaho Fish & Game is correct in trying to establish minimum flows for future fish protection. Demands for water, you know, are constant and it seems proper that the State take action to protect one of the fine resources that this water provides. We urge you to establish the minimum flow for Silver Creek.

Sincerely,

Butch Harper
Pres. S.V.F.F.

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APR 13 1987

NOTES -
NORM YOUNG
HEARING OFFICER

Hearing on Application # 37-7849
11/10/83

1) Allowed Joe Sorenson to intervene as a full party — Admitted Mr Stroud as a full party —
2) Gene Gray - read statement

3) Dave Tuthill - read statement
Present exhibits — Admitted #1
— Admitted #2
— Admitted #3

Mail copies of all four exhibits to all parties 11-30-83 DMR

X-EXAM — Sorenson
1962 is latest date? — Yes but flow regimes haven't changed much -
Sorenson believes Pandy + Goodner changes to stream has changed the flow pattern
Stroud — tenet — says stream dry in 1977 —
Stroud — concerned about loss of unrecorded flood rights
Sorenson — Loss of water to sink holes + creeks one significant take 1 to 3 cfs
Goddard —

4) F+G
Tim Cochnauer — Dean Edelen
Reviewed credentials
F+G exhibit A — Admitted
Parties stipulated to Cochnauer as a professional witness for instream flows
Critical life history phases for Rainbow trout + brown trout - rearing phase for juveniles

Relates habitat to wetted perimeter + needed at least + ½ ft of depth below overhanging banks for brown trout habitat

Habitat curve - relationship between habitat and discharge

74 cfs req'd to obtain

FIG - Exhibits D & E → Adm. Item

illustrative purposes

ideal flow - is bank full ▭ 150 cfs

optimum flow - natural flow

Sorenson

Why 39 cfs below & 74 cfs above?

Cochrane - habitat studies - silver ck habitat is totally different than cattle wood - at the locations chosen for transects

- Little wood - wetted perimeter
- Silver ck - ½ ft under undercut banks

Data taken at discrete sites - probably would grade out to a smoothly changing flow requirement -

FIG exhibits FIG - → Adm. Item

illustrative purposes

Critical for brown trout & rainbow habitat - 74 cfs needed

Needed for food for trout - not based upon this require 10% reduction in habitat to impact

Aesthetic values = reduced flows would impact water quality & therefore aesthetics

Can it be maintained? -

X-Exam = Stroud -

Spawning ground? - NO most occurs in the upper end

Only for xportation? No for rearing habitat

who does that benefit? Water is public access by floaters + waders - riperian access is limited. Fish move into areas of public access.

Sorenson - trespassing if on bottom

Robert Bell

Credentials as fishery manager given by Ex 4
Educ., Exp., + visits to stream reach -

Fish & Game Exhibit B - Admitted

7 lb browns in the reach may run 36
4 lb rainbow
Now managed as wild fishery - no stocking since 1992

Fish & Game Exhibit C - Admitted

Mr. Sherod - X-Exam

Paul Wallace - Picabo Idaho
Cons. officer - 3½ yrs

Est flows of River in mid oct 1977
20-25 cfs

Min. flow needed to prevent "anchor" ice
Water fowl - songbirds, muledeer
otter - other fur bearers
Raptors - red tail hawks
Important for aesthetics - fur bearers
X-Exam - Gray - important

Reid Newby -

Need two one below confluence of Silver Cr + one just above Bellen Gaging Station (8 should also be reinstituted

Mr Sorensen - Direct

Concerned that the 2% will jeopardize the farmers -

Will farmers suffer or will fish suffer -

Does not believe that Mr Bell's est on fishing presence -

Fished creek since 1970

Visited once a week during fishing season + daily during hunting season - 250 fishermen in a year on the reach.

Mr Stroud - Direct (Loren Strode, Caney Idaho)

Lived in area since 1963 -

Renter + Water user

Who suffers fish or farmer?

Photos of Mr Bell are not representative of stream -

Use occurs only during irrig season - would not be water available at that time -

Drives road every day to Hoodoo creek -

Listed uses by farmers for fishing (200 cfs per)

Reid Newby -

He + deputies on the creek every few days

Knows of no users right except a little wood River

- Rights on 1st cut the reinstated a below CR as sub with minimum flows -

Need gauging station —

Does not oppose min flow — but must realize that ag use will continue to be sought

Will ICWD & FHC assert claims with rights prior to 1980.

X-Exam Craig -

What % of land on Meincke converted in the ~~segregation~~ ~~of~~ to Sprinkler — 50%!

How has this changed — It has made the later rights better rights except on very dry years may not have stream held up as long.

Requested Dec 11-30-87

— Craig asks for official statement on what happens to claimed rights relative to minimum flow —

Hendry asks for copy —

Mr.

MSF Hearing 37-7849
Silver Creek Nov 10, 1983

NOTES - D. TUTHILL

Full Parties

IWRB - Gene Gray
Fish & Game
Joe Sorenson - Has ranch along the Creek in question
Loren Strode

IWRB Testimony - Gene Gray

IDWR Staff - Dave Tuthill

IDFG (Testimony prepared by Steve Goddard, Atty)

- Tim Cochanauer
  Doctorate candidate at U of I, Moscow

- IDFG Exhibit A Tim Cochanauer qualifications

Request sent to Dave Hanson 11/30/83 →

(Obtain for Franklin Jones: Cochanauer, Tim & Bill Horton. A reference workbook for determining ~~mainstream~~ flow needs in Idaho, IDFG)

Gene Gray

Bank full discharge would be 150 cfs

- IDFG Exhibit D - Stream Flow transect info
- IDFG Exhibit F - map drawn by Cochanauer on Butcher paper

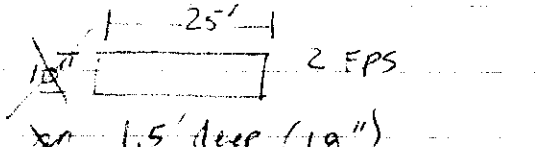
- Bob Bell
  - Qualifications
  - Statement is F & G Exhibit B.
  - Exhibit C Dec 1978 - Feb Completion Report

- Paul Valcarce Sr Conservation officer for ~ 3 yrs
  On Oct 15 1977 was at Silver Creek
  20-25 cfs
  One of the better sections of stream within the patrol area.
  Less wintertime water could result in more "anchor ice".
  Deer, songbirds & mule deer common. Also water fowl: mink, muskrat, otter. Plus raptors & predators.

- Reid Newby
  Mean flow would need to be placed as follows:
  One just downstream from confluence w/ Little Wood &
  one just upstream
  Also, reinstate gage # 18, 2 mi upstream from Hwy 93 bridge

- Mr Sorenson - Testimony
  Concerned about impact on irrigators
  Says that F&G estimates are extremely high for the reach
  estimates 250 fishermen/year in the reach

- Loren Strode Carey
  Leases Sorenson's farm
  Estimates for year fishermen days (2 people per day)



Reed Newby:

- IWRB willing to honor existing and yet-to-be-filed (reasonable) claims?
  % conversion to sprinkler system ≈ 50%

Requested 11-30-87 → Gene Gray requests an AG opinion on the impact of claimed rt delivery on Min Stream Flows

Nov 10, 1983

I'D LIKE TO ADD A COUPLE OF OBVIOUS OBSERVATIONS I'VE MADE CONCERNING SILVER CREEK FISH POPULATIONS AND MINIMUM STREAM FLOW. AS AN ANGLER AND FISHING GUIDE ON SILVER CREEK, I FEEL THAT SEEKING THE MINIMUM STREAM FLOW OF 74 CFS DOES NOT ADEQUATELY PROVIDE FOR THE FISH. THE QUALITY OF FISHING IS UNSURPASSED AND QUITE PROBABLY IN THE TOP 3 BLUE RIBBON STREAMS IN THE U.S. TO SEEK THE MINIMUM ONLY AIS A TRAVESTY TO THE FISH AND THE CREEK. I FEEL WE SHOULD ENACT LEGISLATION THAT PROVIDES MORE THAN 74 CFS M. STREAM FLOW. WE SHOULD ENCOURAGE RATHER THAN LIMIT THE FISH GROWTH & DISTRIBUTION, AND ONE WAY TO DO THIS WOULD BE TO SET A STREAM FLOW CLOSER TO THE OPTIMUM STREAM FLOW MENTIONED BY TIM FROM FISH & GAME. I ADMIT I HAVE NO SCIENTIFIC BACKGROUND IN THIS, BUT I'M ON SILVER CREEK AS MUCH OR MORE THAN ANYONE. IT SEEMS THAT THE FISH ARE GETTING THE SHAFT AGAIN AND SOMEONE MUST SPEAK UP FOR THEM OTHER THAN F & GAME. THE QUALITY OF FISHING, SCENIC VALUES, ETC CONTRIBUTE DIRECTLY TO THE AREA'S (MINE SPECIFICALLY!)

CONT'D

ECONOMIC BASE, RECREATIONAL POTENTIAL, ETC.
AND IT'S ABOUT TIME THAT WE RECOGNIZE THIS,
AND MANAGE THE RESOURCE AT MORE THAN A
MINIMUM LEVEL. THANK YOU

JIM HOLCOMB

Exhibit F+G A.

Tim Cochnauer
Principal Fishery Research Biologist
Idaho Department of Fish and Game
Coeur d'Alene, Idaho

Education:

1967: Bachelor of Science, University of Oklahoma, Norman, Oklahoma.
1973: Master of Science, University of Oklahoma, Norman, Oklahoma.
Present: Doctorate student in Fishery Management, University of Idaho, Moscow, Idaho.

Instream Flow Work Experience:

Idaho Department of Fish and Game: Project Leader, Instream Flow Investigations, 1974-79. Identified flow needs for fish and wildlife resources on approximately 100 streams or strem reaches in Idaho. Portions of these studies were funded by the U.S. Fish and Wildlife Service, Idaho Department of Water Resources and U.S. Bureau of Reclamation.

Idaho Department of Fish and Game: Project Leader, U.S. Bureau of Land Management Instream Flow Investigations. Ongoing study. A four-year study to determine instream flow needs on 60 streams located on BLM lands throughout Idaho.

Intragovernmental Personnel Assignment to U.S. Fish and Wildlife Cooperative Instream Flow Group, 1977. Assisted in development of new methodologies for determining instream needs for fish and wildlife resources.

Conference, Workshop and Seiminar Participation:

American Fisheries Society Instream Flow Needs Conference, 1976, Boise, Idaho.

Pacific Fishery Biologists Instream Flow Session, 1976, Ocean Shores, Washington.

U.S. Fish and Wildlife Service Instream Flow State-of-the-Air Workshop, 1975, Logan, Utah.

Idaho Water Resource Research Institute Instream Flow Seminar, 1978, Moscow, Idaho.

U.S. Fish and Widlife Service Instream Flow Conference for Idaho, 1977, Boise, Idaho.

U.S. Fish and Wildlife Service Instream Flow Computer Programs Workshop, 1977, Salt Lake City, Utah.

American Fisheries Society, Nevada Chapter, Instream Flow Seminar, 1977, Las Vegas, Nevada.

Idaho Department of Fish and Game. Instream Flow Training Workshop for Regional Managers and Biologists, 1981, Lewiston, Idaho.

U.S. Fish and Wildlife Service Instream Flow Strategies and Application Workshop, 1982, Portland, Oregon.

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Instream Flow Publications:

Bovee, Ken D. and Tim Cochnauer. 1977. Development and evaluation of weighted criteria, probability of use curves for instream flow assessments; fisheries. Instream Flow Information Paper No. 3. Cooperative Instream Flow Service Group, Fort Collins, Colo. 49 p.

Cochnauer, Tim. 1976. Idaho Department of Fish and Game instream flow program status. In: Instream Flow Needs and Competing Uses for Water. Proceedings of a Joint Water Resources Seminar of the University of Idaho and Washington State University. Pp. 49-79.

_____. 1976. Stream resource maintenance flow studies, 1976. Job Performance Report, F-69-R-1, Job II. Idaho Department of Fish and Game. 44 p.

_____. 1976. Instream flow techniques for large rivers. Instream Flow Needs, Vol. II, American Fisheries Society, 1976.

_____. 1977. Snake River stream resource maintenance flow studies, 1975-76. A Report with Recommendations to the US Bureau of Reclamation, Boise Office. Idaho Department of Fish and Game. 14 p.

_____. 1977. Stream resource maintenance flow studies, 1977. Job Performance Report, F-69-R-2, Job II. Idaho Department of Fish and Game. 85 p.

_____. 1977. Stream resource maintenance flow determinations for Box Canyon Springs. Idaho Department of Fish and Game. 10 p.

_____. 1977. Snake River (American Falls Dam to Lake Walcott) stream flow study, 29 October - 10 November 1977. Idaho Department of Fish and Game. 31 p.

_____. 1980. Snake River fisheries investigations, survey of fish populations and status of white sturgeon populations in the Snake River. Job Performance Report, Project F-73-R-2. Idaho Department of Fish and Game. 21 p.

_____. 1980. Stream flow investigations. Job Completion Report. Idaho Department of Fish and Game. 16 p.

_____ and Edwin Buettner. 1978. Stream flow investigations--stream resource maintenance flow determinations on Idaho streams. Job Performance Report, Project F-69-R-3, Job No. II. Idaho Department of Fish and Game. 88 p.

Cochnauer, Tim and Bill Horton. 1981. A reference workbook for determining instream flow needs in Idaho. Idaho Department of Fish and Game. In Press.

Cochnauer, Tim and Neil R. Hoyt. 1979. Stream flow investigations--stream resource maintenance flow determinations on Idaho streams. Job Performance Report, Project F-73-R-1. Idaho Department of Fish and Game. 50 p.

APR 13 1981
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Cochnauer, Tim and L. Brent Mabbott. 1981. Instream flow study, Bureau of Land Management. Annual Report, April 1981. Idaho Department of Fish and Game.

Cochnauer, Tim and Robert G. White. 1975. Stream resource maintenance flow studies, 1975. A Cooperative Study; Idaho Department of Water Resources, Idaho Department of Fish and Game and Idaho Cooperative Fishery Research Unit. 136 p.

Horton, William D. and Tim Cochnauer. 1979. Instream flow methodology evaluation, biological criteria determination, and water quality needs for selected Idaho streams. Stream Evaluation Project--Phase II, BOS, Western Water Allocation Projects, Contract No. 14-16-0001-77090. 177 p.

APR 13 1981
BUREAU OF LAND MANAGEMENT

Miscellaneous:

Since September 1974, I have been employed as a Fishery Research Biologist for the Idaho Department of Fish and Game. During the period 1974-79, I was assigned as the project leader on the Department's stream flow investigations project. My main duties were to formulate a program for developing instream flow needs for fish and wildlife resources on major streams throughout Idaho, and implement that program in subsequent years. During the five years of the project approximately 100 stream resource maintenance flow recommendations were developed and 50 applications for instream flow water rights were prepared in accordance with legislation that designated fish and wildlife resources as a beneficial use of water. I have attended Department of Water Resources' hearings on applications for stream flow water rights, and have appeared as an expert witness in support of the applications when reviewed by legislative committees.

During this period I was responsible for administering seven contracts to develop instream flow needs for streams on priority lists of several federal and state agencies. I have worked with the Idaho Department of Water Resources, Idaho Department of Parks and Recreation, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. Bureau of Land Management, and U.S. Forest Service in coordinating stream flow studies and providing technical assistance to their personnel.

A major component in the assessment of instream flow needs is the evaluation of habitat loss with decreases in discharge for fish species of concern. Since 1974 I have been involved in the development of habitat requirements for most game fish species found in Idaho. In 1977, I was assigned to the U.S. Fish and Wildlife Service's Cooperative Instream Flow Service Group in Fort Collins, Colorado. One of major responsibilities at Fort Collins was to develop habitat curves for sixty cold and warm water game fish species. In 1977 and 1978, I was involved in field investigations to collect habitat requirement information for game fish species on 21 Idaho streams. Working as the project leader on the Department's stream flow investigations for five years and remaining as a technical consultant after that period has allowed me to become very familiar with the habitat requirements for game fish in Idaho and how that habitat is impacted by development.

During 1979-81, I was assigned as the project biologist on Department's Snake River investigations project. The objectives of this project have been to assess fish populations and collect white sturgeon life history data from the Snake River.

Since 1981, I have been assigned as a principal fishery research biologist coordinating research projects on northern Idaho lakes and supervising research projects on rivers and streams throughout the state. I have also continued to coordinate instream flow studies throughout the state.

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Exhibit F+G B.

STATEMENT OF ROBERT J. BELL, REGIONAL FISHERY MANAGER
IDAHO DEPARTMENT OF FISH AND GAME
INSTREAM WATER RIGHT APPLICATIONS
FOR LOWER SILVER CREEK

To: Idaho Water Resource Board

Date: November 10, 1983
Hailey, Idaho

Silver Creek has historically supported an exceptionally high quality trout fishery and has been acclaimed as one of the great trout streams in North America. As recently as 1977, the stream was described as one of the top ten trout streams in the United States.

The section of Silver Creek involved in this instream flow application supports excellent brown and very good rainbow trout populations. (Exhibits 1-A, 1-B and 2-A). Along with sections of the Little Wood River immediately downstream it now furnishes some of the finest brown trout angling in Idaho. Many trophy-sized browns are now present within the area with some of the fish reaching weights of over seven pounds and fish exceeding two pounds are common. Brown trout were first introduced into the Little Wood River in the spring of 1970 and moved upstream from the Little Wood River into Silver Creek. The browns for these first plantings in the Little Wood River were obtained from Massachussets as eyed eggs in the late fall of 1969 and were hatched and reared at the Idaho Department of Fish and Game's Hayspur Hatchery near Gannett before being stocked as fingerlings have been made since 1970 and it is known good natural reproduction now occurs in both Silver Creek and the Little Wood River. Trophy-sized wild rainbow trout are also caught within the area with some of the fish exceeding four pounds.

Currently, the Department of Fish and Game is managing this section of Silver Creek as a wild trout fishery and all stockings of catchable rainbow were terminated in the early 1970's. The angling season on this portion of the stream runs from January 1 to October 15--the October 15 closure was enacted to protect brown trout spawners. No other special fishing regulations are in effect and all types of angling occurs.

An intensive fishery investigation was initiated on Silver Creek by the Idaho Department of Fish and Game in 1975 and continued through 1978 to assist in formulating a management plan for the drainage. Exhibit No. 4 is the final report on the results of this study. The study began with a preliminary creel census which was conducted in 1975. In 1976, Department personnel collected information to assess the status of fish stocks in the stream and information was collected on the relative abundance, density, distribution, species composition, movement, sizes and age and growth of fish. During 1977 information was collected to determine total angler effort and catch and angler preferences.

Exhibit No. 5 summarizes rought current angler use estimates made by Department personnel for this section of Silver Creek. The area receives an estimated 3,512 angler days of use annually and the estimated annual economic value of the resource would be approximately $124,781.

RECLAIMED

APR 13 1987

In addition to the high fishery value, this part of Silver Creek has some excellent riparian habitat as shown in Exhibits 2-B, 3-A and 3-B and supports good populations of upland birds, furbearers and waterfowl as well as non-game species.

High-quality wild trout streams are now at a premium in Idaho and we feel the requested minimum instream flow of 74 cfs for this section of Silver Creek is necessary to maintain adequate resting, rearing and spawning areas. As pointed out in the instream flow applciation, the 74 cfs requested is far under the optimum flow which would be approximately 150 cfs.

Sincerely,

Robert J. Bell
Regional Fishery Manager

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EXHIBIT NO. 1

Exhibit 1-A. Trophy-sized brown trout obtained in Idaho Department of Fish and Game electrofishing operation in November, 1976 on the lower portion of Silver Creek in the vicinity of the instream flow request. Photo taken by Idaho Department of Fish and Game Fisheries Biologist.



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EXHIBIT NO. 1

Exhibit 1-B. Large-sized brown trout and rainbow obtained in Idaho Department of Fish and Game electrofishing operation in November, 1976 on the lower portion of Silver Creek in the vicinity of the instream flow request. Photo taken by Idaho Department of Fish and Game Fisheries Biologist.



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EXHIBIT NO. 2

Exhibit 2-A. Juvenile brown trout obtained in Idaho Department of Fish and Game electrofishing operation in November, 1976 on the lower portion of Silver Creek in the vicinity of the instream flow request. Photo taken by Idaho Department of Fish and Game Fisheries Biologist.



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EXHIBIT NO. 2

Exhibit 2-B. Looking upstream on Silver Creek on the Sorenson property within the requested instream flow section. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.



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EXHIBIT NO. 3

Exhibit 3-A. Looking downstream at low falls on Silver Creek on the Sorenson property within the requested stream flow section. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.

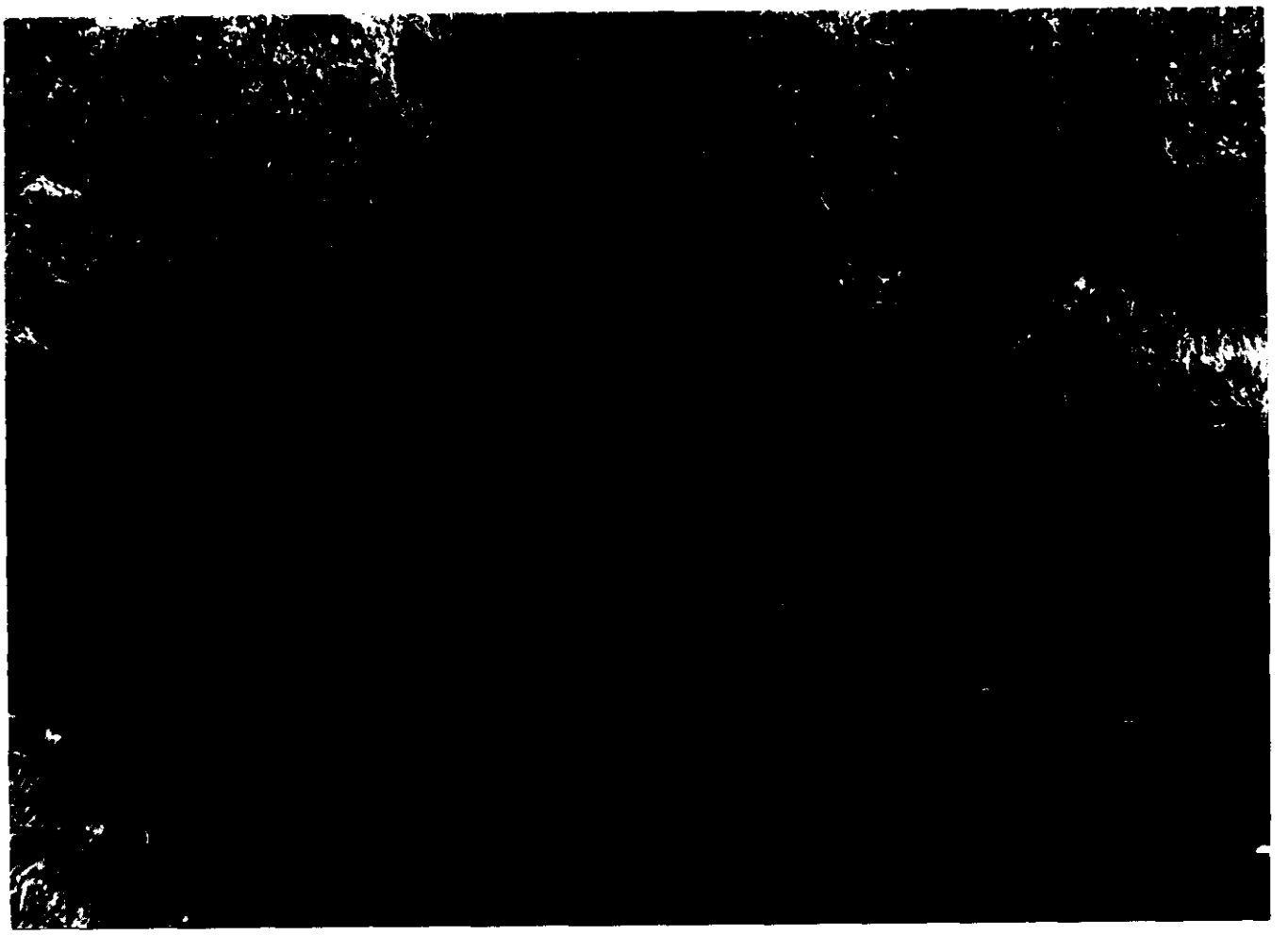


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APR 13 1984

EXHIBIT NO. 3

Exhibit 3-B. Looking upstream on Silver Creek on the Sorenson property within the requested stream flow section. This photo typifies some of the excellent riparian habitat found along portions of the stream. Photo taken by Robert J. Bell of the Idaho Department of Fish and Game on September 11, 1983.



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EXHIBIT NO. 5

ROUGH CURRENT ANGLER USE ESTIMATE
DURING THE FISHING SEASON ON LOWER SILVER CREEK
FROM HIGHWAY 93 DOWNSTREAM
TO ITS CONFLUENCE WITH THE LITTLE WOOD RIVER

Month	Estimated Average Angler Use	Estimated Total Angler Days
January	0.5/day	15
February	0.5/day	14
March	8/day	248
April	13/day	390
May	15/day	465
June	18/day	540
July	20/day	620
August	20/day	620
September	15/day	450
October	10/day for 15 days	150
		3,512

The net value per day of fishing streams in Idaho (updated with the consumer price index) comparable to this section of Silver Creek amounted to approximately $35.53 in June of 1983. Using this figure, the estimated annual economic value of this fishery on this portion of Silver Creek would be approximately $124,781 ($35.53 x 3,512).

These associated costs are primarily for expenses involved with transportation to and staying in the fishing area (gas, meals, motel, etc.). Durable costs for permanent items such as fishing or camping gear are not included.

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APR 13 1987

EXHIBIT NO. 4 F&G. C. 4

IDAHO
DEPARTMENT OF FISH & GAME

Joseph C. Greenley, Director

FEDERAL AID TO FISH AND WILDLIFE RESTORATION

Job Completion Report

Project F-66-R

RIVER AND STREAM INVESTIGATIONS

Job No. III Silver Creek Fisheries Investigations
Job No. III-a. Angler Opinions, Preferences and/or Attitudes
Job No. III-b. Fish Distribution and Abundance Survey
Job No. III-c. Angler Use and Harvest Survey

Period Covered: 1 March 1976 to 28 February 1978

by

Russ Thurow
Fisheries Research Biologist

December, 1978

MICROFILMED
APR 13 1987
FRONT ONLY



Wild rainbow trout caught in Silver Creek - circa 1925.

ACKNOWLEDGEMENTS

The late Harry Gibson helped design the Silver Creek Fisheries Investigations project and supervised the project from 1 March 1976 to 4 July 1977. Gibson died in an airplane crash on 4 July 1977 while engaged in making angler counts on Silver Creek.

Biological aides Bruce Reininger, Rich Uberuaga, Terry Powell, Steve Elle and Jerry Baltazor contributed their skills and energies to the project.

Conservation Officer Lee Frost assisted in securing tag recovery information.

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JOB COMPLETION REPORT

State of Idaho | Name: River and Stream Investigations

Project No. F-66-R | Title: Silver Creek Fisheries Investi-

Job No. III | gations

Period Covered: 1 March 1975 to 28 February 1978

ABSTRACT

In 1975 the Idaho Department of Fish and Game initiated an intensive fishery investigation on Silver Creek designed to aid the development of a management plan for the drainage. To assess the status of the fish stocks in Silver Creek we collected information on the relative abundance, density, distribution, species composition, movement, sizes and age and growth of fish. During 1977 we collected information characterizing the Silver Creek fishery, estimated total angler effort and harvest and assessed angler opinions regarding the fishery.

Silver Creek currently supports an abundant population of self sustaining wild rainbow trout, particularly within the upper sections and tributaries. This population is comprised of predominantly two and three year-old trout; large (>400 mm) and old age (>IV+) trout are uncommon.

Since the early 1900's a variety of rainbow trout stocks have been introduced into Silver Creek forming a complex gene-pool. As a result, Silver Creek supports spring-spawning and fall-spawning races of rainbow trout. Although most wild rainbow trout sustained a limited home range, a portion of the population exhibited upstream and downstream migrations in the spring and fall related to spawning.

The primary tributaries (Stalker, Grove, Wilson and Loving creeks) function as important spawning and rearing areas for wild rainbow trout.

Hatchery catchable rainbow trout planted in Silver Creek moved considerable distances from the planting site into sections of Silver Creek where no hatchery trout were planted.

Trout sampled in Silver Creek in 1976 and 1977 grew slower than trout sampled in 1952. However, a disproportionate number of trout sampled in 1952 consisted of old age fish. Growth of wild rainbow trout in Silver Creek in 1976 and 1977 was comparable to growth rates of trout in the South Fork Boise River.

Preliminary results indicate that the catch and release regulations currently in effect on Section 1 are increasing the abundance of large trout within that section.

Anglers expended an estimated 32,033 hours of effort and captured 32,112 game fish in Silver Creek and tributaries in 1977. Wild rainbow trout comprised a majority of the catch from all sections except 3 and 4 where large numbers of hatchery catchable rainbow trout were planted. The catch consisted of predominantly 2- and 3-year old trout with few trout over 4-years old.

A majority of the anglers who fished Silver Creek caught at least one game fish per trip (79% successful trips). The catch rate exceeded or approached one fish per hour in four stream sections. The catch rate for wild rainbow trout was largest in sections 1 and 2.

Although anglers were allowed to keep fish on Sections 2 through 5 and Grove and Loving creeks, approximately 50% of the wild trout caught were subsequently released. Anglers released over 14,705 wild rainbow trout from a total catch of 20,683 wild rainbow in 1977. Fly fishermen released a majority (94%) of all wild rainbow released in 1977.

Fly fishermen comprised a majority of the anglers who fished Silver Creek in 1977. Anglers using flies were also the most successful fishermen on Silver Creek and they caught a disproportionate amount of the catch of wild rainbow trout for the effort expended.

Most anglers who fish Silver Creek considered the fishing good or fair, were satisfied with the species composition in the stream and preferred to catch wild rainbow trout. Anglers opposed plants of hatchery catchable rainbow trout in the upper sections of the stream and they supported the catch and release regulations in effect on Section 1.

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INTRODUCTION

The Silver Creek drainage historically supported a high-quality rainbow trout fishery which was recognized as one of the premier trout streams in North America. Numerous popular articles have been published about this highly touted trout stream and its crystal water, difficult to catch trout and scenic beauty (Schwiebert 1976, 1977). As recently as September, 1977 Bauer (1977) described the stream as one of the top ten trout streams in North America.

Since the 1940's anglers and fishery biologists have observed an apparent decline in the number and size of rainbow trout harvested from Silver Creek. Hauck (1947) recognized that fishing success in Silver Creek had declined during the previous decade but he did not identify the cause. Following Hauck's preliminary work, additional studies have been conducted to assess the status of the fish population and evaluate management programs (Bell 1966, Gebhards 1963, Irving 1952, 1953, 1956, 1958).

In 1975 the Idaho Department of Fish and Game initiated an intensive fishery investigation on Silver Creek designed to aide the development of a management plan for the drainage. During 1975, project personnel conducted a preliminary creel census (Mallet 1975). In 1976, Department personnel assessed fish distribution and abundance, food availability and utilization and physical stream parameters. In 1977 we conducted a creel census to determine total angler effort and catch and angler preferences.

This report is intended to serve as a completion report for Job III (Silver Creek Fisheries Investigations) as well as an annual job performance report for: Job III-a of F-66-R-3 (Angler Opinions, Preferences and/or Attitudes on Silver Creek); Job III-b of F-66-R-2 (Fish Distribution and Abundance Survey on Silver Creek); and Job III-c of F-66-R-3 (Angler Use and Harvest Survey on Silver Creek). The annual performance report for Job III-d of F-66-R-2 (Food Availability and Utilization by Trout in Silver Creek) will be reported separately.

OBJECTIVES

To determine fish distribution and abundance in Silver Creek.

To compare the fish population of the "fly-fishing-only" section with that of the non-regulated section.

To evaluate the effect of catchable trout releases on the wild trout population.

To survey angler use and harvest in Silver Creek.

To monitor angler opinions, preferences and/or attitudes on Silver Creek.

RECOMMENDATIONS

Formulate a specific management plan with specific management goals for

the Silver Creek fishery.

Limit plantings of hatchery catchable rainbow trout to the lower, accessible sections of Silver Creek (Sections 3 and 4) and discontinue catchable plants in the tributaries.

Isolate a wild strain of late-maturing rainbow trout which exhibit rapid growth rates and experimentally introduce the strain into upper Silver Creek.

Prevent additional removal of stream bank vegetation and promote techniques of bank cover restoration.

Monitor the effect of the special regulations in Section 1 on the size and growth rate of wild trout.

DESCRIPTION OF STUDY AREA

The Silver Creek drainage is located in south central Blaine County (Fig. 1). Silver Creek originates from springs surfacing south of Gannett and flows southeast through a gap between the Pioneer Mountains and the Timmerman Hills. The main stem of Silver Creek begins at the confluence of Grove and Stalker creeks and flows southeast 39 km (24 mi) to its confluence with the Little Wood River. The watershed encompasses 18,100 ha (44,707 acres) and drops in elevation from 1,509 m (4,951 ft) at the headwaters to 1,448 m (4,751 ft) at the confluence with the Little Wood River.

Peak stream discharge occurs in March and April as a result of snowmelt. Local ranchers begin diverting irrigation water from Silver Creek in early June and low flows occur from late June through July or August. Most of the land is irrigated by sub-irrigation methods, but ranchers began applying sprinkler irrigation techniques in 1976. Flows increase in August as a result of irrigation return water recharging the aquifer (Castelin and Chapman 1972). Local annual rainfall averages 35.6 cm (14 in). Additional hydrological data will be available upon publication of the Silver Creek Aquifer Recharge Study by the Idaho Department of Water Resources.

The geology of the drainage has been described in detail by Schmidt and Mackin (1962) and Castelin and Chapman (1972) provide a summary of the geologic framework. During the early Paleozoic Era the region was covered by a succession of seas which accumulated sediments and formed the underlying basement rock in the drainage. In the Tertiary Period extrusion of the Challis Volcanics modified the area. During the Quaternary Period a succession of basalt flows in the valley altered the Big Wood River channel which formerly flowed in the present Silver Creek drainage. A basalt flow also impounded the river forming a lake filled with fine-grained sediments which were later deposited throughout the valley. Late in the Quaternary Period alpine glaciers began to recede and substantially increase the flow of the Big Wood River systems and its load-carrying capacity. A succession of alternating layers of clay, sand, silt and gravel were later deposited in the valley.

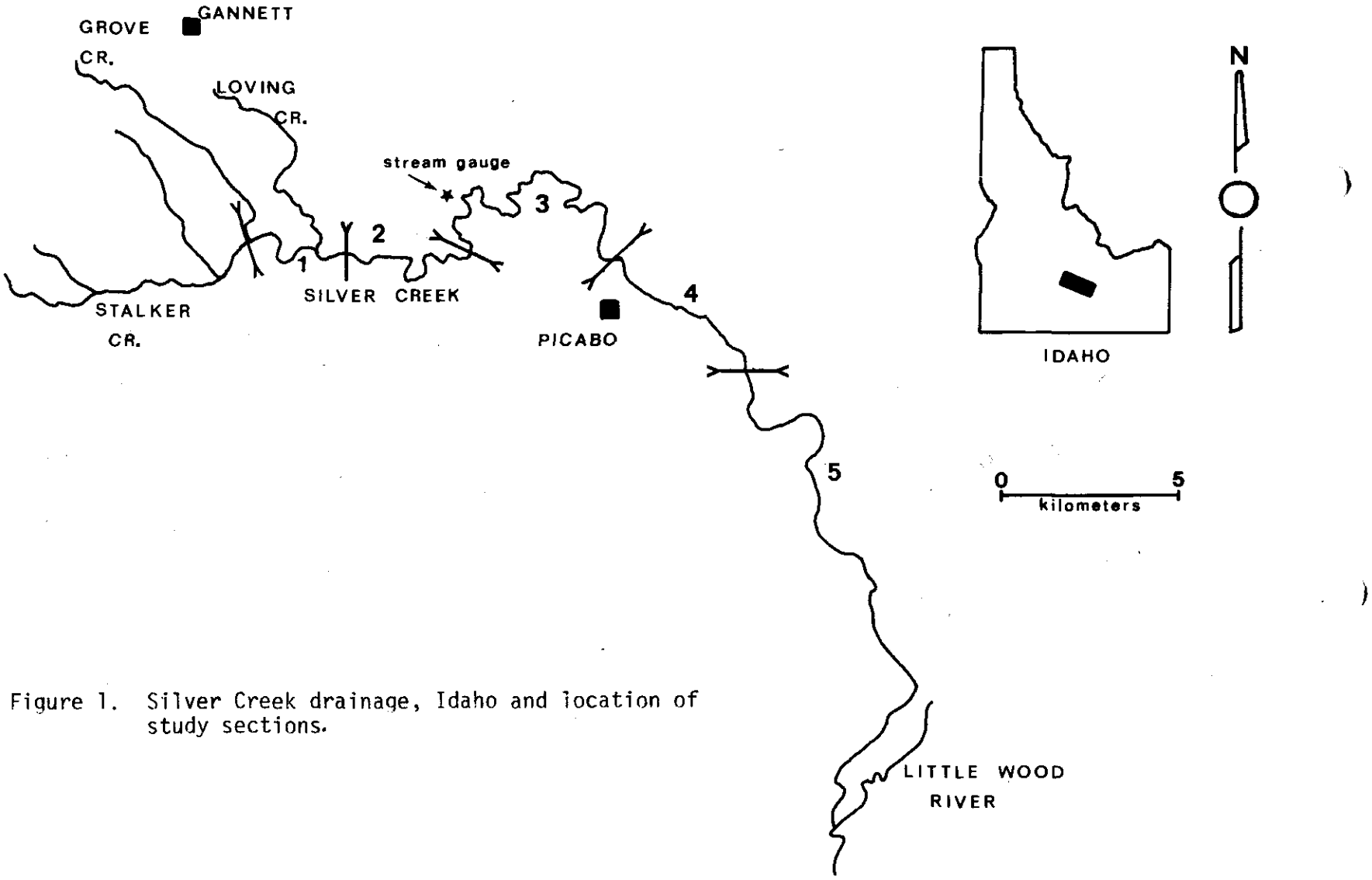


Figure 1. Silver Creek drainage, Idaho and location of study sections.

LOCATION AND DESCRIPTION OF STUDY SITES

In 1975 Idaho Department of Fish and Game research personnel surveyed Silver Creek and selected five study sections based primarily on physical characteristics, fishing regulations and the presence of hatchery reared trout (Fig. 1) (Mallet 1976).

The study sites included a variety of habitat types and I recorded substrate and channel characteristics and accessibility for each site (Table 1). Section 1 is suitable for wading due to its slight gradient and shallow mean depth. The only unwadeable area is formed by an irrigigation dam which impounds 1.4 km (0.9 mi) of stream beginning 0.6 km (0.4 mi) below Section 1. In Sections 2 through 4 the Silver Creek channel becomes narrower and deeper than in Section 1 and the gradient also increases. Substrate in Sections 1 through 4 consists of gravel and silt in varying proportions. Within Section 5, the stream channel is narrower and deeper and the gradient steeper than in the other sections. Section 5 also contains a larger proportion of exposed gravel substrate and rubble than the other stream sections.

The primary tributaries, Loving, Grove and Stalker creeks exhibit moderate gradients and varying proportions of silt and gravel. Loving Creek contains a large proportion of silt. Stalker and Grove creeks also contain occasional silted areas, but these two streams also contain a large proportion of exposed gravel substrate which functions as primary spawning area for rainbow trout and whitefish.

Stream discharge in Silver Creek varied considerably during the 3 years of research (Fig. 2). An extremely high-flow year occurred in 1975 while 1977 was an extremely low-flow year. In 1977 no peak spring discharge occurred. Mid-summer flows averaged approximately 280 cfs in 1975, 180 cfs in 1976 and 80 cfs in 1977.

Within Section 1 the temperature regime of Silver Creek remained stable. Francis (1977) installed a thermograph below the confluence of Grove and Stalker creeks and recorded water temperatures from 13 June to 24 October. Daily maximum water temperatures ranged from 10 C (50 F) in October to 22 C (72 F) in June with a mean of 17.1 C (62.8 F). Daily minimum water temperatures ranged from 4.5 C (40 F) in October to 13.5 C (56.3 F) in August with a mean of 9.8 C (49.6 F).

Comparisons of temperature data between Sections 1, 3 and 5 illustrate variations in water temperature between sections. The lower sections of the stream are colder in the winter and warmer in the summer than the upper sections (Table 2) (Clark 1976).

Chemical analysis of water samples indicates that Silver Creek is composed of productive waters which contain relatively large concentrations of various ions (Table 3) (Clark 1976).

Table 1. Description of Silver Creek study sections.

Section	Length (km)	Location	Fishing regulations	Access	Substrate	Channel characteristics
1	3.4	Confluence of Stalker and Grove creeks to Kilpatrick Bridge	Catch and release, fly fishing only	Open to public	Gravel-silt, silt increases in impoundment	Mean depth 1 m except in impoundment
2	2.7	Kilpatrick Bridge to Hwy. 68	General regulations	Private land, inaccessible except by private membership or float tubing	Gravel-silt	Channel narrower and deeper than Section 1, pools up to 1.5 m
3	5.8	Hwy. 68 to Picabo Bridge	General regulations, hatchery rainbow trout plants	Numerous access points through public access and landowner consent	Gravel-silt	Similar to Section 2
4	5.2	Picabo Bridge to lower Hwy. 68 Bridge	General regulations, hatchery rainbow trout plant-	Private land, inaccessible except at Picabo and Lower 68 bridges	Gravel-silt	Similar to Section 2
5	9.7	Lower Hwy. 68 Bridge to Little Wood River	General regulations	Access point at Priest Campground	Gravel-silt	Numerous pools and riffles, steeper gradient than Sections 1 through 4

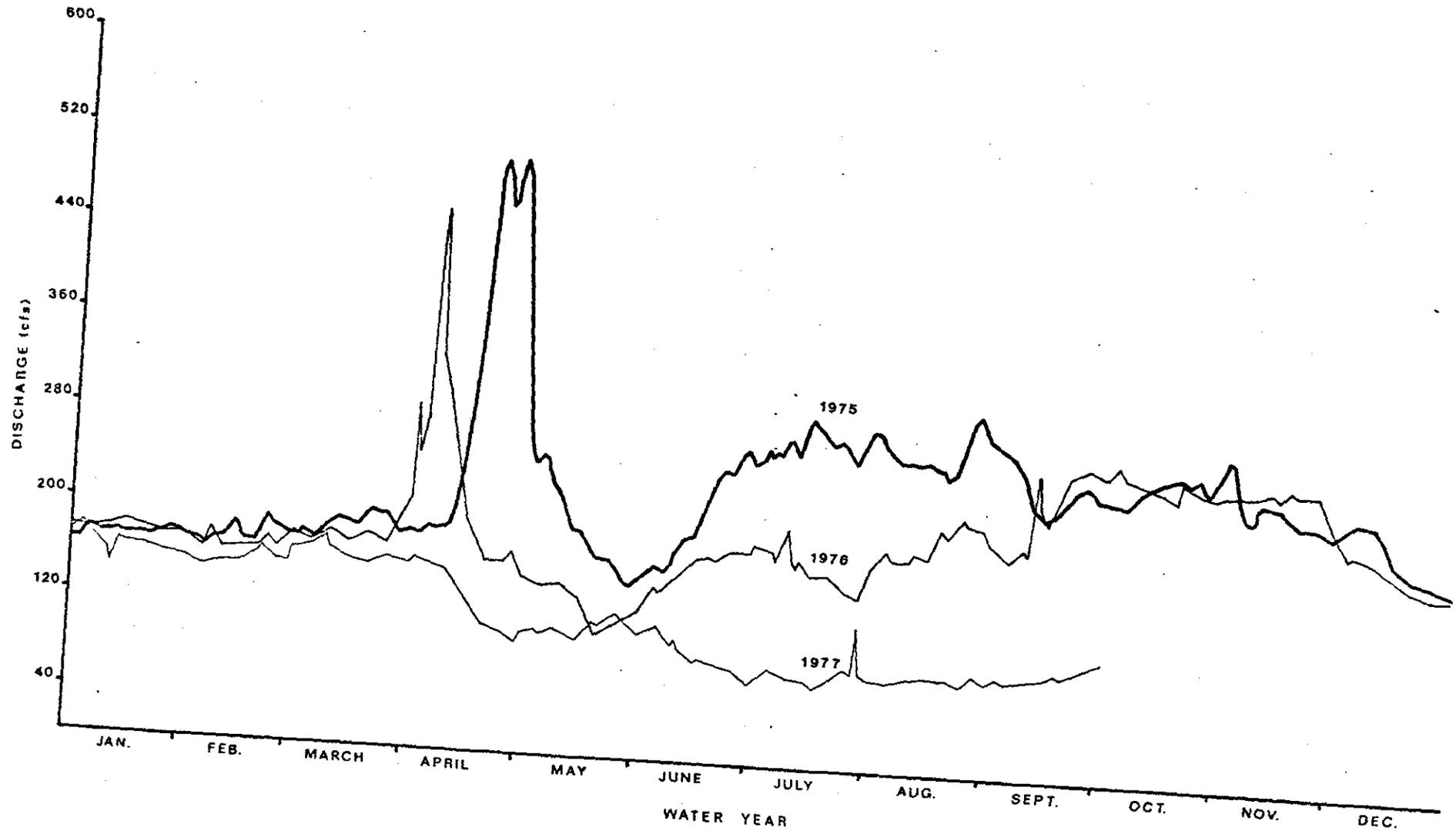


Figure 2. Daily discharge (c.f.s.) of Silver Creek at Sportsman Access-Section 3, during 1975, 1976 and 1977.

Table 2. Water temperatures recorded in Silver Creek in Sections 1, 3 and 5; February, 1975 to February, 1976 (Idaho Department of Health and Welfare).

Date	Section 1 Temperature °C.	Section 3 Temperature °C.	Section 5 Temperature °C.
2-19-75	4.0	4.0	3.5
4-19-75	8.0	7.0	7.0
5-20-75	9.0	8.0	7.5
6-12-75	16.0	15.0	17.0
7-17-75	13.0	15.0	17.0
8-6-75	14.0	15.0	18.0
9-16-75	12.0	13.0	14.0
10-9-75	6.0	7.5	7.5
11-28-75	3.0	3.0	3.0
2-25-76	3.0	3.0	4.0

Table 3. Water quality parameters sampled in Silver Creek February, 1975 to February, 1976 (Idaho Department of Health and Welfare)

Parameter	Range (mg/l)
Specific conductance (umhos/cm.)	190 - 493
Total alkalinity ($CaCO_3$)	108 - 228
Total solids	216 - 340
Nitrate (NO_3)	0.85 - 3.44
Nitrite (NO_2)	.001 - .017
Ortho phosphate (PO_4)	.01 - .90
Calcium (Ca++)	11.0 - 80.0
Sulfate (SO4)	12.0 - 17.5
Sodium (NA+)	4.1 - 6.1
Potassium (K+)	0.8 - 2.7

Dense growths of aquatic macrophytes including Chara, Veronica, Potamogeton, Elodea, Ranunculus, Myriophyllum and others occur in Silver Creek (Francis 1977). Aquatic invertebrate production and fish production are apparently closely associated with the condition of the aquatic vegetation (Bell 1967; Gebhards 1963).

Section 1, Grove, Stalker and Loving creeks are sparsely shaded by occasional stands of aspens, cottonwoods and willows. Within sections 2-4 permanent bank cover is scant, consisting of occasional stretches of willows. In Section 5, Silver Creek meanders through a sagebrush desert and occasional stands of willows, aspen, and cottonwoods occur. Grasses and sedges comprise additional bank cover on all stream sections.

Silver Creek is accessible to anglers through public access points in Section 1, 3 and 5 (Table 1). Within Section 2 and 4, a majority of the adjacent land is privately owned and access is by permission only. Crop production and cattle grazing are prevalent land-use forms on Sections 2 through 5 of Silver Creek. The access surrounding Section 1 is currently owned by the Nature Conservancy and limited crop production and no cattle grazing currently occur there.

Biological Characteristics

Rainbow trout from several stocks have been introduced into Silver Creek forming a complex gene pool. The original rainbow trout introductions were of McCloud River, California trout in the nineteenth century. In 1907 the State of Idaho constructed Hayspur fish hatchery on Loving Creek (tributary to Silver Creek) (Batchelder 1975). Since 1907 rainbow trout from several sources have been reared at Hayspur Hatchery and introduced to Silver Creek. Sources include Neosho, Mo.; Soap Lake, Wash.; Hat Creek, Calif.; Henrys Fork Snake River, Idaho; Williams Lake, Idaho;

and Roaring River, Oregon. In addition, between 1955 and 1970 Idaho Department of Fish and Game personnel annually salvaged fish from Richfield Canal and planted them in Silver Creek. Richfield Canal introductions included trout from the original Big Wood River stock and trout from stocks reared in Hayspur Hatchery and introduced into Richfield Canal. Hayspur Hatchery currently maintains its own brood stock and these fish exhibit considerable variation in external characteristics due to their complex genetic makeup. Hayspur Hatchery personnel stocked catchable sized rainbow trout in Loving Creek and Section 3 and 4 of Silver Creek during this research from 1975 to 1977 (Table 4).

Table 4. Silver Creek fish planting record for hatchery catchable rainbow trout, 1975 to 1977.

Date	Location	Number of fish
5/23/75 to 9/1/75	Silver Creek-Sections 3 & 4	13,600
5/23/75 to 8/29/75	Loving Creek	5,000
5/19/76 to 11/5/76	Silver Creek-Sections 3 & 4	14,900
5/23/76 to 7/30/76	Loving Creek	2,770
4/11/77 to 8/3/77	Silver Creek-Sections 3 & 4	7,948
5/23/77 to 7/30/77	Loving Creek	2,500

A variety of other game and non-game fish species are present in the Silver Creek drainage (Table 5).

Table 5. Game and non-game fish species present in Silver Creek and tributaries.

Common name	Scientific name
Game Species	
Rainbow trout	Salmo gairdneri
Brown trout	Salmo trutta
Brook trout	Salvelinus fontinalis
Mountain whitefish	Prosopium williamsoni
Non-Game Species	
Bridgelip sucker	Catostomus columbianus
Redside shiner	Richardsonius balteatus
Longnose dace	Rhinichthys cataractae
Wood River sculpin	Cottus leiopomus
Utah chub	Gila atraria

TECHNIQUES USED

Fish Populations

To assess the status of the fish stocks in the Silver Creek drainage we collected information on the relative abundance, density, distribution, species composition, movements, sizes and age and growth of fish. We used electrofishing and snorkeling techniques to sample the fish and jaw tags to monitor movements.

Fish Distribution and Abundance

In 1976 Gibson established electrofishing transects in the Silver Creek study area (Table 6). Between April, 1976 and March, 1977 he increased the number of transects to 48. Transects consisted of a length of stream which was representative of the habitat in the respective sections. Recognizable landmarks designated transect boundaries.

Using a canoe and fiberglass boat, Gibson floated downstream through each transect and collected fish during a recorded time period.

Gibson captured the fish with a D.C. variable voltage pulsator powered by a portable generator. He enumerated all collected fish by species and measured them. He also weighed, tagged and collected scales from a sample of the trout.

In 1977 we established five transects each in Sections 1, 2 and 3 and utilized portions of the transects Gibson sampled in 1976. We utilized identical gear in 1977 but made three passes through each transect in an attempt to collect a larger sample. We enumerated species, measured each fish, collected scales and tagged a sample of trout.

To further evaluate fish distribution and abundance, I made underwater counts of fish in established transects in Sections 1 and 2. I snorkeled the transects which Department personnel had surveyed previously (Bell 1967 and Gebhards 1963). Using a wetsuit and snorkle, I floated each transect and counted the total number of fish per transect (by species) and estimated the size of large fish with the aide of a clipboard length scale. Due to the width of the stream and the fair to marginal visibility, I did not attempt to estimate the total number of fish within the transects.

Rainbow Trout Movements

To assess movements of rainbow trout, we tagged wild rainbow captured by electrofishing, catchable-size rainbow trout reared at Hayspur Hatchery and planted into Silver Creek and rainbow trout salvaged from Richfield Canal and introduced into Silver Creek (Table 7). From 1975 to 1977 project personnel tagged and released approximately 3,456 wild rainbow, 16,873 hatchery rainbow and 2,927 Richfield rainbow trout in Silver Creek and tributaries. In 1976 and 1977 we also tagged 195 brook trout and 124 brown trout. We attached numbered monel-metal tags to the mandible of each trout and recorded species, total length, tag number and date and location of release.

Table 6. Number of electrofishing transects in Silver Creek, 1976 and 1977.

Stream Sections	Number of sites electrofished, by dates				
	21 April-11 May 1976	7-23 July 1976	25 Oct.-12 Nov. 1976	24 Feb.-31 March 1977	8-17 Nov. 1977
Silver Cr. -1	3	4	4	5	5
Silver Cr. -2	2	2	2	4	5
Silver Cr. -3	4	6	7	7	5
Silver Cr. -4	3	4	4	3	-
Silver Cr. -5	5	5	8	9	-
Stalker Cr.	4	4	6	7	-
Grove Cr.	2	2	3	4	-
Wilson Cr.	2	4	4	3	-
Loving Cr.	4	3	4	6	-
Totals	29	34	42	48	15

Table 7. Numbers and stocks of trout tagged and released in Silver Creek and tributaries from 1975 to 1977.

Year	Wild rainbow tagged		Hatchery RB tagged		Richfield RB tagged		Brook trout tagged		Brown trout tagged	
	Silver Cr.	Tribs.	Silver Cr.	Tribs.	Silver Cr.	Tribs.	Silver Cr.	Tribs.	Silver Cr.	Tribs.
1975	---	---	11,504	5,202	---	---	---	---	---	---
1976	1,542	903	107	10	2,065	592	99	81	81	---
1977	735	276	46	4	180	90	11	4	43	---
Total 1975-1977	2,277	1,179	11,657	5,216	2,245	682	110	85	124	

Project personnel collected a majority of the recaptured trout while electrofishing in Silver Creek and tributaries. We also obtained tag recovery information from anglers we contacted on Silver Creek. To stimulate more anglers to return tags, we posted signs along Silver Creek which provided information on where to send or deposit tag recovery information.

Age and Growth

We analyzed 196 scales collected from wild rainbow trout in Sections 1, 2 and 3 in Silver Creek in 1976 and 1977. We collected the scales from the caudal peduncle above the lateral line, mounted them on glass slides in a water medium and examined them on a microprojector. After recording the total number of annuli, we measured the distances from the center focus to each annuli along the median anterior radius.

The regression equation ($L=a+cS$) fit the body-scale relationship of rainbow trout from Silver Creek. We employed this formula to back-calculate mean lengths at each annulus for each age class.

Creel Census

In 1975, department personnel conducted a preliminary creel census on Silver Creek in preparation for more intensive studies in 1977 (Mallet 1976). During 1977 we collected information characterizing the Silver Creek fishery, estimated total angler effort and harvest and assessed angler opinions regarding the fishery.

Angler Effort

We conducted angler counts on Silver Creek between 28 May and 30 November 1977. Personnel conducted an aerial census between 28 May and 4 July. We employed ground counts for the duration of the census. Utilizing the study sections designated in 1975, we regularly censused Sections 1 through 5, Stalker, Grove and Lovings creeks and enumerated all anglers during each count.

Gibson designed the census and selected 14-day intervals. He employed cluster sampling as outlined by Cochran (1953). We used each day as a cluster and made four counts daily. We selected the count days at random and the counts during each day systematically. During each 14-day interval we selected 2-weekend days and 2 weekdays. The study period included twelve 14-day intervals and one final 20-day interval.

I estimated the total hours of angler effort by stream section and angler type (shore, boat, float tube) for each interval as follows:
$\overline{X}WD(H) + \overline{X}_1WE(H)$

Where: $\overline{X}$ = mean number of anglers counted for all weekdays during an interval, computed by:

$$\frac{\text{Anglers Counted}}{\text{Number of Counts}}$$

$\overline{X}_1$ = mean number of anglers counted for all weekend days and holidays during an interval, computed by:

$$\frac{\text{Anglers Counted}}{\text{Number of Counts}}$$

WD = total number of weekdays per interval

WE = total number of weekend days and holidays per interval

(H) = mean daylight hours per interval

I estimated total angler use for each stream section by combining the total estimated hours fished during each interval.

Harvest

Project personnel interviewed anglers to assess residence, stream section fished, fishing method, catch composition and catch per hour. When possible, personnel measured all creeled fish and recorded data by species.

I estimated the catch per interval by the product of the estimated total angler hours per interval multiplied by the mean catch per angler hour during that interval for each section. The mean catch rates were based upon catch records obtained during personal interviews. We recorded catch per hour by species caught and angling method (fly, lure, bait). I calculated total harvest for each stream section by combining the estimated catch during each interval.

Angler Opinions

We also interviewed anglers on Silver Creek to assess their opinions on present management programs and their preferences for future management of the fishery.

Fish Distribution and Abundance

Electrofishing

Wild rainbow trout comprised a majority of the game fish captured in all study sections (Table 8). Gibson captured the largest numbers of wild rainbow trout in Section 1 and the tributaries (Table 9). Juvenile rainbow trout were also most abundant in Section 1 and the tributaries, particularly Grove and Wilson Creeks. Large rainbow trout (>356 mm) were most abundant in Sections 1 and 2.

Calculated relative fish densities, fish per 1,000 linear meters (1,094 yd) (Table 9) provided a poor indicator of actual fish densities. A comparison with fish per 1,000 m (1,094 yd) by snorkeling (Table 11) and the estimated catch per 1,000 m (1,094 yd) (Table 20) indicates that electrofishing underestimated the actual numbers of fish present. Apparently a single pass during the electrofishing was not effective in capturing a large percentage of the fish. Although gear efficiency may have varied between sections, particularly in the smaller tributary areas, electrofishing did provide an indicator of relative fish abundance.

A majority of the wild rainbow trout captured in 1976 and 1977 were age II+ fish 220 to 300 mm (7.9 - 11.8 in), in all sections except Section I in 1977 (Fig. 3, 4, 5). With Section 1, young-of-year trout were the most abundant age class.

We captured a larger percentage of small, <200 mm (<7.9 in), trout in 1977 than Gibson did in 1976 in all stream sections (Fig. 3, 4, 5). I believe the three electrofishing passes we completed in each section in 1977 were more effective in capturing small trout than the single pass Gibson completed in 1976. Gibson's single pass was down the center of the stream while our procedure was composed of one pass down the center of the stream and one near each stream bank. Due to the variable effectiveness of the sampling trips, I calculated the percentage of large rainbow captured on the basis of fish exceeding 200 mm (7.9 in) total length. In 1976 Gibson captured the largest percentage of trout exceeding 300 mm (11.8 in) in Section 2 and the largest percentage of trout exceeding 400 mm (15.7 in) in Section 3. In 1977 we captured the largest percentage of trout exceeding 300 mm (11.8 in) and 400 mm (15.7 in) in Section 1. Within Sections 2 and 3 the percentage of large trout (>300 mm and > 400 mm) declined between 1976 and 1977. In contrast, within Section 1 the percentage of large trout, >300 mm (>11.8 in) increased from 1976 to 1977. Trout exceeding 450 mm (17.7 in) total length were uncommon in all stream sections in 1976 and 1977.

The relative abundance of large rainbow trout captured varied between seasonal electrofishing samples (Table 10). Within the sections, the percentage of captured rainbow exceeding 300 mm (11.8 in) and 400 mm (15.7 in) increased between July and March in Sections 1 and 2 and increased from July to October in Section 3. A plausible explanation for the increased percentage of large fish is that large, mature trout migrated out of deep water areas (as Kilpatrick Pond) into upstream areas to spawn in the fall and spring. Electrofishing gear would have been more effective in sampling these large fish in the shallower water areas.

Table 8. Species composition and numbers of fish captured per hour by electrofishing in Silver Creek and tributaries during April-May, July-August, and October-November, 1976.

	STREAM SECTIONS																	
	Silver Cr. 1		Silver Cr. 2		Silver Cr. 3		Silver Cr. 4		Silver Cr. 5		Stalker		Grove		Wilson		Loving	
Game Fish	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour	% comp	Fish/ hour
Wild RBT	47	55	27	30	16	15	26	30	13	18	53	82	83	250	43	92	49	84
Hatchery RBT	0.8	0.9	2	3	7	7	4	5	0	0	0.1	0.2	0.1	0.3	0	0	0.6	1
Brook trout	2	2	1	1	0.6	0.6	0.5	0.5	0	0	8	12	12	36	46	98	0.2	0.4
Brown trout	0	0	0	0	0	0	0.5	0.5	7	10	0	0	0	0	0	0	0	0
Whitefish	32	37	4	4	1	1	0.1	0.2	0.1	0.1	12	19	3	9	0	0	0.6	1
Non-Game Fish																		
Sucker	15	18	60	67	49	46	43	48	33	46	11	18	0.5	2	1	2	35	61
Dace	3	4	3	4	19	18	18	20	11	16	14	22	0.1	0.3	0.5	1.1	15	26
Sculpin	.2	.2	0	0	0	0	0	0	0	0	1	1	1	4	10	21	0.1	0.1
Shiner	0	0	3	3	7	6	8	9	35	49	0	0	0	0	0	0	0	0
Chub	0	0	0	0	0.1	0.1	0	0	0.2	0.2	0	0	0	0	0	0	0	0

Table 9. Species of game fish captured per 1,000 m (1,094 yd) of stream by electrofishing in Silver Creek and tributaries during April-May July-August and October-November 1976.

Species	Length (mm)	Silver Cr-1	Silver Cr-2	Silver Cr-3	Silver Cr-4	Silver Cr-5	Stalker Cr.	Grove Cr.	Wilson Cr.	Loving Cr.
Wild Rbt	150	4	2	1	1	1	18	318	200	36
	150	18	9	4	9	5	64	109	28	46
	356	4	2	0.3	1	0.2	7	4	2	9
	Total	26	13	5.3	11	6.2	89	431	220	91
Hatchery Rbt	150	0	0	0	0	--	0	0	--	0
	150	1	3	3	0.2	--	0.3	1	--	2
	356	0	0	0.3	0	--	0.3	0	--	0.4
	Total	1	3	3.3	0.2	0	0.6	1	0	2.4
Brook trout	150	0	0	0	--	--	0.3	27	109	--
	150	1	0.5	0.1	--	--	2	18	55	--
	356	0	0	0	--	--	0	0	0	--
	Total	1	0.5	0.1	0	0	2.3	45	164	0
Brown trout	150	--	--	--	0	0.5	--	--	--	--
	150	--	--	--	0.5	5	--	--	--	--
	356	--	--	--	0.5	4	--	--	--	--
	Total	0	0	0	1.0	9.5	0	0	0	0
White fish	150	0	0	0.3	--	--	1	9	--	1
	150	9	1	0	--	--	9	9	--	0.4
	356	9	0.5	0	--	--	4	3	--	0
	Total	18	1.5	.3	0	0	14	21	0	1.4
Total game fish		46	18	8.9	12.2	15.7	105.9	498	384	94.8

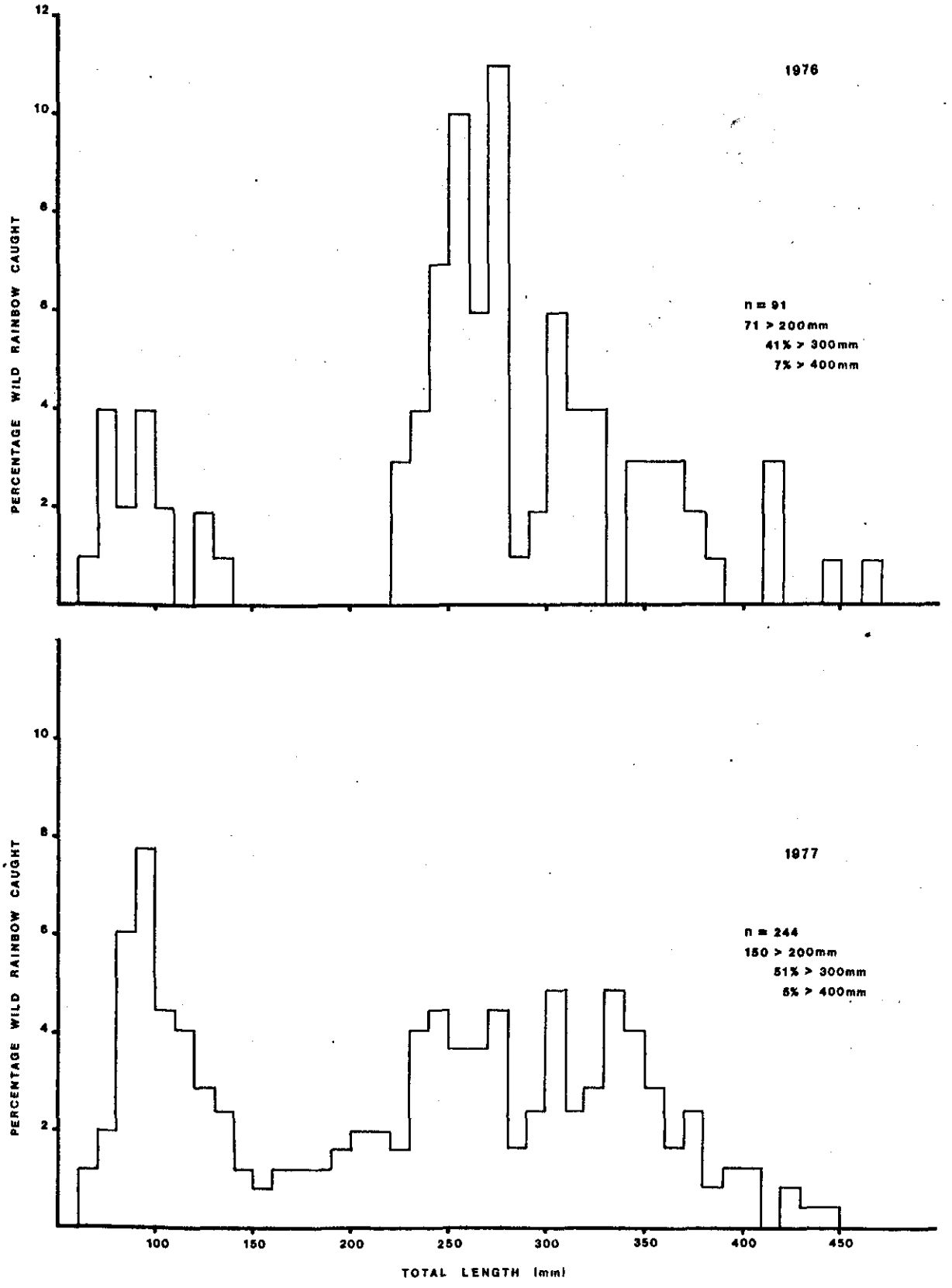


Figure 3. Length frequencies of wild rainbow trout captured by electrofishing in Silver Creek - Section 1, November, 1976 and 1977.

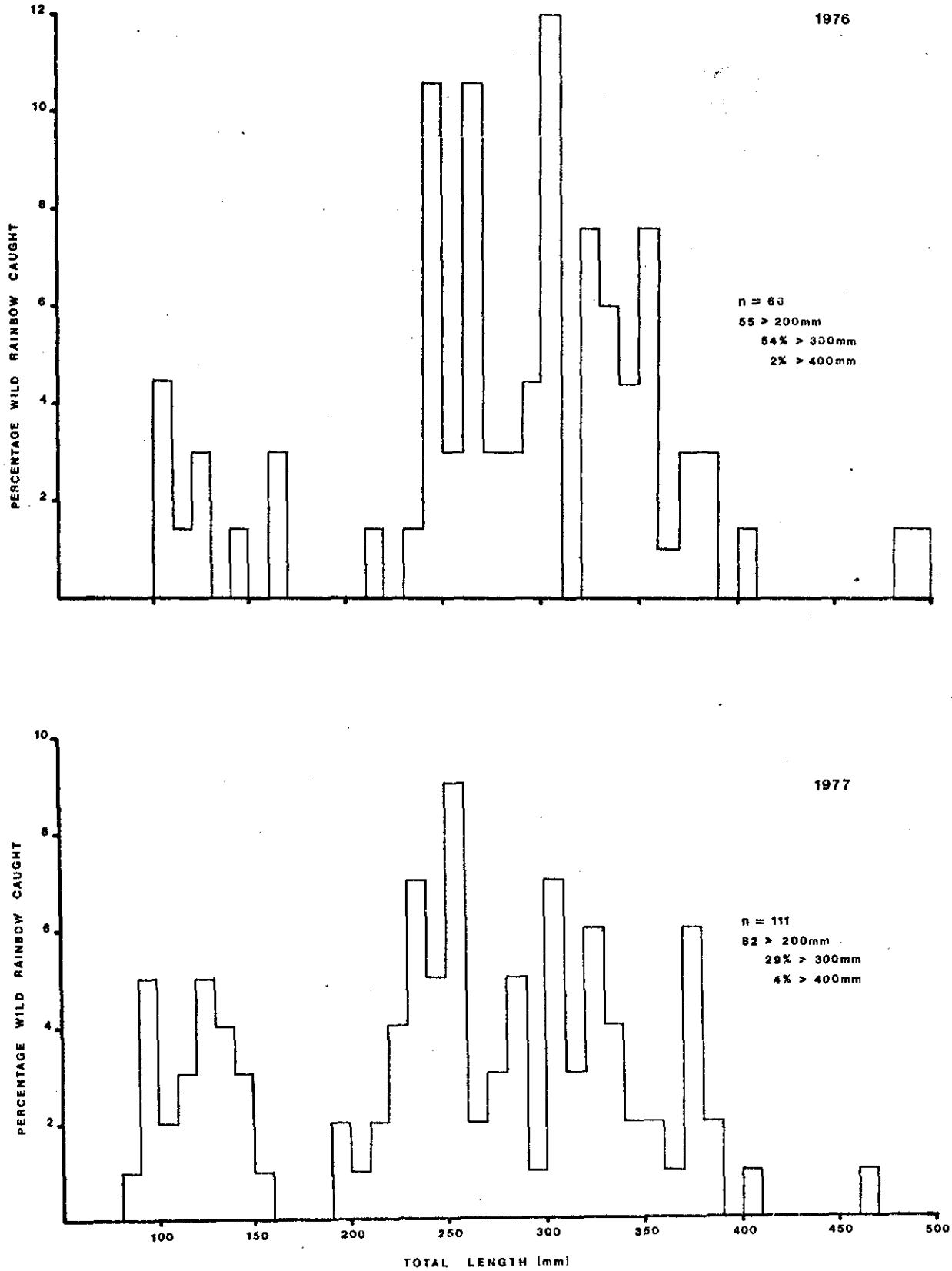


Figure 4. Length frequencies of wild rainbow trout captured by electrofishing in Silver Creek - Section 2, November, 1976 and 1977.

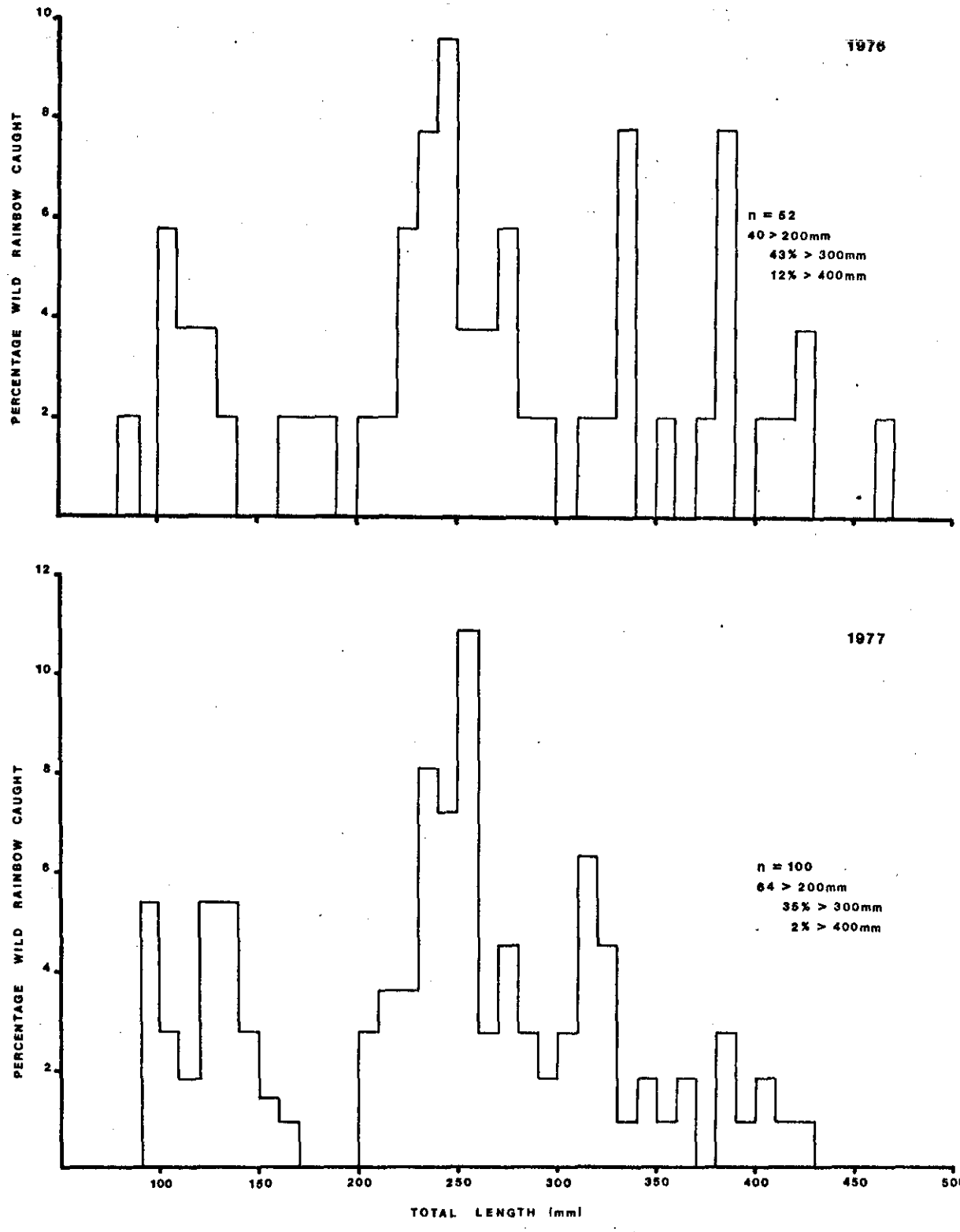


Figure 5. Length frequencies of wild rainbow trout captured by electrofishing in Silver Creek - Section 3, November, 1976 and 1977.

Table 10. The percentage of wild rainbow trout captured by electrofishing in Silver Creek which exceeded specified total lengths, 1976 and 1977.

Stream section	Date	Percentage of trout exceeding 300 mm	Percentage of trout exceeding 400 mm	Sample size
Silver Creek - 1	July, 1976	24	1	170
	Oct., 1976	33	5	91
	March, 1977	74	13	92
Silver Creek - 2	July, 1976	20	3	100
	Oct., 1976	45	2	66
	March, 1977	55	4	117
Silver Creek - 3	July, 1976	19	2	43
	Oct., 1976	33	10	52
	March, 1977	25	2	168

Hatchery reared rainbow trout moved into unplanted stream sections. Although hatchery rainbow trout were stocked only in Sections 3, 4, and Loving Creek, Gibson captured them in all stream sections except Section 5 and Wilson Creek (Tables 2, 8, 9).

Brown trout apparently moved farther up Silver Creek between 1976 and 1977 (Table 8, 9). In 1976 Gibson collected brown trout in Sections 4 and 5 while in 1977 we also collected brown trout in Section 2 below the irrigation dam. A small population of brown trout is also present in Loving Creek below Hayspur Hatchery. Brook trout were most abundant in Grove and Wilson creeks. Mountain whitefish were present in all areas except Wilson Creek and were most abundant in Section 1 and the tributaries.

Bridgelip suckers were the most common non-game species in Silver Creek and they were more abundant than trout in Sections 2 through 5 (Table 8). Schools of suckers were most prevalent in deep pool areas. Gibson collected redside shiners from Section 2 downstream and Utah chubs from Section 3 downstream. Sculpin were most common in the tributaries and Section 1.

Underwater Observations

Within Section 1, I observed approximately 1,000 wild rainbow trout, 290 mountain whitefish and 40 brook trout per 1,000 m (1,094 yd) of stream (Table 11). I observed large numbers of young-of-the-year rainbow trout, <150 mm (<5.9 in), and juvenile and adult whitefish in the upper portion of Section 1. Numbers of wild rainbow trout decreased as I approached the mouth of Loving Creek.

I observed small numbers of large, > 450 mm (>17.7 in), rainbow trout in the transects in 1977 (Table 11). Within the six transects 41 rainbow trout exceeded 400 mm and 5 rainbow trout exceeded 450 mm (0.9-1.4 kg, 2-3 lb). Gebhards (1963) observed 5 rainbow trout below Loving Creek ranging from 1.8 to 2.3 kg (4-5 lb) and Bell (1966) observed 10 rainbow trout in Stalker Creek and below the mouth of Loving Creek ranging from 1.4 to 2.3 kg (3-5 lb). I observed only 42 brook trout and 29% of them exceeded 300 mm in total length.

Within Section 2 I observed fewer wild rainbow trout than I had in Section 1 (Table 11). I observed approximately 480 wild rainbow trout and 100 mountain whitefish per 1,000 meters of stream. Young-of-the-year rainbow trout were uncommon. Although large (0.9 to 1.4 kg) trout were also uncommon in Section 2, a larger percentage of the trout observed exceeded 400 mm and 450 mm than in Section 1.

Table 11. Snorkeling observations on Stalker Creek and Silver Creek Sections 1 and 2, September and October, 1977

Date	Upper boundary of stream section	Approximate length (m)	Species observed: Wild rainbow trout Total	Wild rainbow trout No. <150mm	Wild rainbow trout No. >400 mm	Wild rainbow trout No. >450 mm	Brook trout Total	Brook trout No >310mm	Whitefish Tot.	Whitefish Juv.
28 Sept. 1977	Stalker Cr. Bridge	220	180	90	80	1	9	1	12	0
	Confluence of Stalker and Grove Cr.	220	350	140	12	2	15	5	150	100
	Foot Bridge at Hunting Lodge	165	130	65	4	0	6	2	22	10
	2nd Foot Bridge	165	180	50	10	2	10	4	32	10
	300 yards above Loving Creek	110	75	25	2	0	0	0	50	10
	Loving Creek mouth	165	130	0	5	0	2	0	40	0
	Totals	1045	1045	370	41	5	42	12	306	130
5 Oct. 1977	Purdy Dam to First Bridge	90	95	30	9	2	0	0	44	0
	Duck Blind above Purdy's House	220	73	5	6	2	0	0	1	0
	Purdy's House to Hwy. 68	165	60	0	5	1	0	0	1	0
	Totals	475	228	35	20	5	0	0	46	0

Migration and Movement

Seasonal Migration

Returns of trout tagged and released in Silver Creek indicated that most wild rainbow trout remained within 1.6 km (1 mi) of the original tagging location (Table 12). We recaptured a majority (56 to 79%) of the trout recovered within 1.6 km (1 mi) of the release site for all seasons tagged.

Approximately 28% of the wild rainbow trout tagged and released in Silver Creek were recovered after migrating more than 1.6 km (1 mi) upstream or downstream (Table 12). A majority of these trout moved downstream.

Wild rainbow trout which migrated in Silver Creek, moved upstream and downstream in spring and fall. Of 14 tagged trout which moved upstream, 8 (57%) were tagged in spring and summer and moved upstream by fall and winter, 3 (21%) were tagged in fall and winter and recovered upstream in spring, and 2 (14%) were tagged in spring and summer and recovered upstream in the spring of the following year. Only one trout had moved upstream by summer. Of 26 tagged trout which moved downstream, 9 (35%) were tagged in spring and summer and recovered downstream in fall and winter, 5 (19%) were tagged in spring and summer and moved downstream in spring, 5 (19%) were tagged in spring and summer and moved downstream in summer, and 3 (12%) were tagged in fall and winter and recovered downstream in the spring.

I believe the seasonal upstream and downstream movements of wild rainbow trout in Silver Creek were migrations of spring and fall spawning races of trout. Due to the variable proportions of trout spawning between March and November, we did not observe a distinct spawning migration.

Movements of Planted Rainbow Trout

Rainbow trout salvaged from Richfield Canal and introduced into Silver Creek moved both upstream and downstream from the release site (Table 12). Of 13 recaptured Richfield trout introduced in summer, only one remained within 1.6 km (1 mi) of the release site. A majority (79%) of the recaptured Richfield trout which were introduced in fall remained within 1.6 km (1 mi) of the release site.

A large proportion of the hatchery catchable rainbow trout planted in Silver Creek moved upstream and downstream in Silver Creek (Table 12). Fifty percent (197 trout) of the recaptured hatchery trout planted in spring, summer and fall moved upstream and downstream more than 1.6 km (1 mi) from the release site. A majority of these trout moved downstream.

Anglers captured a majority of the hatchery catchable rainbow trout within the same season in which they were released. Approximately 71% of the recaptured hatchery trout tagged in spring, 82% of the recaptured trout tagged in summer and 79% of the recaptured trout tagged in fall were recaptured during the same month in which they were planted. This indicates that anglers rapidly exploited hatchery catchable trout, particularly in the vicinity of Martin Bridge and Picabo Bridge.

Table 12. Numbers and percentages (in parenthesis) of wild, Richfield and hatchery rainbow trout tagged in Silver Creek and recovered at various distances from tagging locations, by season, 1975 to 1977.

Season tagged	No. trout recaptured	Movement in miles				
		5+ Upstream	1-5 Upstream	Within 1	1-5 Downstream	5+ Downstream
Wild rainbow trout						
Spring	46	3 (7)	1 (2)	33 (72)	8 (17)	1 (2)
Summer	60	1 (2)	6 (10)	43 (72)	6 (10)	4 (7)
Fall	29	1 (3)	1 (3)	23 (79)	3 (10)	1 (3)
Winter	9	--	1 (11)	5 (56)	3 (33)	--
Totals	144	5 (3)	9 (6)	104 (72)	20 (14)	6 (4)
Richfield rainbow trout						
Spring	1				1 (100)	
Summer	13		4 (31)	1 (10)	8 (62)	
Fall	183	5 (3)	13 (7)	144 (79)	9 (5)	12 (7)
Totals	197	5 (3)	17 (9)	145 (74)	18 (9)	12 (7)
Hatchery rainbow trout						
Spring	101	2 (2)	25 (25)	59 (58)	5 (5)	10 (10)
Summer	257		43 (17)	123 (48)	74 (29)	17 (7)
Fall	39	1 (3)	1 (3)	18 (46)	18 (46)	1 (3)
Totals	397	3 (1)	69 (17)	200 (50)	97 (24)	28 (7)

Tributary Movements

Returns of wild rainbow trout tagged and released in tributaries indicate that trout in tributaries exhibited more movement than trout in Silver Creek (Table 13). Only 14% of the recaptured wild trout remained within 1.6 km (1 mi) of the original tagging location. Approximately equal numbers of wild trout moved upstream and downstream from the tagging location.

Wild rainbow trout in tributaries to Silver Creek migrated upstream and downstream in spring and fall (Table 13). We recaptured 44 trout which migrated upstream and 23 (52%) were tagged in spring and summer and moved upstream by fall and winter, 10 (23%) were tagged in spring and summer and recovered upstream in spring of the following year, and 7 (16%) were tagged in fall and winter and recovered upstream in spring. Of 48 trout which migrated downstream,13 (27%) were tagged in spring and summer and recovered in spring of the following year, 12 (25%) were tagged in spring and summer and recovered downstream in summer of the same year, and 10 (21%) were tagged in spring and summer and recovered downstream in fall and winter.

I believe the movements of wild rainbow trout in the tributaries were also migrations of spring and fall spawning races of trout which utilized the four major tributaries as spawning areas. Gibson collected ripe and spawning rainbow trout in Stalker, Grove, Wilson and Loving creeks in spring and in fall, 1976.

A small percentage of the wild rainbow trout tagged in tributaries and later recaptured, had migrated down the tributaries into Silver Creek. Ten trout (9% of wild trout recaptured) migrated from Stalker, Grove, Wilson and Loving creeks into Silver Creek. Four trout migrated from Silver Creek into Stalker, Grove and Loving creeks and five trout migrated from Stalker and Grove creeks into Stalker, Grove and Loving creeks.

The major tributaries provide rearing areas for juvenile rainbow trout as well as spawning grounds. During his electrofishing trips in 1976 and 1977 Gibson found large numbers of young-of-the-year fry and fingerlings in the tributaries. He observed fewer numbers of juvenile rainbow trout in main Silver Creek, particularly below Kilpatrick Bridge. Hauck (1947) also observed that the tributaries provided spawning and rearing areas for rainbow trout. Unfortunately, a majority of the trout which Gibson tagged were large, >300 mm (>11.8 in) so we are unable to determine whether a substantial number of juvenile rainbow trout eventually migrate into Silver Creek.

Electrofishing conducted by Francis (1977) indicates that many juvenile trout entered main Silver Creek in July. Presumably these were fish which reared in the tributaries.

Richfield Canal rainbow trout that had been introduced into tributaries exhibited random movements (Table 13). A majority moved downstream while approximately equal numbers moved upstream or remained at the original point of stocking.

Table 13. Numbers and percentages of wild, Richfield and hatchery rainbow trout tagged in tributaries to Silver Creek and recovered at various distances from tagging locations, 1975 to 1977.

Location	No. trout recaptured	Movement		
		Upstream	within 1.6 km (1 mi)	Downstream
Wild rainbow trout				
Stalker Cr.	39	20 (51)	7 (18)	12 (31)
Grove Cr.	25	4 (16)	5 (20)	16 (64)
Wilson Cr.	2	1 (50)	--	1 (50)
Loving Cr.	41	19 (46)	3 (7)	19 (46)
TOTALS	107	44 (41)	15 (14)	48 (45)
Richfield rainbow trout				
Stalker Cr.	45	14 (31)	14 (31)	17 (38)
Grove Cr.	35	8 (23)	2 (6)	25 (71)
Loving Cr.	9	1 (11)	6 (67)	2 (22)
Totals	89	23 (26)	22 (25)	44 (49)
Hatchery rainbow trout				
Stalker Cr.	2	2 (100)	--	--
Grove Cr.	1	1 (100)	--	--
Loving Cr.	124	15 (12)	18 (15)	91 (73)
Totals	127	18 (14)	18 (14)	91 (73)

Table 14. Numbers and percentages (in parenthesis) of wild, Richfield and hatchery rainbow trout which moved between study sections of Silver Creek, 1975 to 1977.

Species	No. fish moved between sections	Movement into sections					Movement out of sections				
		1	2	3	4	5	1	2	3	4	5
Wild rainbow trout	20	3 (15)	6 (30)	9 (45)	1 (5)	1 (5)	9 (45)	5 (25)	2 (10)	1 (5)	3 (15)
Richfield Canal rainbow trout	47	8 (17)	11 (23)	14 (30)	--	14 (30)	5 (11)	8 (17)	15 (32)	19 (40)	--
Hatchery rainbow trout	159	6 (4)	2 (1)	72 (45)	68 (43)	11 (7)	26 (16)	--	68 (43)	65 (41)	--

Hatchery rainbow trout exhibited considerable downstream movement in the tributaries (Table 13). Seventy-two percent of the hatchery catchable trout planted in the tributaries moved downstream more than 1.6 km (1 mi). Approximately equal numbers of hatchery trout moved upstream or remained at the original point of planting.

Hatchery rainbow trout also migrated down the tributaries into main Silver Creek. Seventeen percent of the hatchery fish tagged and released in Loving Creek and subsequently recaptured were recaptured in Silver Creek.

Movements Between Sections

Relatively few wild rainbow trout moved from one study section of Silver Creek to another (Table 14). Of 144 wild trout recaptured, 20 (14%) moved between sections. A majority of these trout moved out of Sections 1 and 2, and into Sections 2 and 3. Densities of trout were largest in Section 1 (Table 8) and this factor may have effected the numbers of trout migrating out of the section.

Rainbow trout from Richfield Canal also migrated between sections (Table 14). A majority of the Richfield rainbow were introduced into Sections 3 and 4. Consequently, a majority of these fish migrated out of Sections 3 and 4 and into Sections 3 and 5.

Large numbers of hatchery rainbow trout moved between sections in Silver Creek (Table 14). Forty percent of the hatchery rainbow recaptured had moved between sections. A majority of the hatchery trout were planted in Section 3 and 4 and most of them moved between these two sections. However, hatchery rainbow trout also moved from lower sections of Silver Creek into Sections 1 and 2.

Other species also migrated within Silver Creek. Two brook trout moved from Section 4 to Sections 3 and 2 and one brown trout moved from Section 5 to Section 3. We also observed large numbers of mountain whitefish which entered Grove and Wilson creeks to spawn in November, 1976 and 1977.

Age and Growth

Calculated growth rates and scale radius measurements of rainbow trout varied between Sections 1, 2 and 3 (Tables 15, 16, 17). Rainbow trout in Section 3 grew at a faster rate during the first year of life than trout in Sections 1 and 2. However, trout in Sections 1 and 2 grew at a faster rate during the second growing season than trout in Section 3.

Several factors may contribute to the variable growth rate between sections: 1) earlier fry emergence in Section 3, 2) warmer water temperatures in Section 3 during the growing season, 3) the impact of tributary rearing on trout growth rates, and 4) variable proportions of spring and fall spawning races of trout within stream sections. Warmer water temperatures in lower river areas could result in early fry emergence and more rapid growth than in upper river areas (Table 2). Rainbow trout spawners utilize four main tributaries (Stalker, Grove, Wilson, Loving creeks) which enter Section 1 (Figure 1). If progeny of these spawners rear in tributaries for 1 or 2 years, they may exhibit slower initial growth rates. In 1976 and 1977 Gibson observed rainbow trout spawning in Silver Creek and tributaries in spring and fall.

Although the original Silver Creek introductions were of spring-spawning races, subsequent hatchery plants have also established fall spawning races of rainbow trout. Since I could not identify spring and fall spawned trout on the basis of scale analysis, this factor may have introduced considerable variation into the age and growth data.

Rainbow trout collected from Silver Creek in 1976 and 1977 grew at a much slower rate during their second, third and fourth years of life than trout collected in 1952 (Table 18). Calculated total lengths at annulus 3 in 1952 exceeded calculated lengths at annulus 4 in all sections in 1976 and 1977. Further, the trout sampled in 1952 attained a mean total length of 477 mm (18.8 in) at annulus 4 and none of the trout we sampled in 1976 and 1977 exceeded 380 mm (15.0 in) at annulus 4. I believe, however, that the actual differences in growth rates between fish in Silver Creek in 1952 and 1976-1977 may be of less magnitude. In 1952, a disproportionate amount of the fish sampled were large trout. In 1976-1977, 12% of the trout sampled were IV+ and in 1952, 72% of the trout sampled were IV+ or older (Tables 15, 16, 17, 18). Further, in 1952 department personnel analyzed only one fish less than 400 mm (15.7 in) total length. In 1976 and 1977 only 9% of the trout we analyzed exceeded 400 mm (15.7 in) total length. A majority of the trout sampled in 1952 consisted of large, old age (>IV+), fast-growing individuals. In 1976 and 1977 comparable large, old age individuals were not present in the population.

Calculated growth rates and total lengths at each annulus for rainbow trout in Silver Creek in 1976 and 1977 were similar to those found by Mate (1978) in the South Fork Boise River (Table 18). Growth increments for years one through four were nearly identical, particularly when compared to Silver Creek - Section 3. If the data is comparable in the older age classes, a 5-year old trout in Silver Creek could be expected to exceed 414 mm (16.3 in) total length.

Table 15. Calculated total lengths and increments of growth for rainbow trout collected in 1976 and 1977 from Silver Creek - Section 1.

	Age class	No. fish	Mean total length at capture (mm)	Calc. total length at each annulus (mm) 1	2	3	4
1976	I	4	155	96			
	II	13	250	98	195		
	III	6	331	93	197	287	
	IV	4	382	95	176	239	307
		No. of fish		(27)	(23)	(10)	(4)
		Weighted grand average		96	192	268	307
		Mean growth increment		96	96	75	40
1977	I	9	177	113			
	II	14	262	132	234		
	III	18	347	117	205	277	
	IV	9	414	118	212	298	367
		No. of fish		(50)	(41)	(27)	(9)
		Weighted grand average		121	216	284	367
		Mean growth increment		121	96	68	83
$\bar{X}$ 1976-1977		No. of fish		(77)	(64)	(37)	(13)
		Weighted grand average		112	208	280	349
		Mean growth increment		112	96	72	69

Table 16. Calculated total lengths and increments of growth for rainbow trout collected in 1976 and 1977 from Silver Creek - Section 2

	Age class	No. fish	Mean total length at capture(mm)	Calc. total length at each annulus (mm) 1	2	3	4
1976	I	4	123	97			
	II	20	266	121	215		
	III	12	358	116	211	299	
	IV	1	372	121	182	230	286
		No. of fish		(37)	(33)	(13)	(1)
		Weighted grand average		117	212	293	286
		Mean growth increment		117	95	81	7
1977	I	5	215	136			
	II	15	254	124	198		
	III	8	366	126	220	300	
	IV	2	419	143	232	292	355
		No. of fish		(30)	(25)	(10)	(2)
		Weighted grand average		128	208	298	355
		Mean growth increment		128	80	90	57
$\bar{X}$ 1976-1977		No. of fish		(67)	(58)	(23)	(3)
		Weighted grand average		122	211	296	332
		Mean growth increment		122	90	84	37

Table 17. Calculated total lengths and increments of growth for rainbow trout collected in 1976 and 1977 from Silver Creek - Section 3.

	Age class	No. fish	Mean total length at capture(mm)	Calc. total length at each annulus (mm) 1	2	3	4
1976	I	5	172	141			
	II	6	210	121	194		
	III	2	327	131	205	287	
	IV	5	432	141	217	291	350
	No. of fish			(18)	(13)	(7)	(5)
	Weighted grand average			133	204	290	350
	Mean growth increment			133	71	86	60
1977	I	4	221	160			
	II	20	262	138	213		
	III	7	352	141	213	295	
	IV	3	414	155	240	321	379
	No. of fish			(34)	(30)	(10)	(3)
	Weighted grand average			143	215	303	379
	Mean growth increment			143	73	87	76
$\bar{X}$ 1976-1977	No. of fish			(52)	(43)	(17)	(8)
	Weighted grand average			139	212	297	361
	Mean growth increment			139	73	85	64

Table 18. Calculated total lengths and increments of growth for rainbow trout collected in 1952 from Silver Creek and 1977 from South Fork Boise River.

Age class	No. fish	Mean total length at capture (mm)	Calculated total length at each annulus (mm) 1	2	3	4	5	6
I	1	244	132					
II	0							
III	2	468	147	272	379			
IV	6	513	132	274	389	475		
V	1	572	94	191	356	450	528	
VI	1	638	132	348	432	526	569	615
		No. of fish	11	10	10	8	2	1
		Weighted grand average	132	274	386	478	549	615
		Mean growth increment	132	142	114	89	61	46
South Fork Boise River (Mate 1978)								
		No. of fish	126	117	91	44	17	
		Weighted grand average	135	210	300	357	414	
		Mean growth increment	135	75	90	57	58	

Coefficient of Condition

We calculated the condition factors $\left(K = \frac{\text{Weight (gm)}}{\text{Length}^3\text{(mm)}}\right)$ for 298 wild rainbow trout captured in Sections 1, 2 and 3. We collected the trout in June-July, 1976; October-November, 1976 and March, 1977.

Small trout, <200 mm (<7.9 in), were in better condition in early summer and fall than in early spring (Table 19). Presumably food was more available from April through November than it was from November through March. Large trout, >300 mm (>11.8 in), had the largest coefficient of condition in fall and their condition declined during the winter and was smallest in early summer. As previously noted, food was most available from early summer through fall resulting in maximum body condition in fall. In addition, mature trout would be expected to attain their maximum coefficient of condition just prior to spawning in fall through spring. Further, trout which spawned between fall and spring would exhibit their lowest coefficient of condition in early summer, just after spawning and prior to the summer growing season.

Although trout densities varied between Sections 1, 2 and 3 (Table 19), the calculated coefficients of condition within the same season were comparable in Sections 1, 2 and 3. Therefore, larger trout densities within Section 1 apparently did not effect the condition of the trout present.

Anglers and project personnel observed that a large proportion of the fish exceeding 300 mm (11.8 in) in Silver Creek exhibited a low coefficient of condition during the 1977 angling season. The poor condition of these large trout was presumably due to the loss of body condition following spawning and overwintering rather than to reduced food potential for large fish in the stream.

Creel Census

Angler Effort and Catch

Anglers expended an estimated 32,033 hours of effort on Silver Creek and tributaries during the 1977 fishing season (Table 20). Angler effort was largest in Section 3 (37%) followed by Section 1 (24%) (Fig. 6, 7). Within Section 4 and the tributaries angler effort declined considerably during October and November.

Anglers captured an estimated 32,112 game fish from Silver Creek and tributaries in 1977 (Table 20). Anglers captured the largest number of fish in Section 3 followed closely by Section 1 (Fig. 6). Wild rainbow trout comprised a majority of the catch from all sections except 3 and 4 where hatchery rainbow trout were the predominant species captured (55% and 46% respectively). The final plant of hatchery trout occurred on 3 August and anglers captured a few hatchery trout after 15 August (Table 4). Brown trout comprised 21% of the catch from Section 5 and brook trout comprised 18% of the catch from Stalker and Grove creeks. The composition of the catch substantiated the distribution and abundance information collected by electrofishing (Table 8).

Table 19. Calculated seasonal coefficients of condition for wild rainbow trout from Silver Creek, Sections 1, 2 and 3, 1976.

	Section 1				Section 2				Section 3			
Season	Size class (mm)	Sample size	Mean total length (mm)	Mean condition factor	Size class (mm)	Sample size	Mean total length (mm)	Mean condition factor	Size class (mm)	Sample size	Mean total length (mm)	Mean condition factor
June - July 1976	<200	5	179.80	1.068	<200	25	174.96	1.032	<200	17	168.06	1.019
	200-299	23	243.70	.968	200-299	26	240.35	.938	200-299	8	233.63	.876
	300-380	11	341.36	.969	300-380	11	338.09	.872	300-380	4	343.25	.798
	>380	5	403.40	.872	>380	2	399.50	.900	>380	3	443.33	.769
October-November 1976	<200	5	138.20	1.000	<200	9	115.22	1.110	<200	6	128.50	1.283
	200-299	15	250.93	.992	200-299	14	263.43	1.073	200-299	6	239.17	1.059
	300-380	13	332.69	1.009	300-380	19	334.63	1.012	300-380	2	327.00	.927
	>380	4	396.25	1.010	>380	2	394.50	1.051	>380	6	427.83	1.017
March 1977	<200	1	161.00	.886	<200	1	184.00	.851	<200	2	158.50	.907
	200-299	4	268.00	1.030	200-299	6	288.33	.971	200-299	13	264.31	.974
	300-380	4	336.50	.956	300-380	12	342.42	.956	300-380	8	338.25	1.057
	>380	2	443.50	.943	>380	2	395.50	1.024	>380	2	393.50	1.050

Table 20. Harvest information collected on Silver Creek and tributaries from 28 May to 30 November 1977

Stream section	Estimated effort (hrs.)	Estimated no. game fish harvested	Fish per km	Fish per hour	Species Composition (%) W-Rbt	H-Rbt	Bk	Anglers interviewed
Silver Cr. 1	7,772	9,365	2,754	1.20	94	<1	2	551
Silver Cr. 2	4,627	5,300	1,963	1.15	91	3	1	303
Silver Cr. 3	11,963	10,166	1,753	.85	28	55	3	662
Silver Cr. 4	1,630	1,908	367	1.17	32	46	<1	100
Silver Cr. 5	2,227	2,206	227	.99	73	2	21	146
Stalker Cr.	510	397	--	.78	83	0	17	29
Grove Cr.	911	885	--	.98	73	0	19	63
Loving Cr.	2,393	1,885	--	.79	50	33	<1	140
	32,033	32,112						1,994

W-Rbt -Wild rainbow
H-Rbt -Hatchery rainbow
Bk -Brook trout
Brn -Brown trout

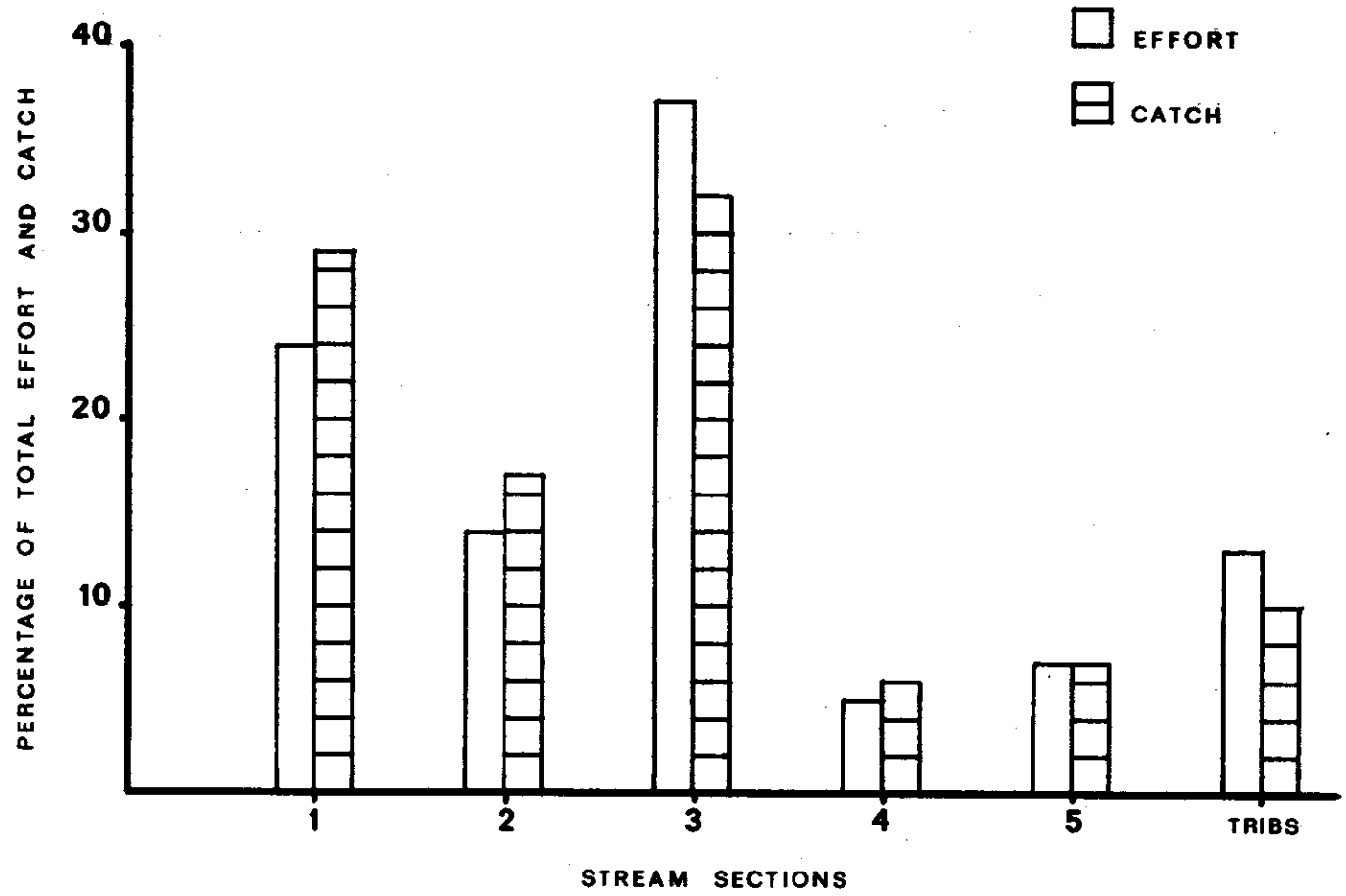


Figure 6. Percentages of total angler effort and catch on Silver Creek, by sections in 1977.

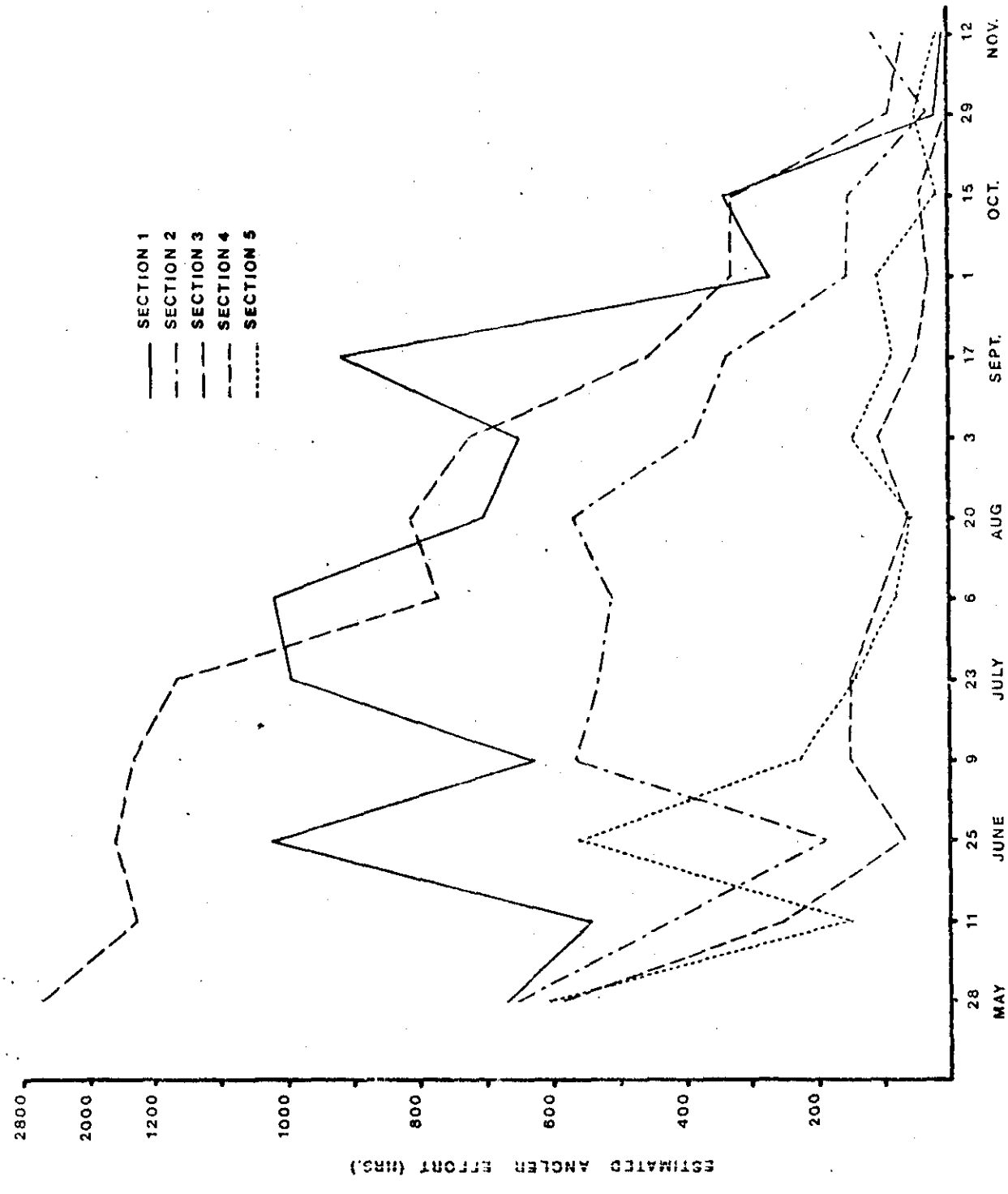


Figure 7. Distribution of angler effort in Silver Creek, by sections in 1977.

Angling effort and the catch of wild rainbow trout followed similar trends throughout the fishing season (Fig. 8). Angler effort and catch were largest during the initial week of the season and thereafter fishing pressure and catch declined. During the third interval, which included Independence Day, there was an increase in angler effort. The catch of wild rainbow increased during intervals 4, 5, 6 and 9 but never approached the peak catch during the initial week of the season. In addition to angler effort expended, a combination of factors including: weather condition, the emergence of aquatic insects and the expertise of the anglers influenced the catch of wild rainbow trout.

Catch Characteristics

Size

Wild rainbow trout captured by anglers varied in size between stream sections (Table 21). The mean total length of trout captured ranged from 219 mm (8.6 in) in Stalker Creek to 346 mm (13.6 in) in Loving Creek and averaged 289 mm (11.4 in) for the entire stream.

The mean total length of rainbow trout captured by anglers was comparable to the mean total length of trout $\geq$ 150 mm ($\geq$ 5.9 in) captured by electrofishing in 1977 (Fig. 9, 10, 11). I used actual fish measurements in computing the mean length of trout captured and the percentage exceeding specified lengths in all areas except Section 1. Since all fish captured in Section 1 were released, the lengths were based upon angler recall. However, Figure 9 indicates that angler recall was fairly accurate in estimating the size of fish captured. Within Section 2, anglers released 71% of the catch (Table 24). Since anglers released the smaller fish and kept the larger fish the mean total length of trout captured and measured was larger than the mean length of trout captured by electrofishing (Fig. 10). Rainbow trout captured by anglers in Section 3 were comparable in size to trout captured by electrofishing although anglers captured and creeled a smaller proportion of fish $<$ 250 mm ($<$ 9.8 in) than the electrofishing indicated were present (Fig. 11). This may have been a result of anglers creeling the larger fish as they did in Section 2.

Anglers captured relatively few large rainbow trout in Silver Creek in 1977 (Table 21). Ten percent of the trout captured exceeded 400 mm (15.7 in) total length and 1% exceeded 500 mm (19.7 in) total length.

Anglers captured a majority of the large rainbow trout in Section 1 and the tributaries (Table 21). Of 156 trout exceeding 400 mm (15.7 in), 75 were captured in Section 1. Project personnel checked only four creeled trout exceeding 500 mm (19.7 in) during 1977, and anglers captured them in Stalker (1), Grove (1) and Loving (2) creeks. Anglers in Section 1 captured five trout exceeding 500 mm (19.7 in) during 1977. Project personnel did not capture any wild rainbow trout exceeding 500 mm (19.7 in) by electrofishing in Sections 1, 2 and 3 in 1976 or 1977.

Age Structure

An abundant group of 2-year old rainbow trout dominated the 1977 catch of wild rainbow trout (Fig. 12). These fish comprised a majority of the harvestable-sized trout in the population (Fig. 3, 4, 5) and they comprised 42% of the catch of wild rainbow trout in all sections of Silver Creek. Age zero and 1-year old

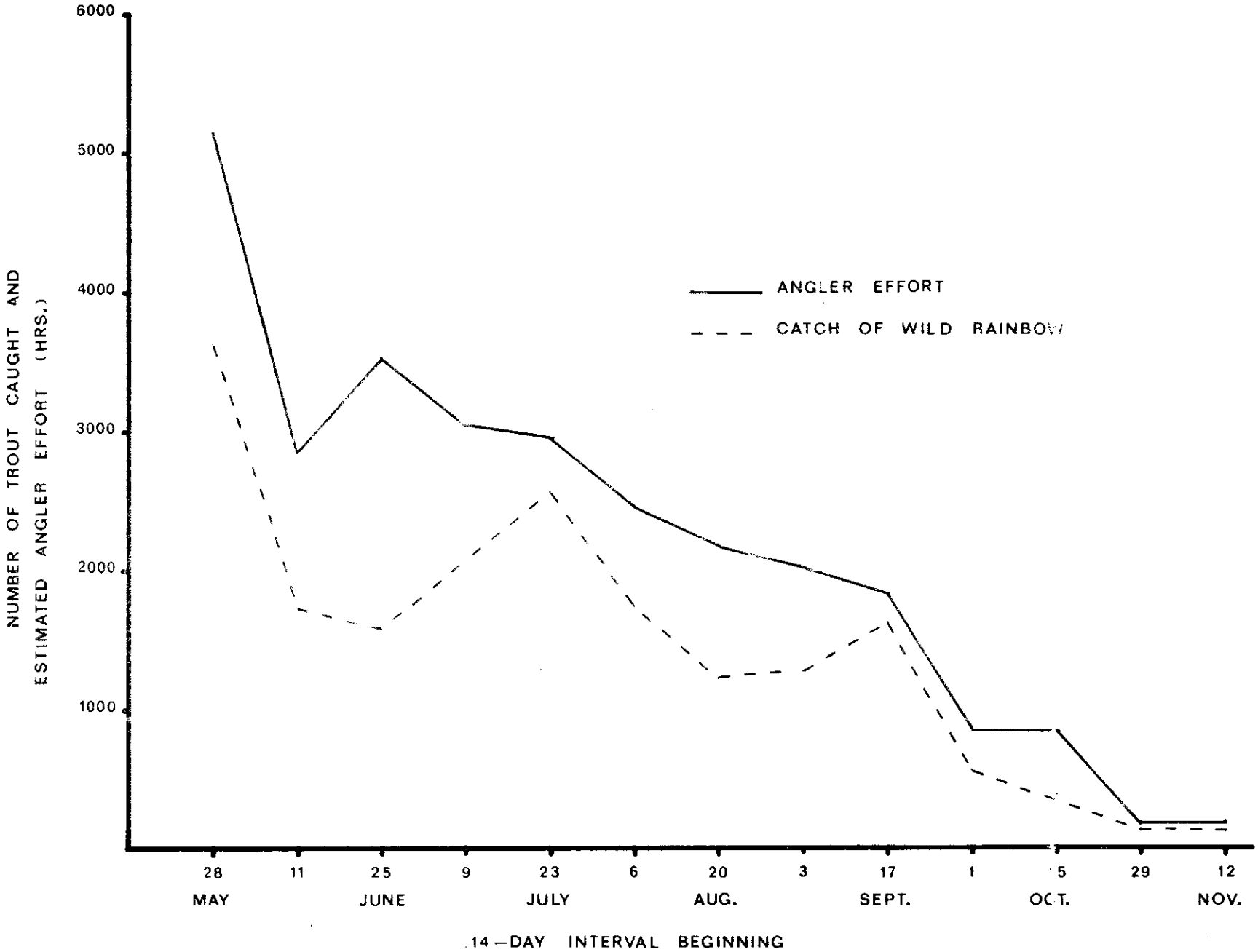


Figure 8. Distribution of angler effort and catch of wild rainbow trout on all sections of Silver Creek, 1977.

Table 21. Mean total length of wild rainbow trout captured by anglers and the percentage of catch exceeding specified lengths in Silver Creek and tributaries, 28 May to 30 November 1977.

Section	Mean total length mm	Mean total length (in)	Percentage of catch exceeding 300 mm	Percentage of catch exceeding 400 mm	Percentage of catch exceeding 500 mm	Fish in sample
Silver Cr.-1	285	11.2	37	8	1	898
Silver Cr.-2	336	13.2	71	23	0	171
Silver Cr.-3	280	11.0	44	8	0	146
Silver Cr.-4	285	11.2	54	8	0	26
Silver Cr.-5	266	10.5	27	2	0	122
Stalker Cr.	219	8.6	13	5	3	38
Grove Cr.	283	11.1	48	3	3	33
Loving Cr.	346	13.6	67	38	3	58
Stream average	289	11.4	42	10	1	1,492

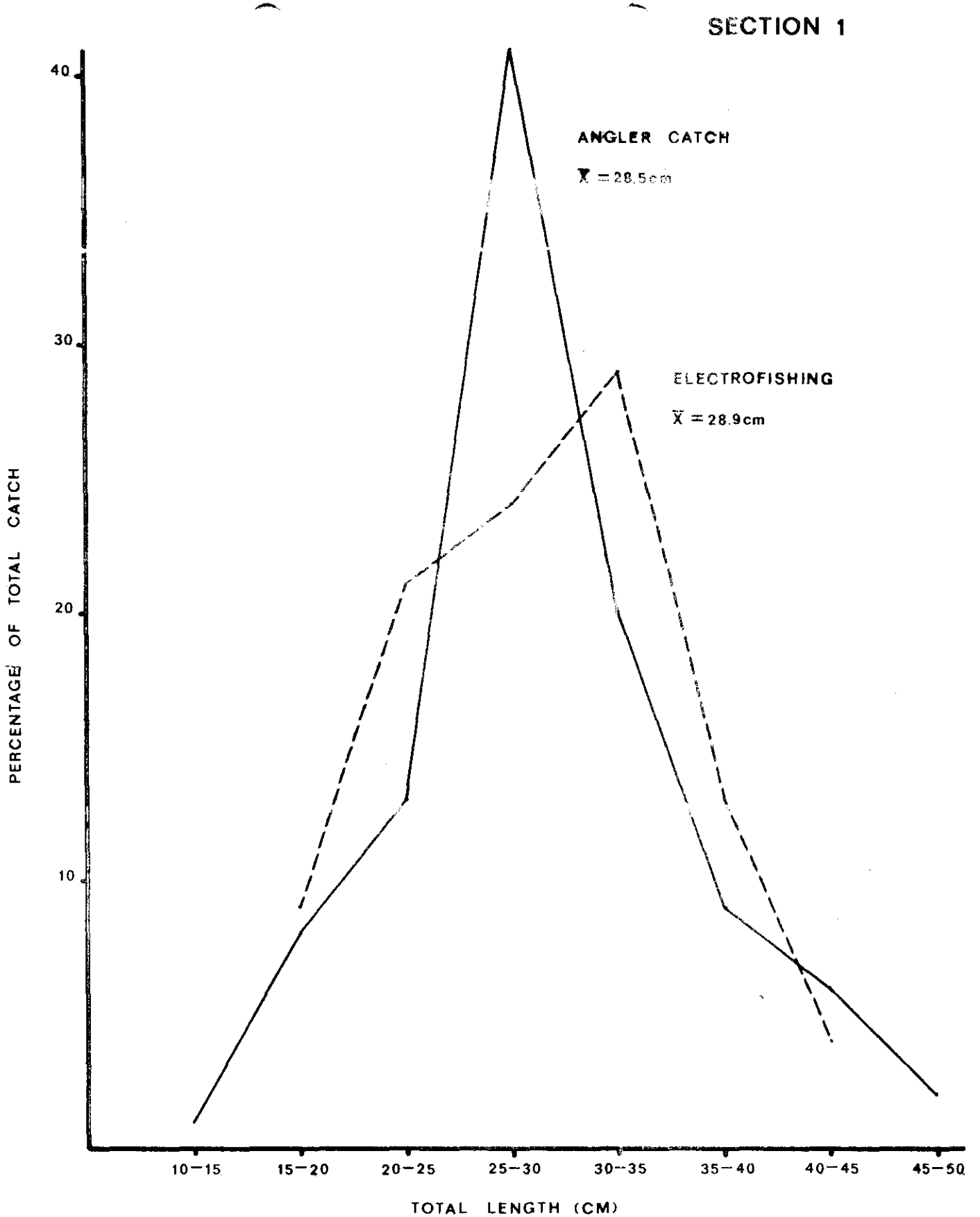


Figure 9. Length frequencies of wild rainbow trout captured by electrofishing and by anglers in Silver Creek - Section 1, 1977

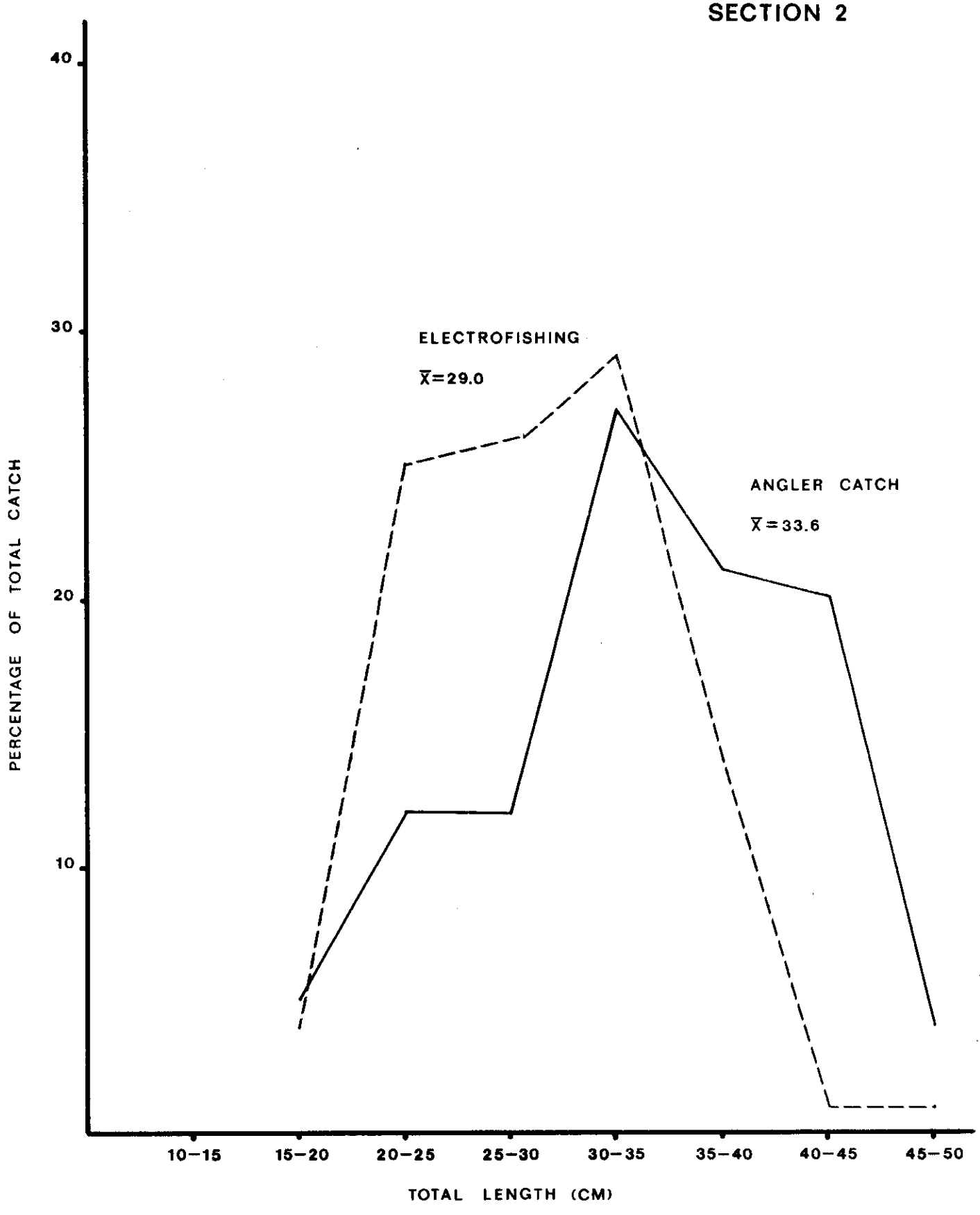


Figure 10. Length frequencies of wild rainbow trout captured by electrofishing and by anglers in Silver Creek - Section 2, 1977.

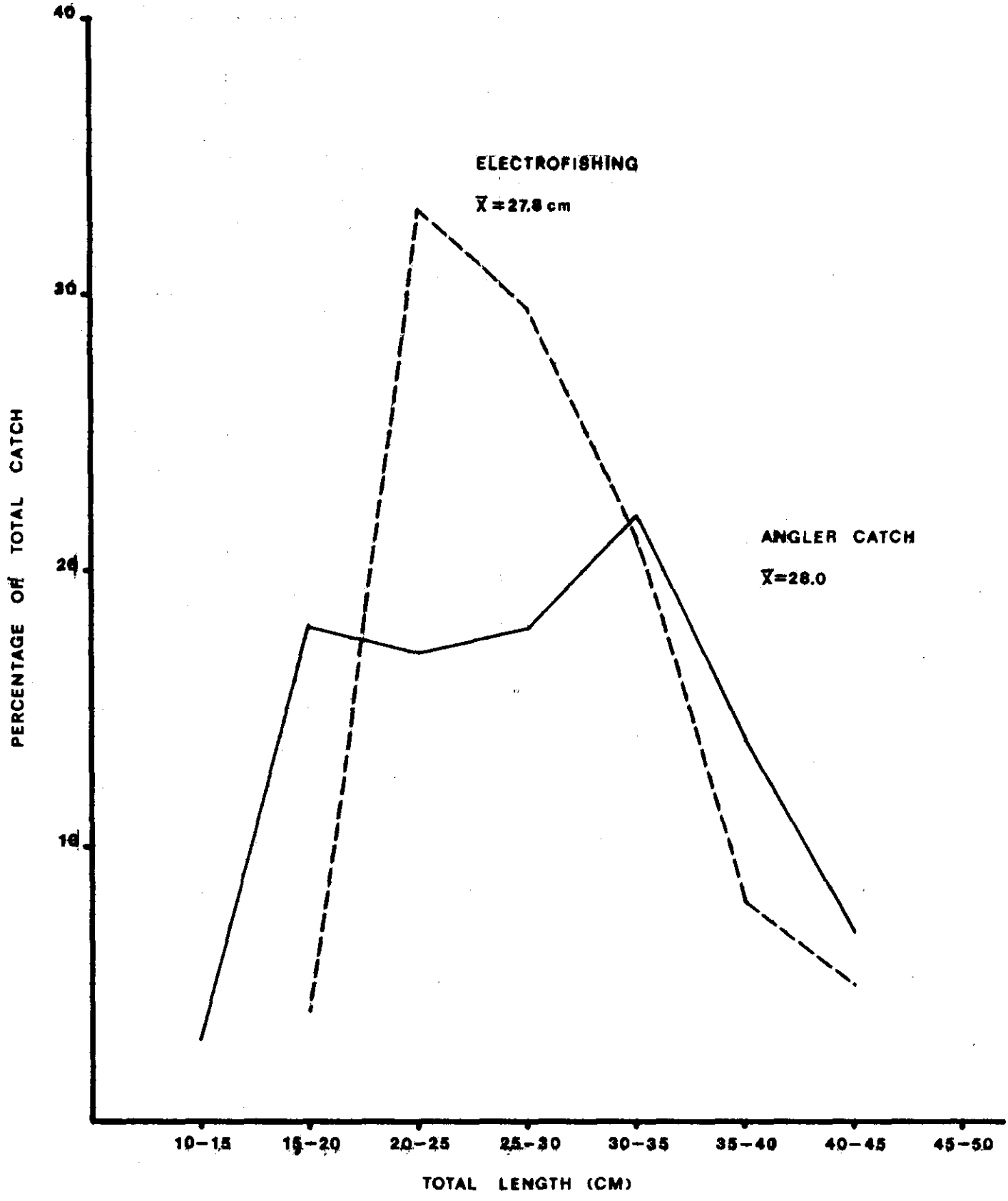


Figure 11. Length frequencies of wild rainbow trout captured by electrofishing and by anglers in Silver Creek - Section 3, 1977.

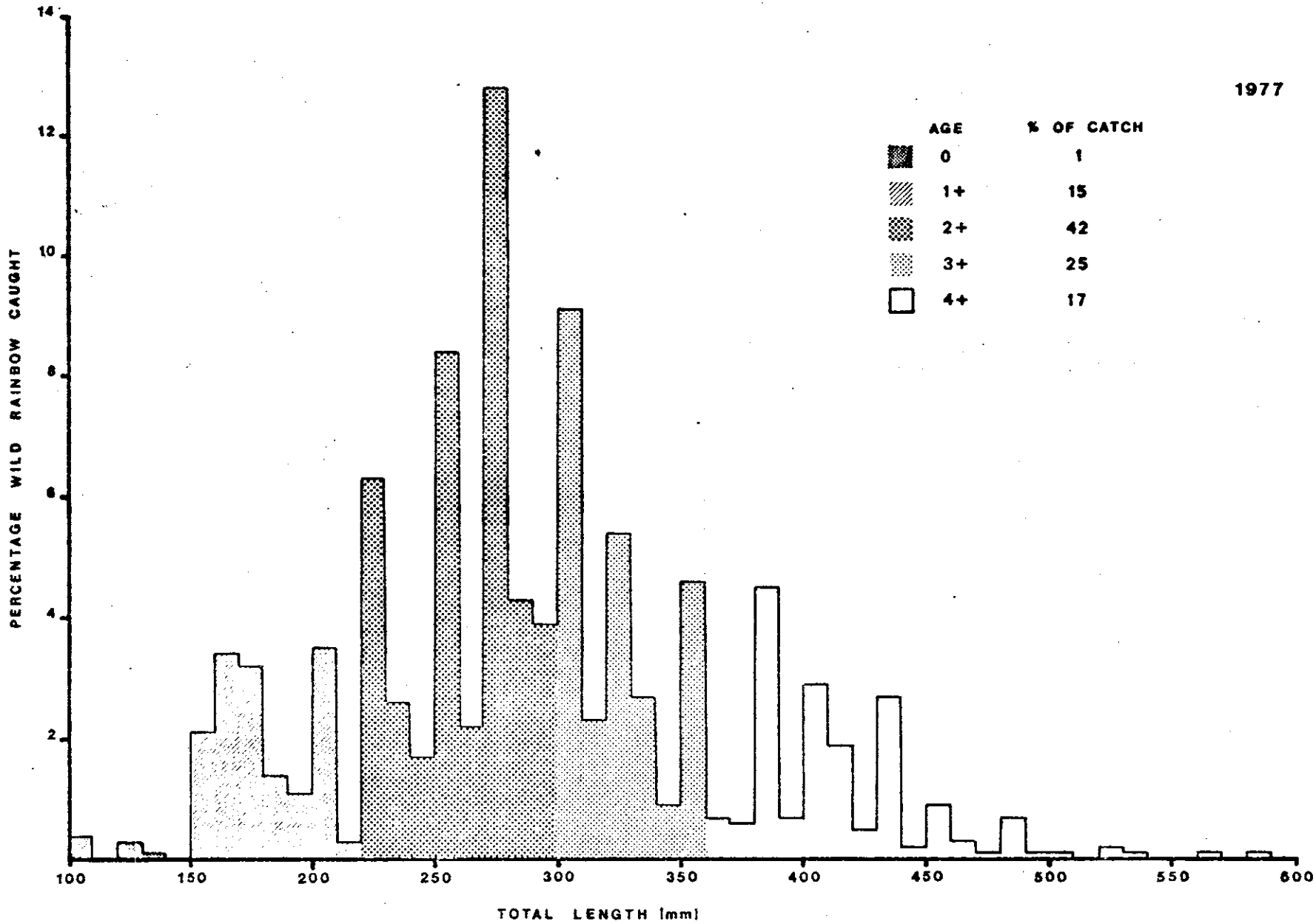


Figure 12. Length frequencies of wild rainbow trout captured by anglers in all sections of Silver Creek, 28 May to 30 November 1977 and the percentage of the catch in various age classes.

Table 22. The percentage of wild rainbow trout captured in Silver Creek by anglers which exceeded specified total lengths by stream section and period, 1977.

Stream Section	I. 28 May to 22 July Percentage of catch exceeding		II. 23 July to 16 Sept. Percentage of catch exceeding		III. 17 Sept. to 30 Nov. Percentage of catch exceeding	
	300 mm	400 mm	300 mm	400 mm	300 mm	400 mm
Silver Creek - 1	39	8	34	7	53	16
Silver Creek - 2	84	29	64	23	56	7
Silver Creek - 3	47	13	41	5	45	0

trout comprised only 16% of the catch. Old-age rainbow trout (IV+) comprised 17% of the catch.

Within Sections 2 and 3, rapid exploitation of larger rainbow trout caused the incidence of large trout in the catch to decline (Table 22). In Section 2 anglers rapidly depleted the supply of trout larger than 300 mm (11.8 in) and 400 mm (15.7 in). In Section 3 the percentage of trout creeled which exceeded 400 mm (15.7 in) declined from 13% during Period I to 0% during Period III. In contrast, within Section 1 the percentage of large rainbow in the catch increased during the same periods. Optimum angling conditions, and an upstream migration of mature trout in the fall may have accounted for the larger incidence of large trout in the catch in Section I during Period III and the smaller number of large trout caught in Section 2 and 3.

Angling Characteristics

Angling Success

A majority of the anglers who fished Silver Creek caught at least one game fish per trip (Table 23). The percentage of successful trips ranged from 68% to 82% with a mean of 79%.

Table 23. Percentage of successful trips on Silver Creek during 1977.

Stream section								Stream
1	2	3	4	5	Stalker Cr.	Grove Cr.	Loving Cr.	average
80	81	78	70	79	68	73	82	79

Anglers captured the largest numbers of game fish per hour in Section I (1.20 fish per hour) followed by Sections 2 and 4 (Table 20). The catch rate in four stream sections approached or exceeded one fish per hour. (Fig. 13). Anglers also captured the largest numbers of game fish per kilometer of stream in Section 1.

The catch rate for wild rainbow trout was largest in Sections 1 and 2 (Table 20). Anglers captured 1.14 rainbow per hour in Section 1 and 1.05 rainbow per hour in Section 2.

Anglers released a large percentage of the wild rainbow trout caught and a large number of these fish were captured more than once during the angling season (Table 24). Within Section 1 (mandatory catch and release) anglers released all captured trout. Although anglers were allowed to keep fish on the remaining stream sections, approximately 50% of the wild rainbow caught were subsequently released. Anglers released over 14,705 wild rainbow trout from a total catch of 20,683 wild rainbow trout in Silver Creek in 1977. Fly fishermen released a majority (94%) of all wild rainbow released in 1977.

Some of the captured fish sustained minor injuries prior to release and we recorded the incidence of hook scars on the trout we captured while electrofishing in 1977. We observed the largest incidence of hook scars on trout in

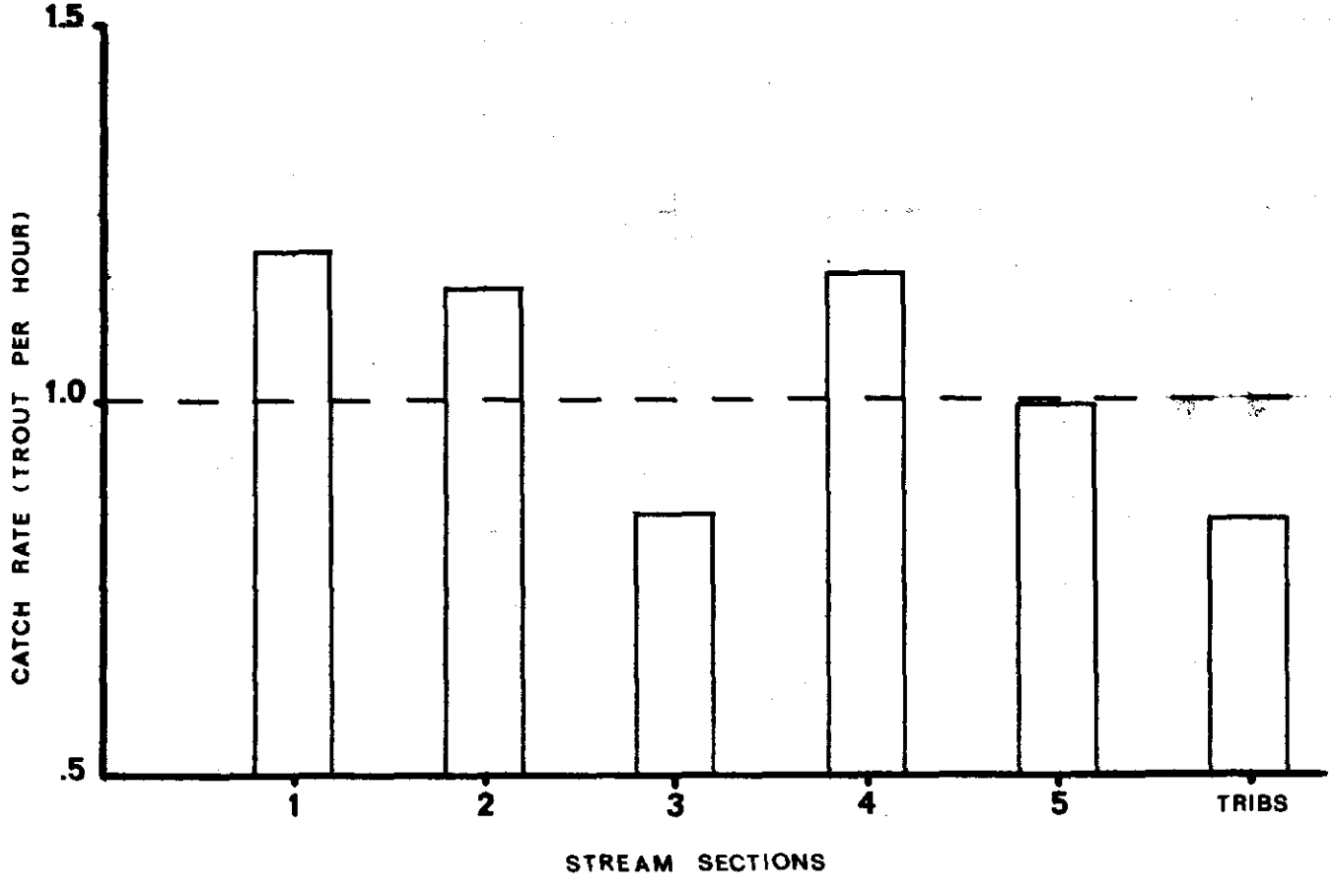


Figure 13. Catch of game fish per hour from Silver Creek by stream section, 1977.

Table 24. Wild rainbow trout released by anglers in 1977; and the percentage of rainbow trout released by anglers using various methods.

Stream section	Wild rainbow trout released		Percentage of wild rainbow trout released, by method		
	Estimated No.	% of Catch	Fly	Bait	Lure
Silver Creek - 1	8,843	100	100	0	0
Silver Creek - 2	3,423	71	98	2	0
Silver Creek - 3	922	32	84	11	5
Silver Creek - 4	104	17	91	0	9
Silver Creek - 5	629	39	93	4	3
Stalker Creek	308	93	100	0	0
Grove Creek	232	36	93	7	0
Loving Creek	244	26	100	0	0
Totals excluding Section 1	5,862	50	94	4	2

Section 1 where 15% of all trout over 250 mm (9.8 in) long exhibited scars. In Section 2, 5% of the trout over 250 mm (9.8 in) and in Section 3, 5% of the trout over 200 mm (7.9 in) long exhibited hook scars. Hook scars consisted of torn mandibles and maxillaries on the fish and I believe they constituted minor injuries in most cases.

Angling Methods

Within all sections of Silver Creek, a majority of the anglers waded the stream or fished from shore (Table 25). Relatively few anglers utilized float tubes or boats. We observed the largest incidence of float tubers in Section 2 (38%). Section 2 is predominantly private land and due to the depth of the stream, float tubes are the only means to fish most of the section.

Bank anglers in Section 2 were more successful than anglers fishing from float tubes. Bank anglers (n=182) averaged 1.16 wild rainbow trout per hour and float tubers (n=119) averaged .88 wild rainbow trout per hour.

A majority of the anglers we interviewed on Silver Creek utilized flies (60%) followed by bait and lures (Table 25). However, when separated by stream sections a majority of the anglers in Sections 3-5, Grove and Loving Creeks utilized bait.

Fly fishermen were more successful than bait or lure anglers in capturing wild rainbow trout (Table 26). Within all stream sections except Section 4, fly anglers exhibited the largest catch per hour. Further, fly fishermen took a disproportionate amount of the catch of wild rainbow trout from Silver Creek (Table 27). Within Section 2 fly fishermen captured 93% of the catch of wild rainbow trout on 82% of the trips. Within Sections 3-5 fly fishermen captured a mean of 59% of the catch of wild rainbow trout on 35% of the trips.

In contrast, bait and lure anglers were more successful than fly fishermen in capturing hatchery catchable rainbow trout in Sections 3 and 4 (Table 26). Within Sections 3 and 4 bait anglers captured 75% of the catch of hatchery rainbow trout on 59% of the trips (Table 27). Two explanations could account for the disparity between the success rates of bait and fly anglers for hatchery trout. Either hatchery trout are more readily caught with bait, or bait anglers actively sought hatchery trout while fly anglers avoided them.

Angler Residence

Resident anglers comprised a majority (68%) of the anglers we interviewed on Silver Creek (Table 28). However, a majority of the anglers we interviewed on Section 1 were non-residents. In contrast, in 1975 non-resident anglers were prevalent only in areas where hatchery catchables were stocked (Mallet 1976). The percentage of resident and non-resident anglers remained similar during Period I (28 May to 22 July),Period II (23 July to 16 Sept.), and Period III (17 Sept. to 30 Nov.). Most resident anglers were locals (within a 97-km, 60-mi, radius) or they lived in Boise or other southern Idaho locations. Californians comprised a majority of the non-resident anglers followed by residents of Oregon and Washington. Anglers from a variety of states and a few foreign countries fished Silver Creek in 1977. During Period II, anglers from 23 states fished Section 1 of Silver Creek.

Table 25. Fishing locations and methods utilized by anglers on Silver Creek and tributaries, 28 May to 30 November 1977.

Stream Section	Angling location (%)			No. sampled	Method used (%)			No. sampled
	Shore	Tube	Boat		Fly	Lure	Bait	
Silver Cr. - 1	100	--	--	537	100	--	--	537
Silver Cr. - 2	61	38	1	301	82	2	16	301
Silver Cr. - 3	96	3	1	659	38	6	56	659
Silver Cr. - 4	90	10	--	104	20	5	75	104
Silver Cr. - 5	95	5	--	154	31	12	57	146
Stalker Cr.	89	--	11	28	86	--	14	28
Grove Cr.	100	--	--	63	32	7	61	66
Loving Cr.	100	--	--	141	34	3	63	143
Totals	92	7	1	1,987	60	4	36	1,984

Table 26. Computed catch rates for trout captured by anglers utilizing various methods on Silver Creek from 28 May to 30 November 1977.

Section	Wild rainbow trout			Hatchery rainbow trout			Anglers interviewed			Total anglers interviewed
	Fly	Lures	Bait	Fly	Lures	Bait	Fly	Lures	Bait	
Silver Cr. - 1	1.14	--	--	--	--	--	551	--	--	551
Silver Cr. - 2	1.18	.25	.69	--	--	--	245	6	47	298
Silver Cr. - 3	.42	.29	.12	.18	.73	.45	241	41	377	659
Silver Cr. - 4	.38	.64	.14	.07	.21	.56	23	4	60	87
Silver Cr. - 5	1.02	.18	.65	.27*	.23*	.18*	50	22	74	146

* Brown trout captured per hour.

Table 27. Percentage of total trips and percentage of total catch by angling method in Silver Creek, 1977.

Stream section	Method	Percent of trips	Wild rainbow trout percent of catch	Hatchery rainbow trout percent of catch	
Silver Creek - 1	Fly	100	100	--	
Silver Creek - 2	Fly	82	93	--	
	Lure	2	1	--	
	Bait	16	7	--	
Silver Creek - 3	Fly	38	65	18	
	Lure	6	6	10	
	Bait	56	29	72	
Silver Creek - 4	Fly	20	41	4	
	Lure	5	8	1	
	Bait	75	51	95	
Silver Creek - 5	Fly	31	52	56*	
	Lure	12	3	12*	
	Bait	57	45	42*	
Totals Sections 3, 4, 5	Fly	35	59	16	Sections 3, 4
	Lure	7	5	9	
	Bait	58	36	75	

* Percent of catch of brown trout

Table 28. Residence of anglers interviewed on Silver Creek, 28 May to 30 November 1977.

Stream section	Total Idaho residents (%)	Non-residents (%)	Anglers interviewed
Silver Cr. - 1	40	60	466
Silver Cr. - 2	74	26	258
Silver Cr. - 3	77	23	622
Silver Cr. - 4	64	36	87
Silver Cr. - 5	89	11	132
Stalker Creek	75	25	28
Grove Creek	75	25	53
Loving Creek	89	11	120
Totals	68	32	1,766

Angler Opinions

A majority of the anglers we interviewed on Silver Creek and tributaries, considered the fishing good or fair, were satisfied with the species composition in the stream, and preferred to catch wild rainbow trout. Anglers within Sections 1, 2 and Stalker Creek opposed hatchery catchable releases (74% negative). In contrast, a majority (85%) of the anglers in the other stream sections favored hatchery catchable releases.

Anglers interviewed on all sections of Silver Creek except Section 5 and Grove Creek supported the catch and release regulations currently in effect on Section 1. Excluding responses from Section 1, 66% of the remaining 361 anglers we interviewed, supported the catch and release regulations.

A majority of the anglers we interviewed did not favor the use of boats on Silver Creek. Over 70% of the anglers did not favor the use of float tubes in the Conservancy Section. Approximately 84% of the anglers interviewed while fishing on the Conservancy did not favor the use of float tubes in that section. Most anglers believed more access is not needed on Silver Creek. A majority of the anglers who believed more access was needed suggested additional access be developed in Section 5 below Highway 68. Ninety-four percent of the anglers we interviewed were satisfied with the current six fish - 14 inch general regulation.

Angler responses to questions in 1977 were consistent with responses obtained during the preliminary survey in 1975 (Mallet 1976).

ANGLER OPINION SURVEY

The specific questions posed to anglers and their responses (as percentages)follow:

1. QUESTION: Do you consider fishing on Silver Creek good, fair, or poor?

Response:	Good	Fair	Poor	N.
Section 1	56	35	9	189
Section 2	45	44	11	96
Section 3	44	50	6	144
Section 4	36	61	3	36
Section 5	41	47	12	32
Stalker Cr.	50	50	-0-	12
Grove Cr.	24	76	-0-	21
Loving Cr.	56	37	7	27
Total	47	45	08	557

2. QUESTION: Is the current species composition satisfactory?

Response:	Yes	No	N
Section 1	95	5	149
Section 2	94	6	79
Section 3	96	4	140
Section 4	100	-0-	33
Section 5	85	15	26
Stalker Cr.	100	-0-	12
Grove Cr.	95	5	20
Loving Cr.	100	-0-	26
Total	.95	.05	485

3. QUESTION: What species do you prefer to catch?

Response:	Wild rainbow	Rainbow or brook	Brown	N
Section 1	95	2	3	112
Section 2	98	-0-	2	65
Section 3	87	11	2	99
Section 4	87	10	3	31
Section 5	62	27	11	26
Stalker Cr.	50	34	16	12
Grove Cr.	90	5	5	20
Loving Cr.	89	11	-0-	28
Total	89	09	02	393

4. QUESTION: Do you favor hatchery catchable releases?

Response:	Yes	No	N
Section 1	20	80	174
Section 2	37	63	89
Section 3	85	15	147
Section 4	71	29	35
Section 5	90	10	29
Stalker Cr.	33	67	12
Grove Cr.	81	19	21
Loving Cr.	96	4	27
Total	54	46	534
Section 1, 2 Stalker:	26	74	
Remainder:	85	15	

5. QUESTION: Do you support the catch and release regulation currently in effect on the Conservancy?

Response:	Yes	No	N
Section 1	79	21	140
Section 2	78	22	85
Section 3	67	33	150
Section 4	67	33	36
Section 5	47	53	30
Stalker Cr.	92	8	12
Grove Cr.	36	64	22
Loving Cr.	58	42	26
Total	70	30	501

6. QUESTION: Do you favor the use of boats on Silver Creek?

Response:	Yes	No	N
Section 1	6	94	131
Section 2	7	93	82
Section 3	18	82	139
Section 4	35	65	37
Section 5	18	82	28
Stalker Cr.	25	75	12
Grove Cr.	5	95	21
Loving Cr.	4	96	26
Total	13	87	476

7. QUESTION: Do you favor the use of float tubes in the Conservancy Section of Silver Creek?

Response:	Yes	No	N
Section 1	16	84	135
Section 2	58	42	90
Section 3	27	73	142
Section 4	63	37	35
Section 5	21	79	29
Stalker Cr.	17	83	12
Grove Cr.	24	76	21
Loving Cr.	11	89	27
Total	29	71	491

8. QUESTION: Is more access needed on Silver Creek?

Response:	Yes	No	N
Section 1	9	91	173
Section 2	9	91	87
Section 3	22	78	143
Section 4	6	94	32
Section 5	17	83	30
Stalker Cr.	-0-	100	12
Grove Cr.	38	62	21
Loving Cr.	15	85	26
Total	14	86	524

9. QUESTION: Is the current six fish- 14 inch limit acceptable?

Response:	Yes	No	N
Section 1	97	3	154
Section 2	89	11	88
Section 3	95	5	148
Section 4	94	6	35
Section 5	90	10	31
Stalker Cr.	92	8	12
Grove Cr.	100	-0-	20
Loving Cr.	85	15	27
Total	94	06	515

SUMMARY AND CONCLUSIONS

Population Status

Silver Creek currently supports an abundant population of self-sustaining wild rainbow trout. Results of trout distribution and abundance surveys indicate that wild rainbow trout are most abundant in the upper two sections and tributaries of Silver Creek.

The wild rainbow trout population is comprised of predominantly 2- and 3-year-old trout. Large, >400 mm (>15.7 in), and old age (>IV+) trout are uncommon. Sections 1 and 2 and the tributaries contain the largest proportion of large trout.

Since the early 1900's a variety of rainbow trout stocks have been introduced into Silver Creek forming a complex gene-pool. As a result, Silver Creek supports spring-spawning and fall-spawning strains of rainbow trout. Although most wild rainbow trout sustained a limited home range, a portion of the population exhibited upstream and downstream migrations in the spring and fall which were related to spawning.

The upper tributaries function as important spawning areas for adult rainbow and rearing areas for juvenile trout. Electrofishing data indicates that juvenile trout from the tributaries enter main Silver Creek.

A small percentage of the wild trout in Silver Creek migrated considerable distances (>15 km) although most (72%) remained within 1.6 km (1 mi) of the release site. A majority of the trout which migrated between study sections moved out of the upper sections into lower sections. These movements may have been related to spawning and/or displacement out of upper areas with large trout densities.

A large portion (50%) of the hatchery rainbow trout released in Silver Creek moved considerable distances from the planting site. Catchable trout moved into areas in which no hatchery trout were planted.

Trout sampled in 1976 and 1977 grew slower than trout sampled in 1952. However a disproportionate number of the trout sampled in 1952 consisted of old age fish. Growth of wild rainbow in Silver Creek in 1976 and 1977 was comparable to growth rates of trout in the South Fork Boise River (Mate 1978).

Large trout densities in Section 1 apparently did not affect the growth and condition of the trout present. The poor condition of large-size trout, >300 mm (>11.8 in) was presumably due to the loss of body condition after spawning and over wintering rather than to reduced food availability.

Status of Fishery

Silver Creek supports a very significant fishery which sustains one of the largest levels of angler effort in Region 4. Angler effort estimates are comparable to other high quality trout streams in Idaho as the Henrys Fork Snake River (Coon 1977) and the South Fork Boise River (Mate 1978).

Indices of angling quality indicate that Silver Creek sustains a high quality of wild trout fishery. Catch rates exceeding one fish per hour and a successful trip ratio of nearly 80% are indicative of a quality trout stream. However, the lack of large, > 400 mm (>15.7 in), "trophy" trout may detract from the angling experience. The catch consists of predominantly 2- and 3-year old trout with relatively few trout over 4-years old.

Silver Creek is an extremely popular stream with fly fishermen. Fly fishermen comprised a majority of the anglers who fished Silver Creek in 1977. Anglers utilizing flies were also the most successful fishermen on Silver Creek and they creeled a disproportionate amount of the catch of wild rainbow trout for the effort expended.

Fly anglers also released a large percentage of the wild rainbow trout they captured. The release of trout in all stream sections probably helped to distribute the catch among more anglers and to sustain the relatively large catch rates throughout the angling season.

Although resident anglers comprised a majority of the anglers who fished Silver Creek in 1977, non-resident anglers outnumbered resident anglers on the catch and release section. Silver Creek attracted anglers from numerous states and a few foreign countries in 1977.

Most anglers who fished Silver Creek considered the fishing good or fair, were satisfied with the species composition in the stream, and preferred to catch wild rainbow trout. Anglers opposed plants of hatchery catchable rainbow trout in the upper sections of the creek and they supported the catch and release regulation in effect on Section 1.

DISCUSSION

Management Goals

Optimum management of the Silver Creek drainage is contingent upon the formulation of specific management goals which will sustain the desired population structure. As Mate (1977) observed, definite management goals outlining the desired percentage of the fish population exceeding a specific size, catch rates, and numbers of fish harvested are necessary before regulation options can be formulated. Fishery managers face a number of options in managing Silver Creek. These options range from sustaining a large harvest of small, young-aged trout to severely restricting harvest in an attempt to establish a fishery for large trout. Different regulations may also be applied to separate stream sections as in 1977. Once specific management goals are established, the information obtained during the fisheries investigations conducted from 1975 to 1977 can be utilized to implement management programs in the Silver Creek drainage.

Silver Creek currently supports an abundant population of wild rainbow trout comprised of predominantly 2- and 3-year old trout. The relatively high productivity of the creek indicates that it may be capable of producing much larger trout.

Historically, Silver Creek did support a high quality fishery for large trout. Anglers who fished Silver Creek since the 1920's reported catching

numerous 1.4 to 2.3 k (3 - 5 lb) trout with larger trout ranging to 4.6 kg (10 lb) (Fig. 14). In the 1940's and early 1950's reports of 1.4 to 2.3 kg trout were also common and Irving (1952) reported catch rates of one fish per hour with "many" 1.8 to 2.3 kg(4 to 5 lb) trout captured on opening day in 1952. Photographs I obtained indicate anglers captured trout up to 3.6 kg(8 lb) in Silver Creek as recently as 1962. Although large rainbow trout captured since 1955 could have been transplanted Richfield Canal trout, trout captured earlier were definitely produced in Silver Creek. Today, trout exceeding 1.4 kg(3 lb) are uncommon in Silver Creek.

Restoration of Silver Creek to its former status as a producer of large trout will necessitate defining the factors which contributed to the decline of large trout in the stream. Once these factors are identified fishery managers may attempt to alleviate them. Plausible reasons for the decline of large trout in Silver Creek include dilution of the genetic stock, a decline in stream productivity and angler overharvest of trout.

Stock Dilution

Random introductions of several races of rainbow trout have altered the genetic makeup of the original Silver Creek stock. The original trout were spring-spawners and trout currently spawn in spring and fall. It is possible that introductions of inbred hatchery stocks have produced a shorter lived trout which matures at an early age. In 1976 Gibson collected ripe female trout to 235 mm (9.3 in) and ripe males to 197 mm (7.6 in) (age II+). These trout would be incapable of utilizing the food production in Silver Creek to attain a large size over a number of growing seasons.

Future introductions of hatchery-reared trout, particularly those from inbred populations of hatchery stock, should be carefully scrutinized. Studies of fall and spring spawning populations of rainbow trout in Wyoming demonstrated that inbreeding equivalent to one generation of full sibling mating produced significant reduction in growth rate, survival, and food conversion efficiency and also increased frequencies of crippled fry (Kincaid 1976). The reduced growth rate and food efficiency was maintained through the first year and the author believed "probably through the entire life cycle". Reisenbichler and McIntyre (1977) also observed that hatchery reared steelhead trout were genetically different from wild fish and when they inbred with wild fish reduced the number of smolts produced.

Any future plantings of hatchery reared rainbow trout should be limited to Sections 3 and 4 of Silver Creek. For the following reasons, hatchery catchable plants should be curtailed in Sections 1, 2, 5 and the tributaries:

1) A large percentage of the hatchery trout planted in Silver Creek, particularly those planted in Loving Creek, moved from the

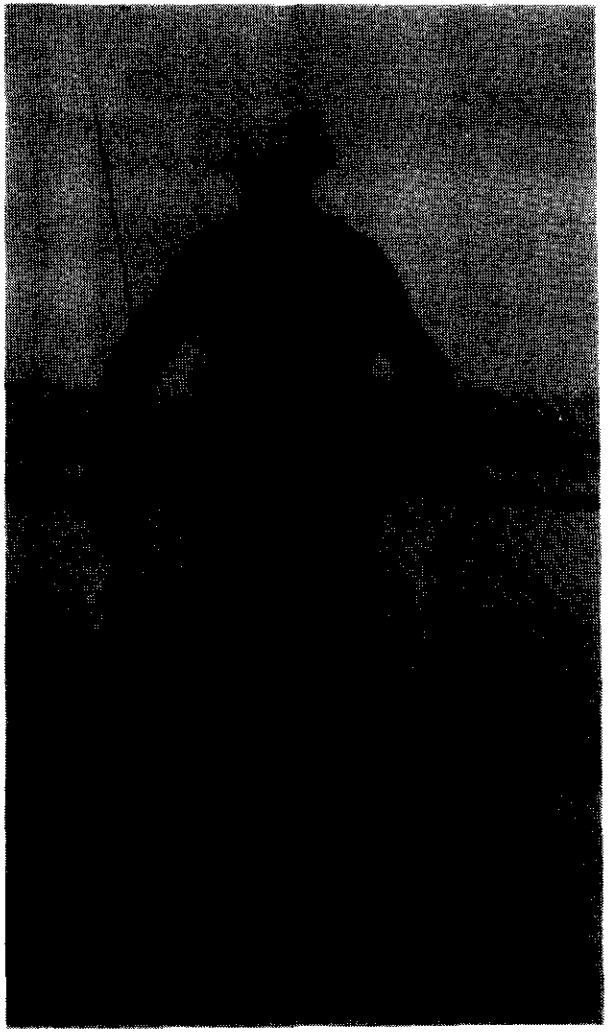




Figure 14. Photos of large rainbow trout captured in Silver Creek - circa 1925, from the collection of Mrs. Claude High.

planting site into areas of the stream where they were not accessible to anglers or not desirable.

2) Anglers who fish Silver Creek prefer to catch wild rainbow trout and anglers on Sections 1, 2 and Stalker Creek oppose plantings of hatchery catchable trout. Hatchery trout planted above Section 3 will eventually enter Sections 1 and 2.

3) Tributaries provide spawning areas for wild rainbow trout. Introduction of large numbers of hatchery catchable trout may adversely impact adult spawning and juvenile rearing.

4) Hatchery catchable plants should be confined to stream sections exhibiting public access and large angler effort in order to accrue maximum public benefit.

Only Section 3 and Section 4 at Picabo bridge meet these criteria. A majority of the anglers who fish these sections also support hatchery catchable plants.

In the future, fishery managers may chose to curtail all hatchery catchable plants and attempt to sustain a wild trout fishery. Currently Silver Creek sustains a large wild trout population, particularly in the upper sections and tributaries. Wild trout comprise a majority of the catch in all areas except Sections 3 and 4 where large numbers of hatchery catchables are planted. It is possible to alter the catch composition in Sections 3 and 4 from primarily hatchery catchable rainbow to wild rainbow trout through implementation of alternative angling regulations and termination of hatchery catchable plants. Mate (1977) reported more large trout and higher catch rates in the South Fork Boise River where such a management procedure was implemented in 1976.

If the gene pool of trout in Silver Creek has been altered to the detriment of the population, measures may also be taken to restore a desirable race of trout. The optimum rainbow trout stock for Silver Creek would exhibit rapid growth rates and late maturity. These trout would be capable of attaining a large size after a number of growing seasons in a productive environment. Fishery managers could experimentally rear and introduce a wild stock of fast growing, late maturing trout into Silver Creek. The brood stock should be replaced periodically to reduce the incidence of inbreeding.

Altered Productivity

During the past 30 years much of the land adjacent to Silver Creek has been coverted from natural vegetation and pastureland into wheat and barley production. Wind erosion and runoff from the cultivated lands have undoubtedly introduced quantities of silt into Silver Creek and tributaries. During the winter months, Hayspur Hatchery personnel reported approximately 365 tons of silt entering the hatchery per month through its intake in Loving Creek.

It is feasible that the influx of silt has reduced the available trout spawning areas and the aquatic vegetation with a subsequent decline in recruitment and fish food production. The magnitude of this siltation is difficult to discern since no past data is available.

Some silt appears to be essential since it functions as the substrate for Chara and Potamogeton beds which support much of Silver Creek's invertebrate population (Francis 1977). However, trout sampled in 1952 grew faster than trout sampled in Silver Creek in 1976 and 1977 and it is possible that the decline in growth was due to decreased production since 1952. It is also likely that the actual differences in growth rates would have been much less if a larger 1952 sample were available.

At the present time I have no basis to conclude that habitat degredation has caused a decline in the productivity of Silver Creek and its ability to produce large trout. In 1978 Idaho State University will begin a study to evaluate the levels of silt entering Silver Creek so additional data is forthcoming. Irregardless of future studies, proper stream management dictates that we prevent additional removal of stream bank vegetation and promote techniques of bank cover restoration in areas where cattle grazing and land clearing have denuded it. This is particularly applicable on the upper tributaries of Silver Creek.

Angler Overharvest

Anglers may have over-harvested the rainbow trout in Silver Creek, removing the larger faster growing individuals and shifting the population to its present status of smaller, younger-aged trout.

Due to its accessibility and reputation as a producer of large trout, anglers have exerted a large amount of effort on Silver Creek since the 1940's. As early as 1957 Irving (1958) estimated that Silver Creek provided 25,000 man days of angling. During the same period, anglers enjoyed liberal catch regulations until the late 1970's. Daily bag limits allowed anglers to keep 25 trout up to 1945, 20 trout up to 1952, 15 trout up to 1972, and 10 trout up to 1977. Angling regulations on Silver Creek varied considerably during its history and special regulations including no boating, headwater stream closures, and fly fishing only sections have been utilized periodically.

If overharvest has caused the decline of large trout in Silver Creek, special regulations as the catch and release (C&R) regulation instituted in 1977 would be expected to increase the abundance of large trout through decreased angling mortality. Although the regulation has only been in effect one angling season, we observed some changes in the population structure in the C&R section as compared to the other sections. Between 1976 and 1977 the abundance of large trout in Sections 2 and 3, as assessed by electrofishing, declined. In contrast, within the C&R section the abundance of large trout increased between 1976 and 1977. Further, during the 1977 angling season we observed a rapid depletion in the percentage of large fish creeled in Sections 2 through 4 between the initial months of the angling season and the close of the season. In contrast, within Section 1 anglers caught more large fish during the latter part of the season than during the initial part. During 1977 trout densities were also larger in Section 1 than any section except the tributaries and more fish moved out of the section than any other area of Silver Creek.

During 1978 and in the ensuing seasons we should continue to

monitor the effects of the catch and release regulation on the size, age structure, and growth rates of wild trout in Silver Creek. If trophy-sized trout are a product of the restrictive regulations, fishery managers may utilize this technique to restore Silver Creek to its former status as a producer of large trout.

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Submitted by:

Russ Thurow
Fisheries Research Biologist

Approved by:

IDAHO DEPARTMENT OF FISH AND GAME

Joseph C. Greenley, Director

Stacy Gebhards, Chief
Bureau of Fisheries

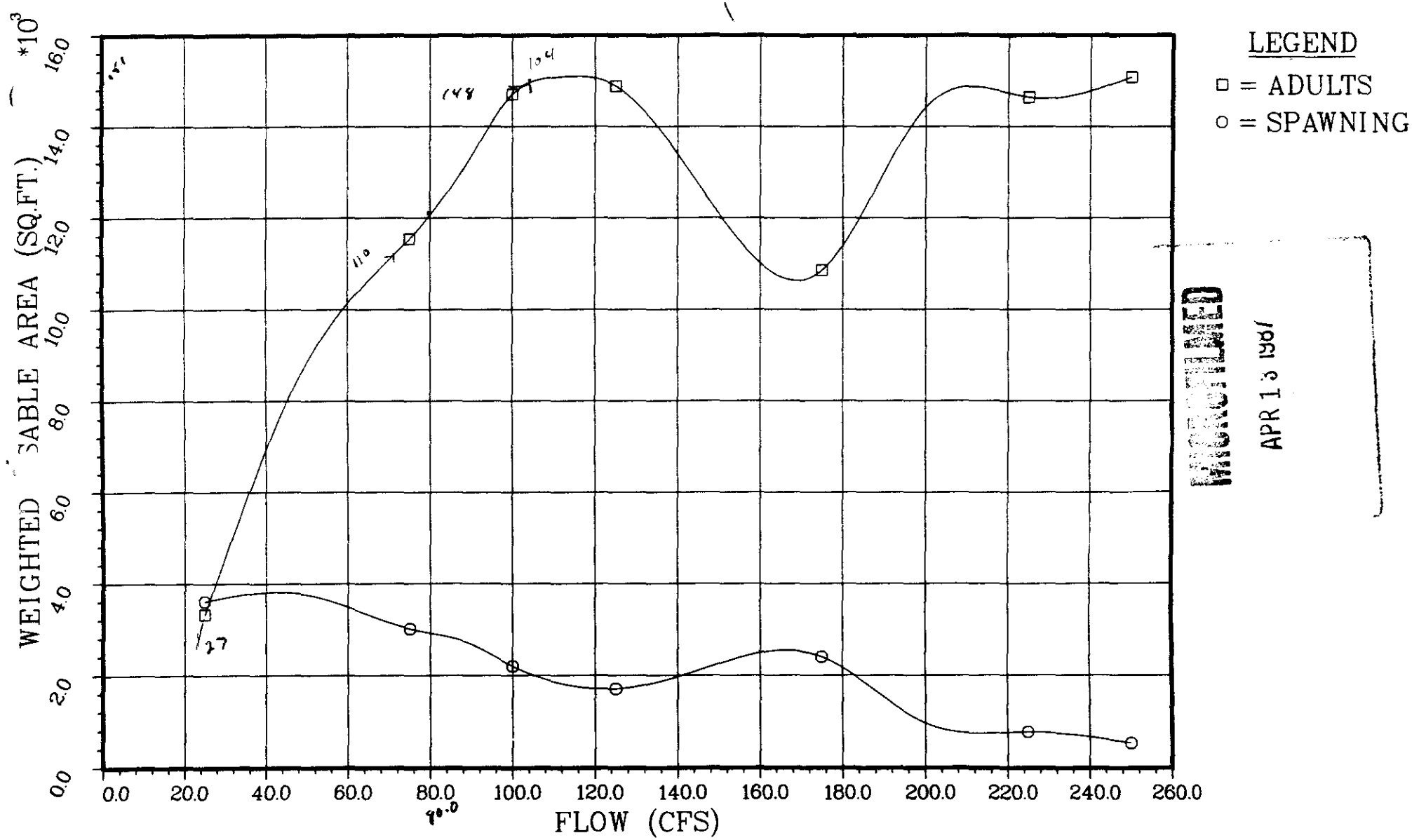
Jerry Mallet
Fishery Research Supervisor
Bureau of Fisheries

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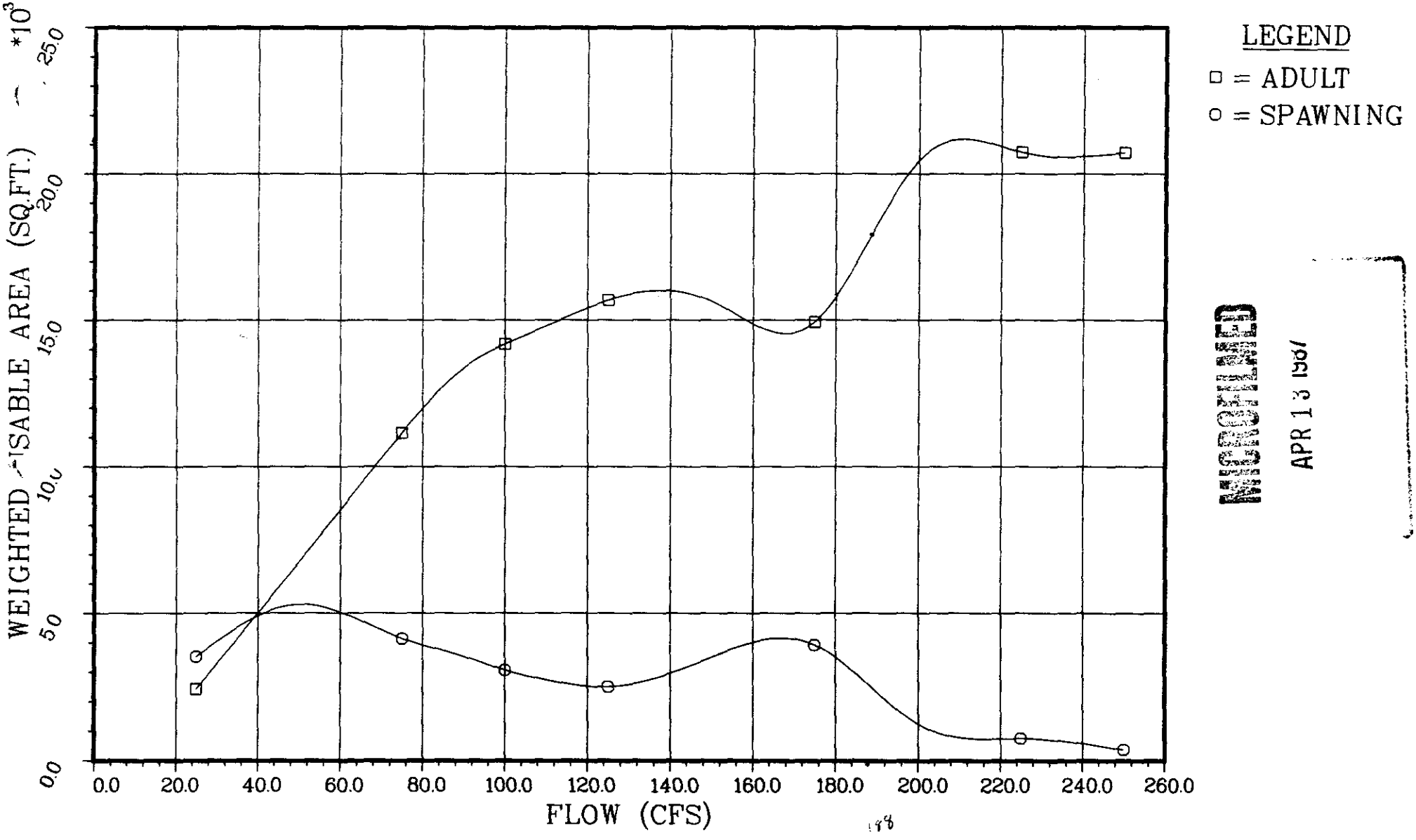
IDAHO FISH AND GAME DEPARTMENT STREAM FLOW STUDY
SILVER CREEK AT SIMPLOT SC6
BROWN TROUT



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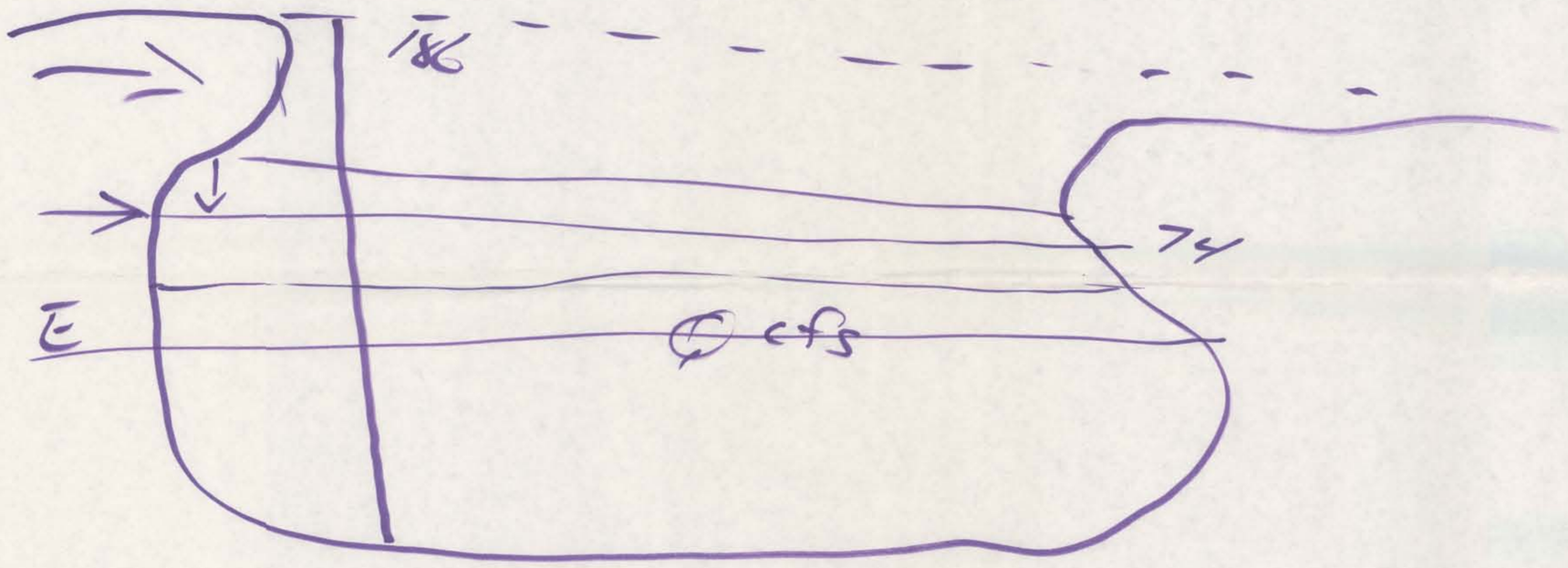
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IDAHO FISH AND GAME DEPARTMENT STREAM FLOW STUDY
SILVER CREEK AT SIMPLOT SC6
RAINBOW TROUT



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FG - F



Silver Creek
Representative Critical Habitat
Above Hwy 93

Little Wood
Representative Critical
Habitat
w/ Cottonwoods

MSF NOTES

- Be Sworn

- Name - David R. Tuthill, Jr.

- Address - 4639 Cochees, Boise, ID

- Employed by the Idaho Department of Water Resources

- The position I now hold is Supervisor, Water Allocation Section. I have been in this position for 5 years and have been employed by the Department for a total of 7½ years. I am registered as a Professional Engineer in Idaho.

- My statement will include:

    1) A chronology of Department activities to date with respect to the application.
    1a) Review of the application
    2) Information on existing water rights and hydrology that the Director may use in his action on the application.

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APR 13 1981

IDWR STAFF - MSF NOTES
37-7849

- On August 26, 1980, the Idaho Department of Fish & Game presented to the Idaho Water Resource Board a request for a minimum stream flow water right on Silver Creek tributary to the Little Wood River.

- This request was considered by the Board and the same day the Board filed a corresponding application for permit with the IDWR, numbered 37-7849 .

- Copies of the application were sent to the state departments of Fish & Game, Recreation, and Health and Welfare, and a news release of the filing was circulated.

- No further action was taken on the application until September, 1983. The IWRB held an informal public meeting to determine public interest with respect to the application on Sept. 22, 1983 . This meeting was advertised by notices published in the Wood River Journal , and by letters sent to waterusers who divert in or near the affected reach, to the owners of land adjacent to the reach, and to legislators of nearby districts.

- Based on the public input received by Board members at the meeting and afterward, the Board resolved at a meeting on October 7, 1983 to request the Director to proceed with administrative action on the application.

- A public notice of the application and this hearing was advertised on Wood River Journal . The hearing information was also sent to each party notified about the public meeting in the file, plus each party that attended the public meeting.

- Letters in support of the proposed minimum flow were received from:

  1.

  2.

  3.

  4.

- Letters in Opposition were received from:

  1.

  2.

  3.

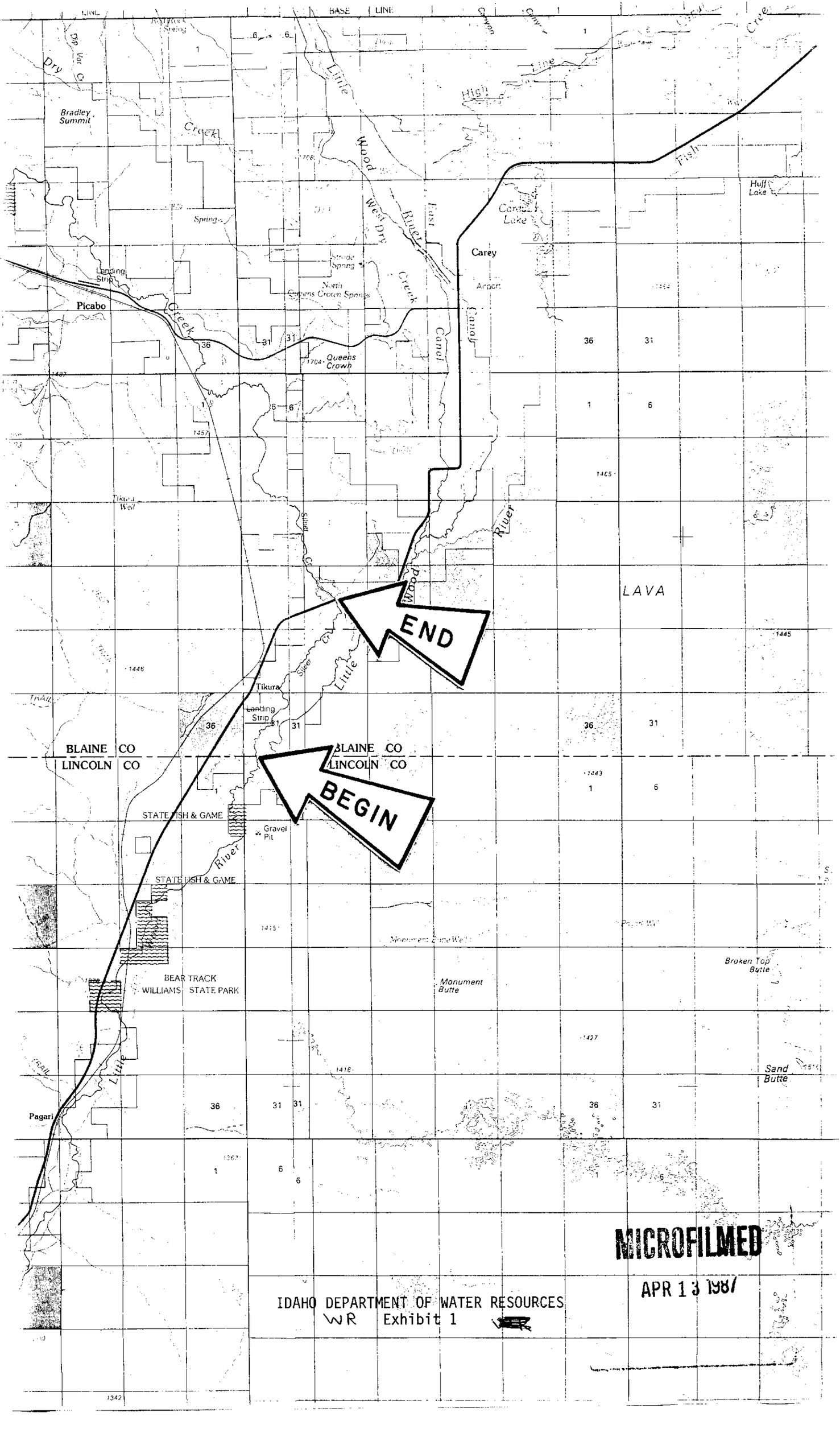
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- Present Staff Exhibit 1 which depicts the location of the reach of stream in question.

- Present Staff Exhibit 2 which shows other water rights near the proposed MSF.

- Present Staff Exhibit 3 which is a flow duration curve for the gaging station,

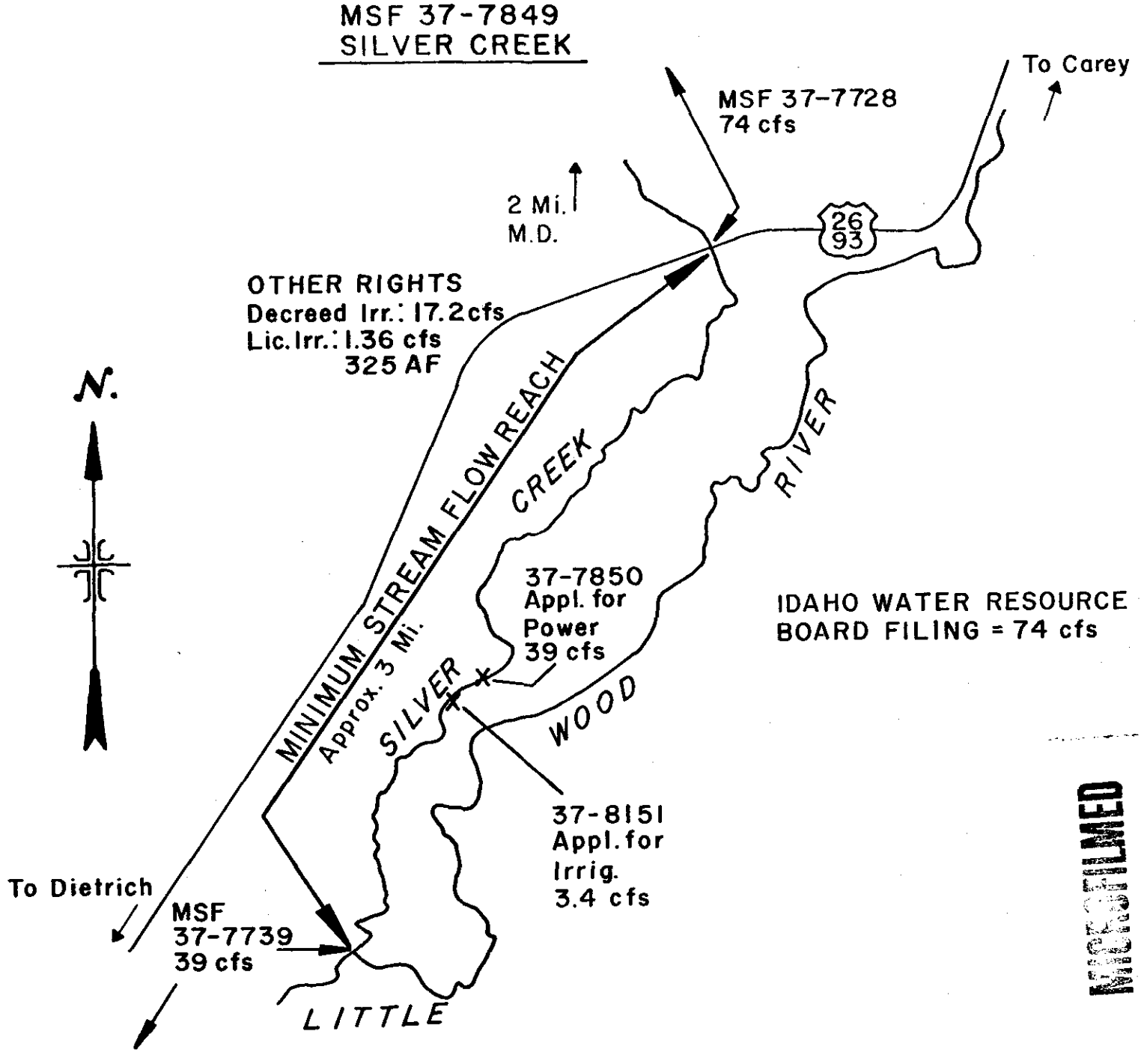
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IDAHO DEPARTMENT OF WATER RESOURCES
WR Exhibit 1



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IDAHO DEPARTMENT OF WATER RESOURCES
Exhibit 2

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 20, 1983

MEMO

TO: Dave Tuthill, Water Allocation Section

FROM: William WTO Ondrechen, Hydrology Section

SUBJECT: HYDROLOGY OF SILVER CREEK FROM HIGHWAY U.S. 20 TO CONFLUENCE WITH LITTLE WOOD RIVER AND BIG WOOD RIVER FROM WARM SPRINGS CREEK TO HAILEY

Silver Creek

The flow of Silver Creek is influenced primarily by groundwater discharge from springs, with snowmelt runoff being a secondary factor. The average flow hydrograph for Silver Creek near Picabo in Figure 1 shows a pattern of low flows in May and June. Discharge begins to increase in June and gradually rises to a maximum in November as a result of recharge of the groundwater system by irrigation. Through the winter the groundwater discharge gradually declines until the next irrigation season. Snowmelt runoff in late March or early April causes the hydrograph to rise abruptly. These snowmelt peaks are of short duration and the streamflow rapidly declines to seasonal (low) levels. Groundwater storage causes a lag of several months between the times of maximum or minimum recharge and the flows of Silver Creek.

Streamflow in the reach of Silver Creek downstream from the U.S. ~~20~~ highway bridge to its confluence with the Little Wood River is represented fairly well by the Silver Creek near Picabo gage. This station operated until 1963, at which time it was discontinued. The present gaging station, Silver Creek at Sportsman's Access, is about 6 miles upstream. Based on streamflow measurements made by the USGS (Ground Water - Surface Water Relations in the Silver Creek Area, Water Info. Bull. No. 45), the stream gains or loses (depending on season) below the Sportsman's Access site to the old gaging station. Below the old gaging station, the stream is believed to be perched above the regional water table and gains or losses are minor.

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Big Wood River

The discharge of the Big Wood River is primarily influenced by snowmelt in the mountainous portion of the basin. The months of April through July yield about 70 percent of the annual runoff, with the peak flow usually occurring in May or June. Low flows generally occur in the December through February period.

The discharge at the lower end of the indicated reach is well defined by the Big Wood River at Hailey gaging station. A flow duration analysis of this record for the period 1916-73 indicates that a flow of 70 cfs is equaled or exceeded about 97 percent of the time. Flows at the upstream end of the reach, that is just below Warm Springs Creek, are not as well defined due to lack of a continuous record. Tributary streams below Warm Springs Creek include Trail Creek, East Fork of the Wood River, and Deer Creek. Miscellaneous streamflow measurements made at various points of interest are listed in the attached table.

Based on these limited data, it appears that flows can be as low as 70 cfs occasionally during the winter months.

Big Wood R. bl Warm Sprgs. Cr.

9-14-72	185 cfs
4-9-73	152
7-10-73	197
9-18-73	128
12-19-73	67.4
2-6-74	90.2
8-16-77	114
10-25-77	86.3

Big Wood R. bl East Fork

(Estimated from Big Wood bl Sewage Plant + East Fork)

9-14-72	247 cfs
4-9-73	206
7-10-73	270
9-18-73	155

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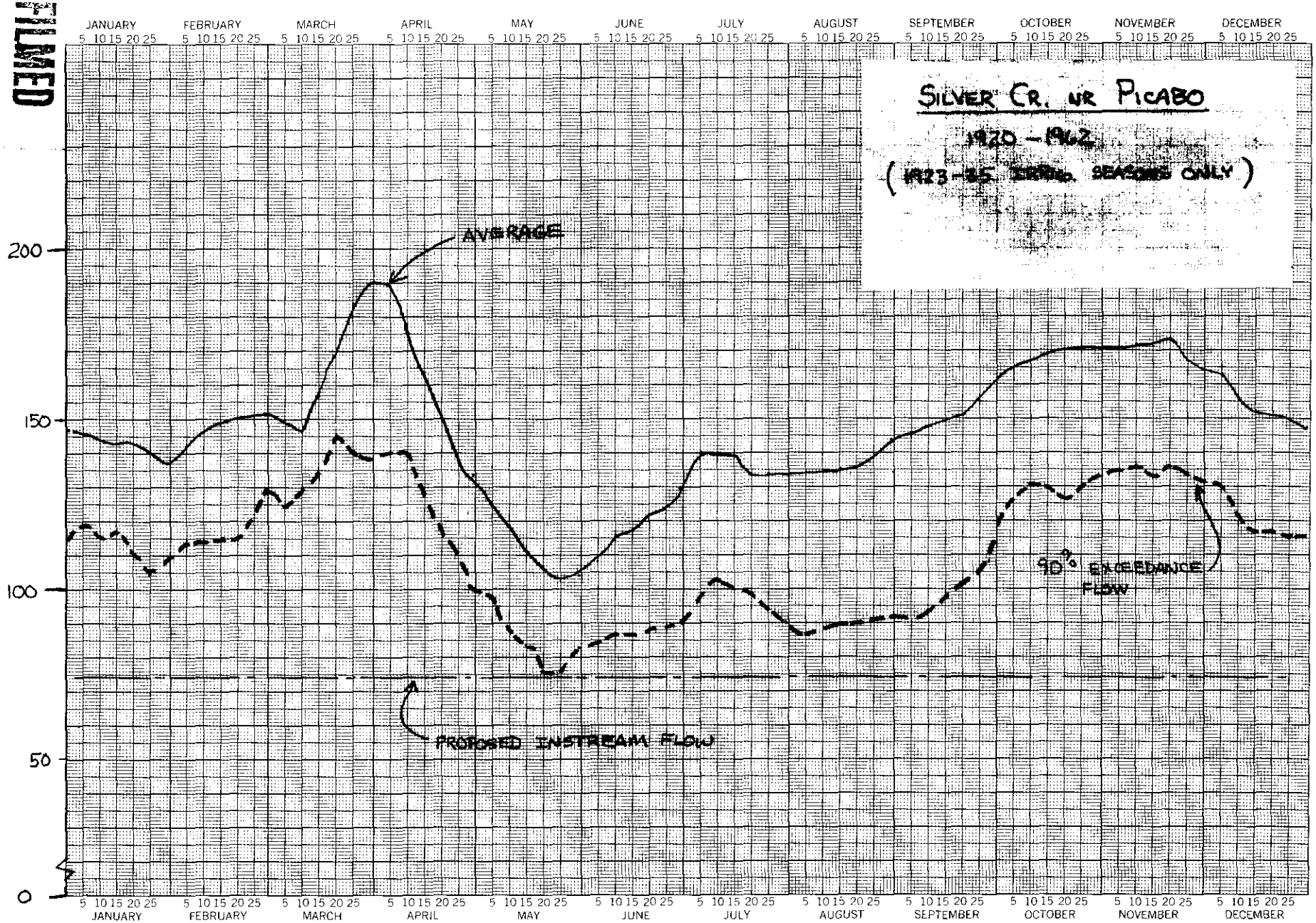
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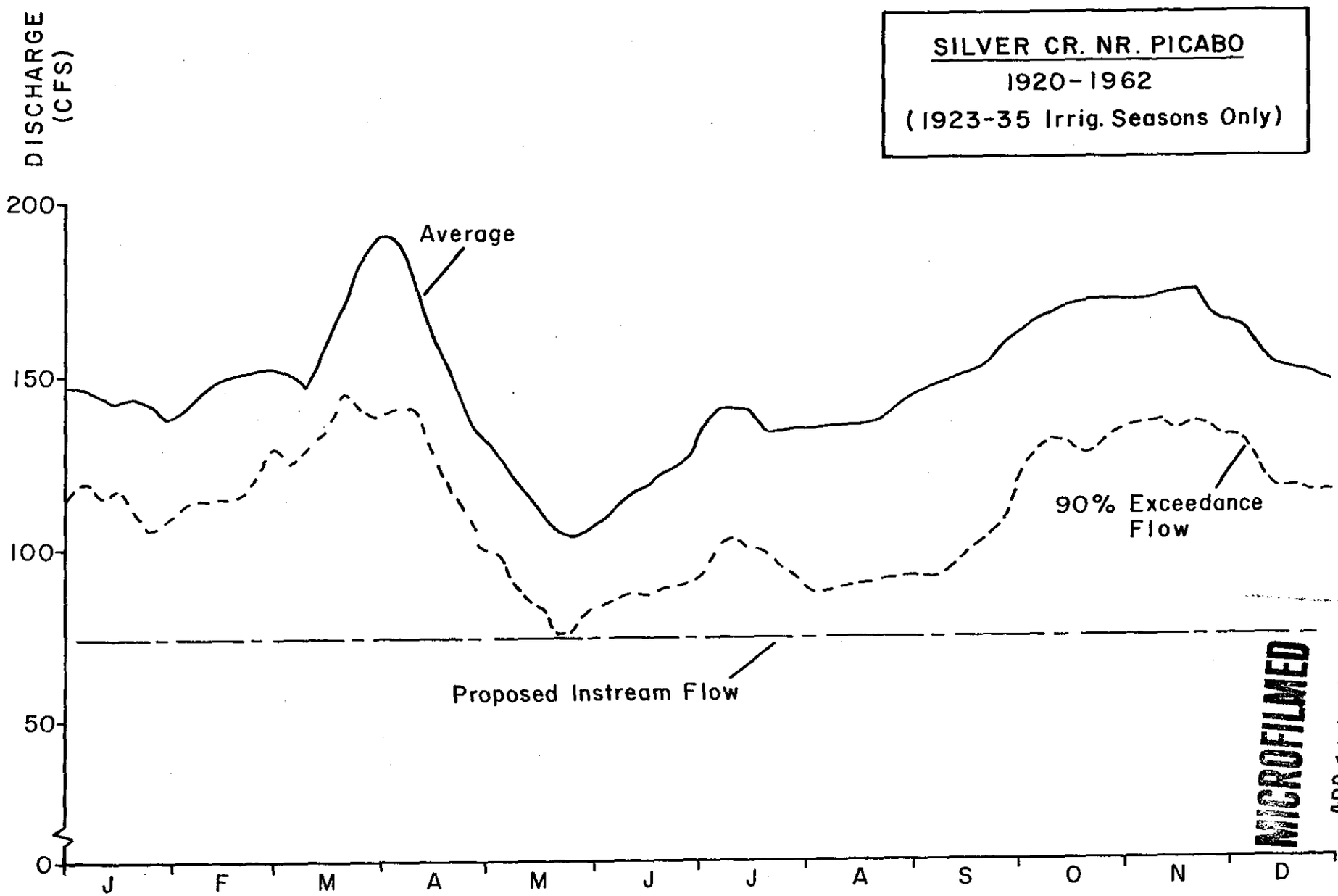
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FIGURE 1. SUMMARY HYDROGRAPH DATA, SILVER CREEK



SUMMARY HYDROGRAPH DATA, SILVER CREEK



IDAHO DEPARTMENT OF WATER RESOURCES
Exhibit 3
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APR 13 1981

DEPARTMENT OF WATER RESOURCES

October 28, 1983

Contact: Dave Tuthill (334-4104)

State of Idaho, Statehouse, Boise, Idaho 83720
Phone: (208) 334-4440

NEWS RELEASE

FOR IMMEDIATE RELEASE

BOISE---A public hearing on a minimum stream flow application on Silver Creek will be conducted Thursday, November 10, at 9:00 a.m. in the Old County Courthouse, 206 First Avenue South, Hailey. Norman C. Young, administrator, Resource Administration division, Idaho Department of Water Resources (IDWR), will conduct the hearing.

The application, #37-7849, seeks a 74 cubic feet per second (cfs) flow year-around from the point where Silver Creek flows under the Highway 93 bridge downstream to the confluence with the Little Wood River. This reach is downstream from two prior approved minimum stream flow water right permits on Silver Creek.

The application, filed by the Idaho Water Resource Board at the request of the Idaho Department of Fish and Game, would maintain trout rearing and spawning habitat.

The public hearing will give interested parties the opportunity to express their support or opposition to the proposed instream flow application. Following the hearing, the director of the Department of Water Resources, A. Kenneth Dunn, will either approve or deny the application. If approved, the application will be submitted to the Idaho Legislature.

--more--

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APR 15 1987

"Minimum stream flows, water rights in which a stream is not diverted, are junior to all water rights with earlier priority dates," Young explained. "These rights help protect fish and wildlife habitat, water quality, aesthetics, recreation, transportation or navigation."

The public is encouraged to attend.

Linda White
Hotline Specialist

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APR 15 1987

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OCT 31 1983
Department of Water Resources

STATE OF IDAHO
OFFICE OF THE ATTORNEY GENERAL

JIM JONES
ATTORNEY GENERAL
STEPHEN V. GODDARD
WILLIAM B. DILLON, III
DEPUTY ATTORNEYS GENERAL
IDAHO DEPARTMENT OF FISH AND GAME

600 S. WALNUT ST.
P.O. BOX 25
BOISE, IDAHO 83707
(208) 334-3715

October 28, 1983

Mr. David Tuthill, Supervisor
Water Allocation Section
Idaho Dept. of Water Resources
STATEHOUSE
Boise, Idaho 83720

Dear Dave:

The Idaho Department of Fish and Game hereby requests full party status in the following instream flow hearings scheduled to be heard on November 9, 10, and 16, 1983:

Malad River	Application No. 37-7920
Silver Creek	Application No. 37-7849
Grouse Creek	Application No. 96-7980
Lightning Creek	Application No. 96-7979

Thank you for your consideration in the matter.

Sincerely,

Stephen V. Goddard
Deputy Attorney General
Idaho Dept. of Fish and Game

SVG:tlv

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 28, 1983

RE: Hearings on Minimum Stream Flows

Dear Board Member:

In accordance with the resolution of the Idaho Water Resource Board which requested the Director, IDWR, to proceed with administrative actions on five minimum stream flow applications, hearings have been scheduled.

As described on the attached fact sheets, the heaering locations are as follows:

Water Right No.	Source	Date, Time	Location
37-7892	Malad River	Wed., Nov. 9, 1:30 pm	Gooding
37-7920	Malad River	Wed., Nov. 9, 1:30 pm	Gooding
37-7849	Silver Creek	Thur., Nov. 10, 9:00 am	Hailey
96-7979	Lightning Cr.	Wed., Nov. 16, 9:00 am	Sandpoint
96-7980	Grouse Creek	Wed., Nov. 16, 9:00 am	Sandpoint

Note that the hearing in Sandpoint will be held the day after the next Board meeting in Coeur d'Alene.

On behalf of the Director, you are cordially invited to attend the hearings. If you plan to attend, please coordinate your travel and lodging arrangements through Anita Warntjes.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 28, 1983

Idaho Dept. of Fish and Game
Attn: Dave Hanson
600 S. Walnut
Boise, ID 83706

Dear Dave:

The purpose of this letter is to follow up earlier telephonic communications by notifying you of upcoming hearings on minimun stream flow applications nos. 37-7920, 37-7849, 96-7979 and 96-7980 for which your agency acted as requestor.

Times and locations are noted on the enclosed fact sheet.

All known interested parties have been notified of the hearings. If any problems arise, please notify me at 334-4104

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:ns

cc: Steve Goddard IDFG

Enclosures

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APR 13 1987

I Florence Blanchard
Box 225
Bellevue, ID 83313

I Karen Crowell
P.O. 1013
Ketchum, ID 83340

I Harold Drussel
Box 690
Bellevue, ID 83313

P John Durfee
Rt. 1, Box 65A
Carey, ID 83320

I Richard Gouley
Box 1051
Hailey, ID 83333

I Butch Harper
[redacted] Box 895
Sun Valley, ID 83353

W Wm. A. & Adelaide B. Hodgman
Shoshone, ID83352

P Henry Jones
Box 87
Carey, ID 83320

I Dave Lewis
Times-News
Hailey, ID 83333

I Milan Lexa
Box 292
Bellevue, ID 83313

W A.W. Molyneaux
Box 400
Bellevue, Id 83313

P Bill Molyneaux
Picabo, ID 83348

I Reid J. Newby
Box T
Shoshone, ID 83352

I Dick Oneida
Shoshone, ID 83352

P Andy Payne
103 E. B.
Shoshone, ID 83352

P Joe Sorenson
S.A.M. Airport, Inc.
Twin Falls, ID 83330

I Gary Stivers
KSKI
Hailey, ID 83333

Key:
I = Interested Party
P = Property Owner
W = Water User

MICROFILMED
APR 10 1984

The following 3 letters were sent to the appropriate people on the above mailing list on 10/28/83 TL Seale

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

RE: Minimum Stream Flow Application on Silver Creek

Dear Interested Party:

On September 22, 1983, you attended a public meeting held by the Idaho Water Resource Board regarding an application for a minimum stream flow on Silver Creek.

Please be advised that based on the public input received, the Board requested the Director of the Idaho Department of Water Resources to proceed with administrative action on the application. Therefore, a hearing has been scheduled for November 10, 1983 as described on the enclosed fact sheet.

At the hearing, you will have an opportunity to provide testimony. If you wish to become a full party with the opportunity to cross-examine witnesses, please advise this office on or before November 4, 1983. On behalf of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

RE: Minimum Stream Flow Application on Silver Creek

Dear Wateruser:

The Idaho Department of Water Resources will be holding a hearing on a minimum streamflow application on a reach of Silver Creek. According to the records of this Department, you have a water right for which the point of diversion is located in or near the proposed minimum streamflow reach.

Information describing the application and the time and place of the hearing is shown on the enclosed fact sheet. Also enclosed is a brochure which describes the minimum streamflow procedure.

At the hearing you will have an opportunity to provide testimony. If you wish to become a full party with the opportunity to cross-examine witnesses, please advise this office on or before November 4, 1983. On behalf of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 1 3 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

RE: Minimum Stream Flow Application on Silver Creek

Dear Property Owner:

The Idaho Department of Water Resources will be holding a hearing on a minimum streamflow application on a reach of Silver Creek. According to the records at the county courthouse, you are one of the owners of property adjacent to the reach where the minimum streamflow is proposed.

Information describing the application and the time and place of the hearing is shown on the enclosed fact sheet. Also enclosed is a brochure which describes the minimum streamflow procedure.

At the hearing you will have an opportunity to provide testimony. If you wish to become a full party with the opportunity to cross-examine witnesses, please advise this office on or before November 4, 1983. On behalf of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 15 1987

MINIMUM STREAM FLOW
Fact Sheet

Water Right No.: 37-7849

Source: Silver Creek tributary to the Little Wood River

Applicant: Idaho Water Resource Board

Requesting Agency: Idaho Department of Fish and Game

Date Application Filed: August 26, 1980

Rate of Flow: 74 cubic feet per second year around

Location of Reach: From the point where Silver Creek is crossed by the Highway 93 bridge within the NW¼SE¼ Section 20, Township 2 South, Range 21 East, downstream about 3 miles to the confluence with the Little Wood River within Lot 5, Section 6, Township 3 South, Range 21 East.

Purpose: To maintain wild trout rearing, spawning and migration within the described reach.

Hearing: Thursday, November 10, 1983, at 9:00 a.m. at the Old County Courthouse, 206 1st Ave. S., Hailey.

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Rep. Steve Antone
1141 Link St.
Rupert, ID 83350

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Representative Antone:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

The hearing for the two applications on the Malad River will be held at the Council Room of City Hall, 308 5th Ave. West, Gooding, at 1:30 p.m. on Wednesday, November 9. The hearing for the application on Silver Creek near Hailey will be held at the Old County Courthouse, 206 1st Ave. South, Hailey, at 9:00 a.m. on Thursday, November 10. Please find enclosed two fact sheets describing the applications and a brochure about the minimum streamflow procedure.

On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 1 5 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Rep. Mark A. Larson
525 Samarra Dr.
Mtn. Home, ID 83647

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Representative Larson:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

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On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 1 5 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Senator John Peavey
Box 88
Carey, ID 83320

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Senator Peavey:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

The hearing for the two applications on the Malad River will be held at the Council Room of City Hall, 308 5th Ave. West, Gooding, at 1:30 p.m. on Wednesday, November 9. The hearing for the application on Silver Creek near Hailey will be held at the Old County Courthouse, 206 1st Ave. South, Hailey, at 9:00 a.m. on Thursday, November 10. Please find enclosed two fact sheets describing the applications and a brochure about the minimum streamflow procedure.

On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 1 0 1984

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Rep. John H. Brooks
Rt. 2, Box 233
Gooding, ID 83330

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Representative Brooks:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

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On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 15 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Senator Claire Wetherell
360 E. 15th N.
Mtn. Home, ID 83647

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Senator Wetherell:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

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On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Senator Wes Trounson
Rt. 2, Box 108
Wendell, ID 83355

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Senator Trounson:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

The hearing for the two applications on the Malad River will be held at the Council Room of City Hall, 308 5th Ave. West, Gooding, at 1:30 p.m. on Wednesday, November 9. The hearing for the application on Silver Creek near Hailey will be held at the Old County Courthouse, 206 1st Ave. South, Hailey, at 9:00 a.m. on Thursday, November 10. Please find enclosed two fact sheets describing the applications and a brochure about the minimum streamflow procedure.

On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 1 5 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Rep. Gordon R. Hollifield
Rt. 6
Jerome, ID 83338

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Representative Hollifield:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

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On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 1 5 1901

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Rep. Dan Kelly
9930 N. 10th E.
Mtn. Home, ID 83647

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Representative Kelly:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

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On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

MICROFILMED
APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

October 27, 1983

Rep. Mack W. Neibaur
Rt. 1, Box 1478
Paul, ID 83347

RE: Public Hearings Regarding Water Rights for Minimum Stream Flows

Dear Representative Neibaur:

The Idaho Department of Water Resources has scheduled public hearings on three minimum streamflow applications for water rights proposed in or near your legislative district. You may recall that in September the Idaho Water Resource Board held public meetings on four minimum streamflow applications. Based on public input the Board requested this Department to proceed with processing each of the applications except for the one on the Big Wood River, which they have requested to be held pending further investigation.

The hearing for the two applications on the Malad River will be held at the Council Room of City Hall, 308 5th Ave. West, Gooding, at 1:30 p.m. on Wednesday, November 9. The hearing for the application on Silver Creek near Hailey will be held at the Old County Courthouse, 206 1st Ave. South, Hailey, at 9:00 a.m. on Thursday, November 10. Please find enclosed two fact sheets describing the applications and a brochure about the minimum streamflow procedure.

On behalf of the Director of the Idaho Department of Water Resources, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

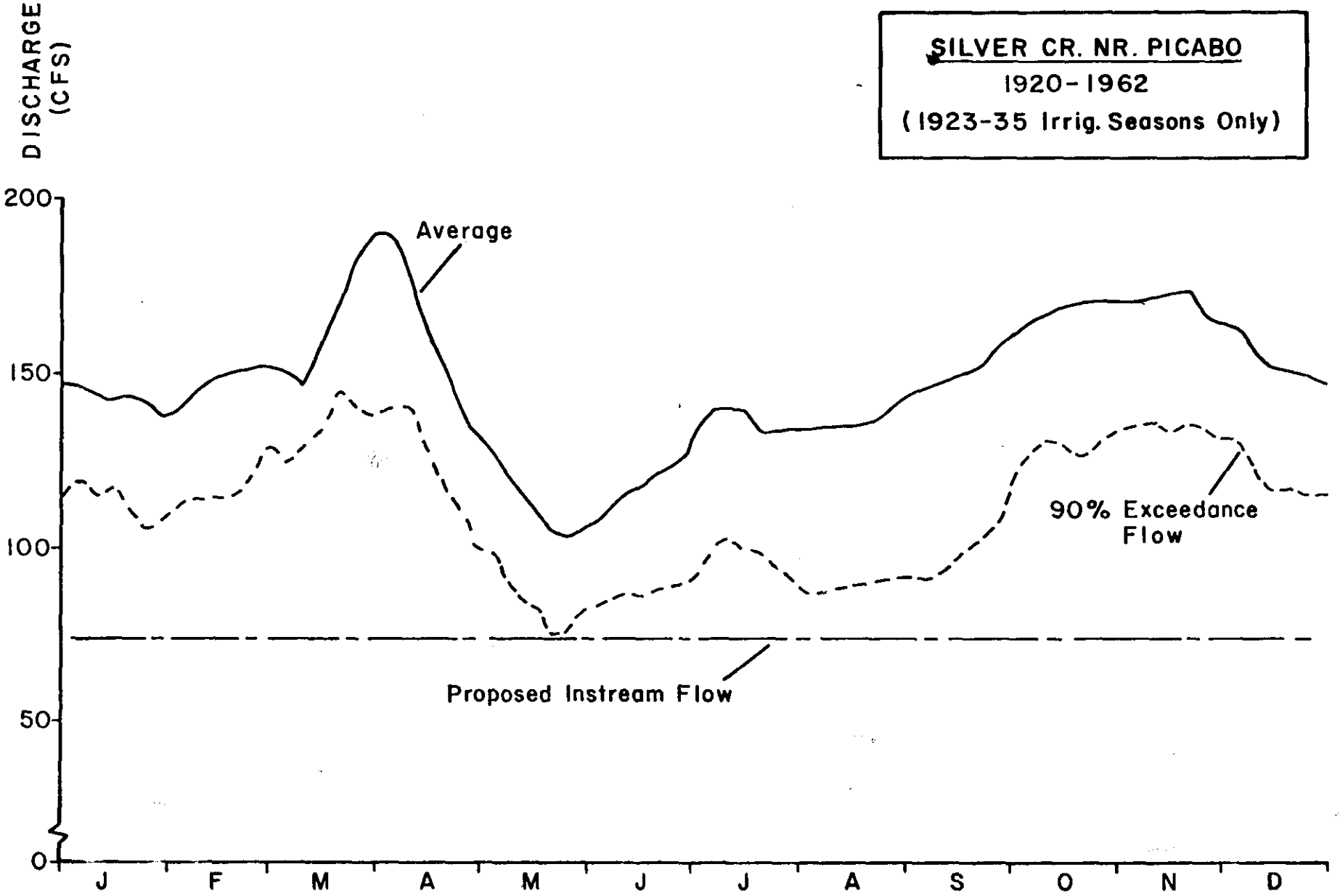
DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

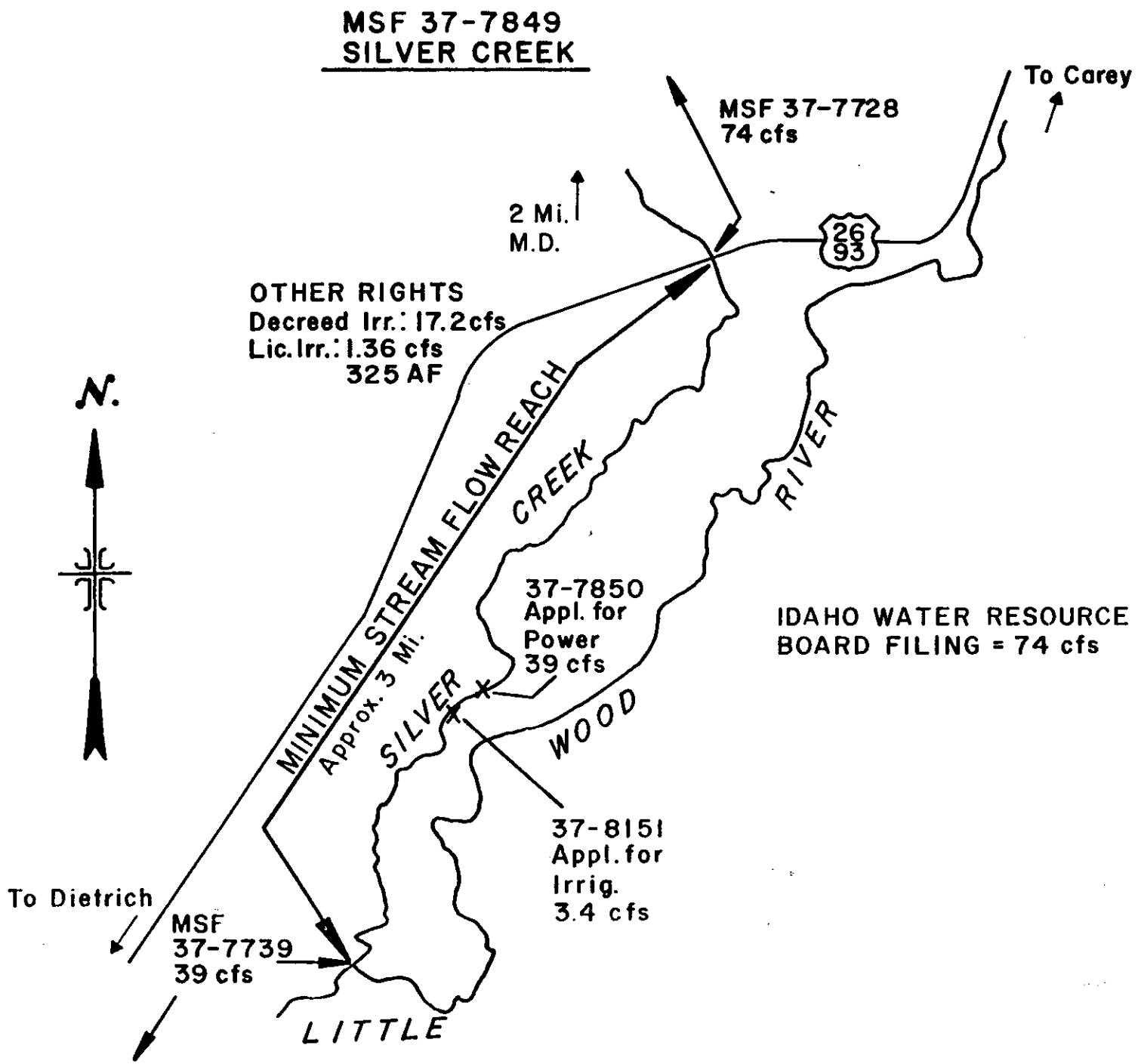
DRT:sc

Enclosures

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APR 13 1987

SUMMARY HYDROGRAPH DATA, SILVER CREEK




MSF 37-7849
SILVER CREEK
MSF 37-7728
74 cfs
To Carey
2 Mi.
M.D.
26
93
OTHER RIGHTS
Decreed Irr.: 17.2cfs
Lic. Irr.: 1.36 cfs
325 AF
N.
MINIMUM STREAM FLOW REACH
Approx. 3 Mi.
CREEK
RIVER
37-7850
Appl. for
Power
39 cfs
IDAHO WATER RESOURCE
BOARD FILING = 74 cfs
SILVER
WOOD
37-8151
Appl. for
Irrig.
3.4 cfs
To Dietrich
MSF
37-7739
39 cfs
LITTLE

MSF 37-7849
SILVER CREEK

HIGHWAY

TO CAREY

MSF 37-7728
74 cfs

2M.
M.D

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Lic Irr: 1.36 cfs
325 AF

REACH

MINIMUM STREAM FLOW

SILVER CREEK

WOOD RIVER

37-7850
APP FOR POWER
39 cfs

37-815
APP FOR IRR
3.4 cfs

LAVA

IDAHO WATER
RESOURCE BOARD FILING = 74 cfs.

N

TO DIETRICH

MSF 37-7739
39 cfs

Borrow Pit

BLAINE CO
LINCOLN CO

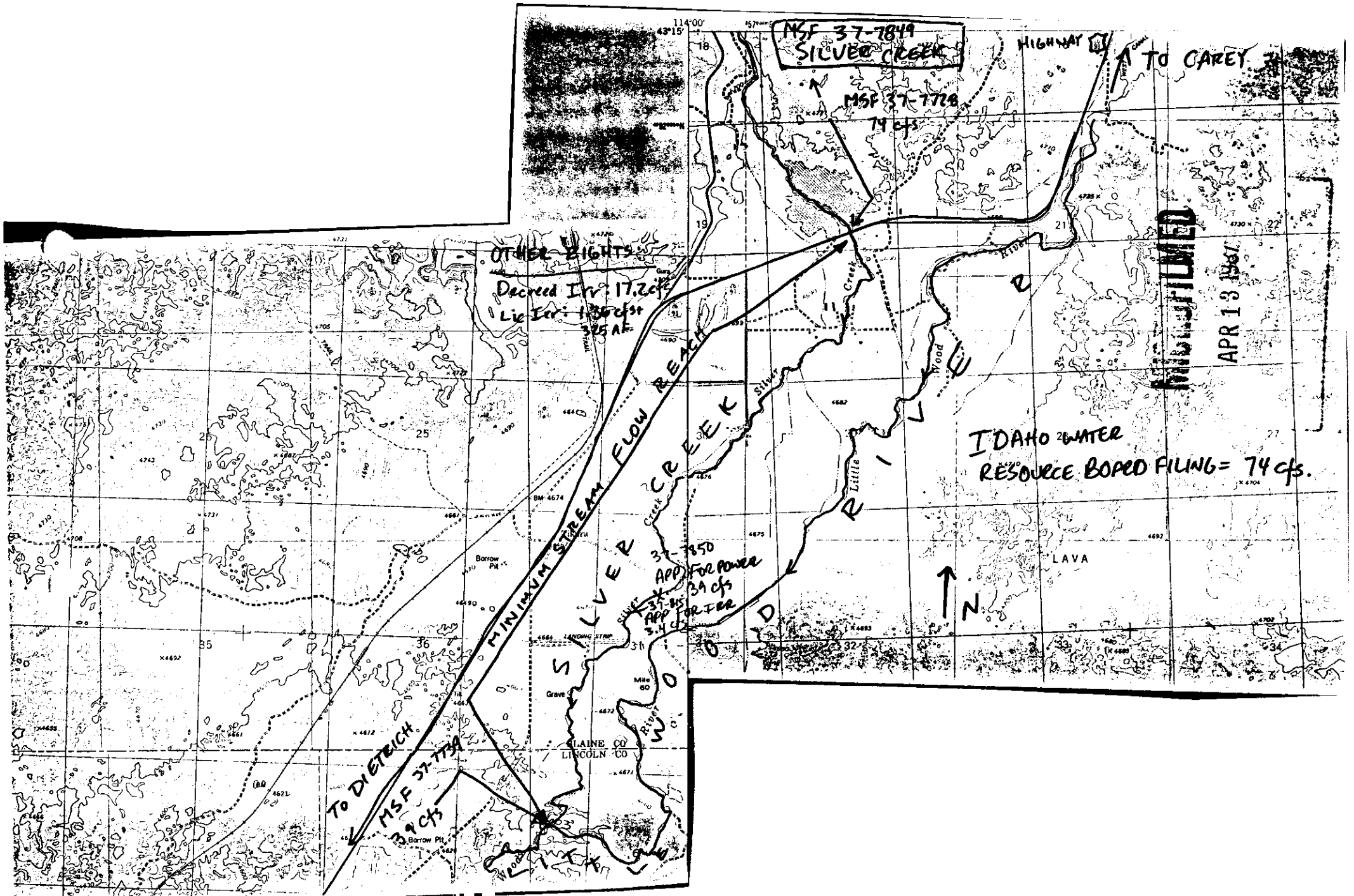
APR 13 1987

ATTENDANCE ROSTER

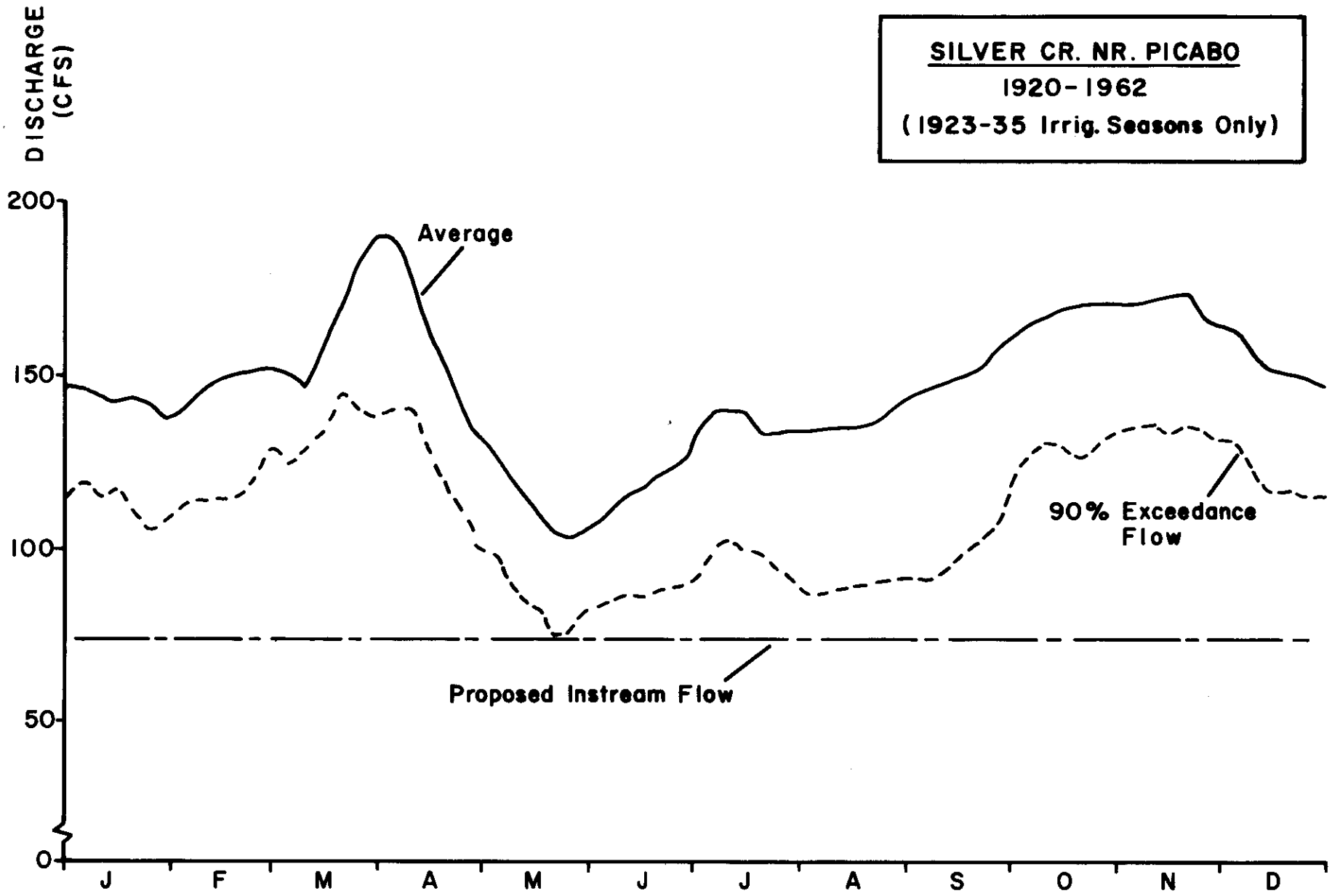
Public Meeting - Thursday, Sept. 22, 1983, at 7:30 p.m. at Wood River High School
Fox Acre Rd., Hailey for water rights numbers 37-7849 and 37-7919

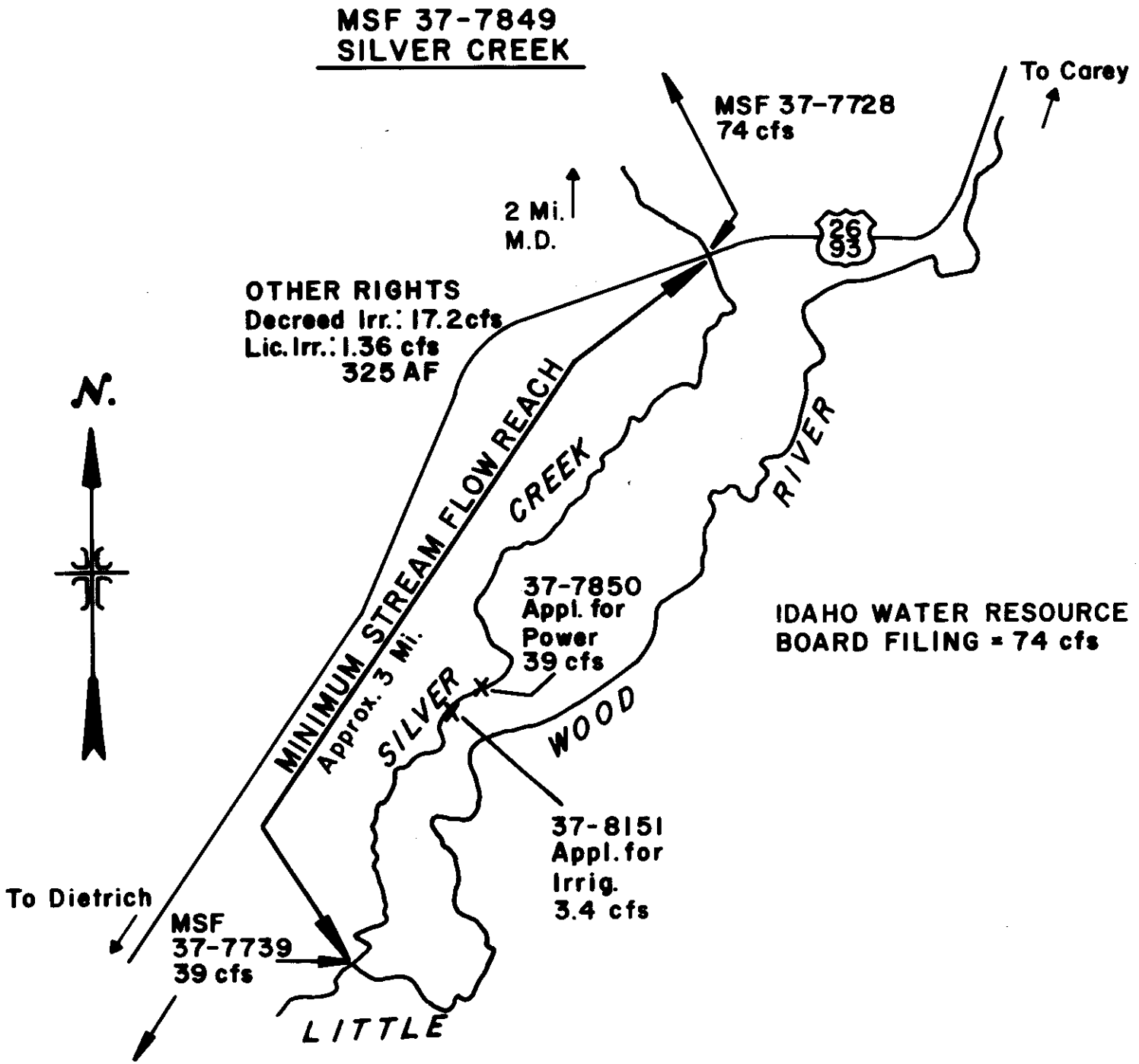
NAME	ADDRESS	REPRESENTING
Karen J. Crowell	Ketchum P.O. 1013	The Mountain Express
Dave Lewis	Hailey	Times-News
Gary Stivers	"	KSKI
Robert Sherwood.	SV PO 273	Hailey Forest R. Ranger Sawtooth Nat.
Ted Dennis	Bellevue.	
DUTCH HARPER	Box 895 Sun Valley	Sun Valley Fly Fishers
MACK NEIBAUR	Rt 1 Box 1478	Paul, Ida
EDNA "	" "	" "
Florence Blanchard	Box 225 Bellevue	
Dick Oncida	Shoshone, Id. 83352	Big Wood Canal
Reid J Newby	Shoshone, Idaho	Water Dist - 37-7371
Norm Young	Boise Idaho	IDWR
A.W. Mahoney	Bellevue Idaho	Box 400
Harold Dunsel	Bellevue Idaho	Box 690
RICHARD GOULEY	BOX 1051, HAILEY	LOWER BROADFORD RD
MILAN LEXA	Box 292 Bellevue	

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APR 15 1987


MSF 37-7849
SILVER CREEK
MSF 37-7728
74 cfs
HIGHWAY
TO CAREY
OTHER RIGHTS
Decreed Irr: 17.2cfs
Lic Irr: 1.36 cfs pt
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MINIMUM STREAM FLOW REACH
SILVER CREEK
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IDAHO WATER RESOURCE BOARD FILING= 74 cfs.
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39 cfs
37-855
APP FOR IRR
3.4 cfs
TO DIETRICH
MSF 37-7729
39 cfs
BLAINE CO
LINCOLN CO
LAVA
N

SUMMARY HYDROGRAPH DATA, SILVER CREEK




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Appl. for
Power
39 cfs
IDAHO WATER RESOURCE
BOARD FILING = 74 cfs
37-8151
Appl. for
Irrig.
3.4 cfs
To Dietrich
MSF
37-7739
39 cfs
LITTLE

AFFIDAVIT OF PUBLICATION

State of Idaho, } SS.
County of Lincoln }

Melba Thorne, being first duly sworn, deposes and says that he is the printer (publisher) of the Lincoln County Journal, a newspaper published every week in Shoshone, Lincoln County, State of Idaho; that said newspaper has been continuously and uninteruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 15 day of September 1983, and the date of the last publication was on the 22 day of September, 1983.

Melba Thorne

Subscribed and sworn to before me this 22 day of September, 1983.
(SEAL)

Maryellen Hagen
NOTARY PUBLIC

LINCOLN COUNTY JOURNAL
Shoshone, Idaho

COST OF PUBLICATION

Number of Lines in Notice		
Number of Insertions		
Lines tabular at	315c	
24 Lines straight at	~~21c~~ 14c	3.36
24 Subsequent lines at	~~15c~~ 26c	6.24
TOTAL COST		15.60

MICROFILMED
APR 13 1984

COPY OF NOTICE
(Paste Here)

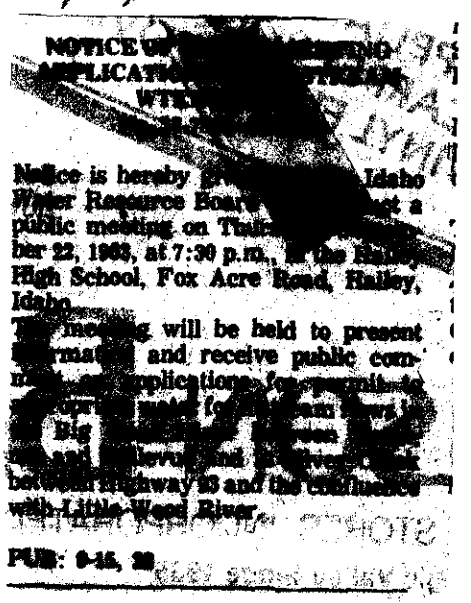
Notice of Public Meeting
TITLE OF NOTICE

37-7849-37-7919
PLAINTIFF ATTORNEY

DEFENDANT

PLAINTIFF

BILL TO
Dept of Water Resources


NOTICE OF [illegible] APPLICATION [illegible] WITH
Notice is hereby given [illegible] Idaho Water Resource Board will [illegible] at a public meeting on Thursday, September 22, 1983, at 7:30 p.m., in the Valley High School, Fox Acre Road, Hailey, Idaho. The meeting will be held to present information and receive public comments on applications for permits to appropriate water for [illegible] Big Wood River and its tributaries between Highway 93 and the confluence with Little Wood River.
PUB: 9-15, 22

PUBLICATION RATES
(Idaho Code, Rev. Statutes 1971)

7 pt. per line, straight	21c
7 pt. per line, tabular	315c
7 pt. per line, successive insertions	15c

RECEIVED
SEP 26 1983
Department of Water Resources
Southern District Office

AFFIDAVIT of PUBLICATION

State of Idaho, } SS.
County of Blaine }

GORDON O. CLAUSMANN, being first duly sworn, deposes and says that he is the printer (publisher) of the Wood River Journal, a newspaper published every week in Hailey, County of Blaine, State of Idaho; that said newspaper has been continuously and uninterruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 15 day of September 1983, and the date of the last publication was on the 22 day of September, 1983.

Subscribed and sworn to before me this _____ day of _____, 19____.
(SEAL)

NOTARY PUBLIC

WOOD RIVER JOURNAL
Hailey, Idaho

COST OF PUBLICATION

Numer of Picas per Line 13
Number of Lines in Notice 21
Number of Insertions 2

_____ Lines tabular at _____ 4¢ / Pica
21 Lines straight at 8.19 3¢ / Pica
21 Subsequent lines at 5.46 2¢ / Pica
TOTAL COST 13.65

MICROFILMED
OCT 13 1981

COPY OF NOTICE
(Paste Here)

Instream Water Rights - No 37-7849-37-7919
TITLE OF NOTICE
PLAINTIFF ATTORNEY

DEFENDANT

PLAINTIFF

Dept of Water Resources
1041 Blue Lake Blvd N. TF
BILLING

[redacted]
No. 37-7849 - 37-791[redacted]
NOTICE IS HEREBY GIVEN, That the Idaho Water Resource Board will conduct a public meeting on Thursday, September 22, 1983, at 7:30 p.m., at Wood River High School, Fox Acre Road, Hailey, Idaho.
The meeting will be held to present information and receive public comment on applications for permit to appropriate water for instream flows in the Big Wood River between Ketchum and Bellevue and in Silver Creek between Highway 93 and the confluence with the Wood River [redacted]

PUBLICATION RATES
(Idaho Code, Rev. Statutes 1980)

7-8 pt. per line, straight	3¢ / Pica
7-8 pt. per line, tabluer	4¢ / Pica
7-8 pt. per line successive insertions	2¢ / Pica

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No SEP 26 2128 1983
Department of Water Resources
Southern District Office

ADVERTISING PRINTING OFFICE SUPPLIES

PHONE 788-3444 BOX 988
HAILEY, IDAHO 83333

WOOD RIVER JOURNAL

ONE MEDIUM • ONE COVERAGE • ONE COST

ACCOUNT NO.	DATE
52429-8	9/13/93

M Dept Water Resources

CASH ☑
CHARGE ☐
ON ACCT. ☐
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DISPLAY ☐
CLASS ☐
SUPPLIES ☐
MISC.

QUAN.	DESCRIPTION	AMOUNT
	Nos. 37-3249-37-7919	
	13 Pubs	
	21 Lines	
	2 Inserts	
21	Lines @ 39¢	8 19
		5 46

JE	SPECIAL RATE	START DATE	EXPIRE DATE	
	MULTILINED			13.65

NEW ACCT.	RENEWAL	PZ	STATE	BILL	CYCLE	LEGAL NO.
		APR 13 1981				2128

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MBF

68817 BY

PLEASE RETAIN THIS TICKET FOR YOUR RECORDS
MOORE DEALER - NORTH SIDE NEWS

Minimum flows ought to be set

The Idaho Water Resource Board, at the urging of the Fish and Game Department, is considering setting minimum stream flows on sections of the Malad and Big Wood rivers and Silver Creek.

That action is crucial to protecting some key recreational resources in our area. The Water Board should proceed rapidly to set the minimum flows.

Last week's hearings on the subject underscored the urgency for immediate action. Dave Tuthill, supervisor of water allocations for the Department of Water Rescources, said the real threat to maintaining the flows in the streams comes from hydroelectric development. Under state law, water diverted for irrigation — a consumptive use — does not threaten minimum flow because of downstream rights. Irrigators must leave enough water in the rivers to satisfy the needs of downstream water users.

But the situation changes for hydroelectric diversions — non-consumptive uses. A hydro project can divert water as long as it eventually returns it to the river to satisfy later consumptive uses. Meanwhile, the stretch of river from which the water is diverted can fall below minimum flow levels.

Add to this situation the current boom of small hydro projects in the state and the nature of the threat becomes clear.

This is not to say that development of hydro projects should not be allowed to proceed. Such projects provide a sound contribution to our economy with relatively little environmental damage.

But development must be balanced against protection of the recreational value of our streams.

For instance, the stretch of the Big Wood under consideration provides 11,160 "angler days" of fishing each season, which translates to $396,550 pumped into our economy. That figure understates the river's contribution to our quality of life.

The Water Resource Board should recognize the value of those streams to the residents of the area and act to protect our resource when it addresses the issue next month.

TIMES–NEWS
Twin Falls, Idaho
SEP 27 1983

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APR 13 1987

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF MINIMUM STREAM FLOW APPLICATIONS NOS. 37-7849, 37-7892, 37-7920, 96-7979 AND 96-7980	A RESOLUTION

WHEREAS, pursuant to Chapter 15, Title 42, Idaho Code, the Idaho Water Resource Board (Board) has the authority to appropriate the unappropriated waters of streams in Idaho for the purpose of establishing minimum stream flows; and,

WHEREAS, the Board has submitted to the Director of the Idaho Department of Water Resources (Director) five applications to appropriate water for minimum stream flows identified as follows: No. 37-7849, Silver Creek; No. 37-7892, Malad River; No. 37-7920, Malad River; No. 96-7979, Lightning Creek; and No. 96-7980, Grouse Creek; and,

WHEREAS, in accordance with the adopted guidelines on minimum stream flow applications, the Board has conducted informal public meetings to determine public interest with respect to said applications; and,

WHEREAS, the Board has reviewed the public comments and has determined that each of the said applications is reasonable and in the public interest;

NOW, THEREFORE, BE IT Resolved that the Board request the Director to proceed with administrative actions on each of the five said applications.

Dated this 7th day of October, 1983.

GENE GRAY
Chairman, Minimum Stream Flows Committee

DON KRAMER
Chairman, IWRB

Attest: FRANKLIN JONES
Secretary, IWRB

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APR 13 1987

On September 14, 1983 copies of the attached materials were sent to the property owners and waterusers identified on the attached mailing labels.

Sharla Curtis

SHARLA CURTIS

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MINIMUM STREAM FLOW
Fact Sheet

Water Right No.: 37-7892

Source: Malad River (Big Wood River) tributary to the Snake River

Applicant: Idaho Water Resource Board

Requesting Agency: Idaho Department of Parks and Recreation

Date Application Filed: March 27, 1981

Rate of Flow: 75 cubic feet per second year around

Location of Reach: From the diversion dam of Justice and Thorpe ditches within the SE¼SW¼ SEction 30, Township 6 South, Range 14 East downstream to the Devil's Washbowl within the SE¼SE¼ Section 30, Township 6 South, Range 14 East.

Purposes: Aesthetics with respect to the 60 foot waterfall at Devil's Washbowl within Malad Gorge State Park, and habitat for fish, waterfowl and animals within the reach.

Public Meeting: Wednesday, September 21, 1983, at 7:30 p.m. at Gooding High School, 1050 S. 7th Ave. W.

Water Right No.: 37-7920

Source: Malad River (Big Wood River) tributary to the Snake River

Applicant: Idaho Water Resource Board

Requesting Agency: Idaho Department of Fish and Game

Date Application Filed: June 19, 1981

Rate of Flow: 39 cubic feet per second

Location of Reach: From the confluence with the Snake River within the NE¼NW¼ Section 34, Township 6 South, Range 13 East upstream approximately 1 mile to the Idaho Power Company diversion in the NW¼NE¼ Section 35, Township 6 South, Range 13 East.

Purpose: To maintain trout rearing and spawning habitat.

Public Meeting: Wednesday, September 21, 1983, at 7:30 p.m. at Gooding High School, 1050 S. 7th Ave. W.

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MINIMUM STREAM FLOW
Fact Sheet

Water Right No.: 37-7849

Source: Silver Creek tributary to the Little Wood River

Applicant: Idaho Water Resource Board

Requesting Agency: Idaho Department of Fish and Game

Date Application Filed: August 26, 1980

Rate of Flow: 74 cubic feet per second year around

Location of Reach: From the point where Silver Creek is crossed by the Highway 93 bridge within the NW¼SE¼ Section 20, Township 2 South, Range 21 East, downstream about 3 miles to the confluence with the Little Wood River within Lot 5, Section 6, Township 3 South, Range 21 East.

Purpose: To maintain wild trout rearing, spawning and migration within the described reach.

Public Meeting: Thursday, September 22, 1983, at 7:30 p.m. at Wood River High School, Fox Acre Road, Hailey.

Water Right No.: 37-7919

Source: Big Wood River tributary to the Snake River

Applicant: Idaho Water Resource Board

Requesting Agency: Idaho Department of Fish and Game

Date Application Filed: June 19, 1981

Rate of Flow: 70 cubic feet per second year around

Location of Reach: From the Bellevue diversion within the SW¼NW¼ Section 36, Township 2 North, Range 18 East upstream to the confluence with Warm Springs Creek in the SE¼NW¼ Section 13, Township 4 North, Range 17 East.

Purpose: To maintain trout habitat

Public Meeting: Thursday, September 22, 1983, at 7:30 p.m. at Wood River High School, Fox Acre Road, Hailey.

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Re: Minimum Stream Flow Application on Silver Creek

Dear Property Owner:

The Idaho Water Resource Board will be holding a public meeting to solicit public input regarding a proposed minimum streamflow water right on a reach of Silver Creek. According to the records at the county courthouse, you are one of the owners of property adjacent to the reach where the minimum streamflow is proposed.

Information describing the application and the time and place of the meeting is shown on the enclosed fact sheet. Also enclosed is a brochure which describes the minimum streamflow procedure.

At the meeting you will have an opportunity to learn more about the application and to express your views. On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Re: Minimum Stream Flow Application on Silver Creek

Dear Wateruser:

The Idaho Water Resource Board will be holding a public meeting to solicit public input regarding a proposed minimum streamflow water right on a reach of Silver Creek. According to the records of this Department, you have a water right for which the point of diversion is located in or near the proposed minimum streamflow reach.

Information describing theh application and the time and place of the meeting is shown on the enclosed fact sheet. Also enclosed is a brochure which describes the minimum streamflow procedure.

At the meeting you will have an opportunity to learn more about the application and to express your views. On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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State of Idaho
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STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Senator Claire Wetherell
360 E. 15th N.
Mtn. Home, ID 83647

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Senator Wetherell:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

David R. Tuthill

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Rep. Dan Kelly
9930 N. 10th E.
Mtn. Home, ID 83647

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Representative Kelly:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

David R. Tuthill, Jr.

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Supervisor, Water Allocation Section

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Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Rep. Mack W. Neibaur
Rt. 1, Box 1478
Paul, ID 83347

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Representative Neibaur:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

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Supervisor, Water Allocation Section

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Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Rep. Gordon R. Hollifield
Rt. 6
Jerome, ID 83338

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Representative Hollifield:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

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Supervisor, Water Allocation Section

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Enclosures

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Rep. John H. Brooks
Rt. 2, Box 233
Gooding, ID 83330

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Representative Brooks:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

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Supervisor, Water Allocation Section

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Senator Wes Trounson
Rt. 2, Box 108
Wendell, ID 83355

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Senator Trounson:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

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Supervisor, Water Allocation Section

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STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Rep. Steve Antone
1141 Link St.
Rupert, ID 83350

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Representative Antone:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

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Supervisor, Water Allocation Section

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Rep. Mark A. Larson
525 Samarra Dr.
Mtn. Home, ID 83647

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Representative Larson:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

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On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

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DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 13 1987

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 14, 1983

Senator John Peavey
Box 88
Carey, ID 83320

RE: Public Meetings Regarding Water Rights for Minimum Stream Flows

Dear Senator Peavey:

The Idaho Water Resource Board is planning to hold public meetings to solicit public input and reaction to four minimum streamflow applications for water rights proposed in or near your legislative district.

Two applications on the Malad River will be reviewed at a meeting at the Gooding High School at 7:30 p.m. on Wednesday, September 21. One application on the Big Wood River near Hailey and one application on Silver Creek near Carey will be discussed at a meeting at the Wood River High School in Hailey on Thursday, September 22, also at 7:30 p.m. Please find enclosed two fact sheets regarding the applications and a brochure which describes the minimum streamflow procedure.

On behalf of the Idaho Water Resource Board, you are cordially invited to attend.

Sincerely,

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DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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APR 13 1987

37-7849

Richard Payne
Box 113
Carey, ID 83320

Andy Payne
103 E. B
Shoshone, ID 83352

Bill Molyneaux
Picabo, ID 83348

John Durfee
Rt. 1, Box 65A
Carey, ID 83320

Henry Jones
Box 87
Carey, ID 83320

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APR 13 198

Joseph B. Sorenson
c/o S.A.M. Twin Falls Airport
Twin Falls, ID 83301

A. W. Molyneux
Box 400
Bellevue, ID 83313

37-7849

~~John Durfee~~
Carey, ID 83320

Dup

~~Henry Jones~~
Box 87
Carey, ID 83320

Dup

Joe Sorenson
S.A.M. Airport, Inc.
Twin Falls, ID 83330

Wm. A. & Adelaide B. Hodgman
Shoshone, ID

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APR 13 1987

Dave T.

FOR IMMEDIATE RELEASE

September 9, 1983

State of Idaho, Statehouse, Boise, Idaho 83720
Phone: (208) 334-4440

NEWS RELEASE

BOISE--Two proposed minimum stream flow applications, one on Silver Creek and the other on the Big Wood River, both in Blaine County, will be discussed at a public meeting, Thursday, September 22 at 7:30 p.m. Gene M. Gray, vice chairman, Idaho Water Resource Board (IWRB) will conduct the meeting at Wood River High School, Fox Acre Road, Hailey.

The Silver Creek application, #37-7849, seeks a 74 cubic feet per second (cfs) flow all year-round from the point where Silver Creek flows under the Highway 93 bridge downstream to the confluence with the Little Wood River. This reach is downstream from the two approved minimum stream flow water right permits on Silver Creek.

The flow would maintain wild trout rearing, spawning and migration, according to Gray.

The second application, #37-7919, seeks a 70 cfs instream flow on the Big Wood River from the confluence with Warm Springs Creek downstream about 18 miles to the Bellvue diversion.

The application, Gray said, seeks to maintain the trout habitat in that particular reach of the river. Both applications were filed by the Idaho Water Resource Board at the request of the Idaho Department of Fish and Game and officials from that agency will attend the meeting to answer questions and discuss the applications.

Gray encourages anyone to wishes to comment on either the Silver Creek or

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more

Big Wood River applications to attend the meeting, since the board has the option of amending, withdrawing or proceeding with its applications, based on public comment.

As required by law, the Idaho Department of Water Resources will conduct public hearings on the two applications later in the year, perhaps in November. After the hearings, the applications will be reviewed by the director, Idaho Department of Water Resources, for approval or denial. If approved, the applications must then be sent to the Idaho Legislature, which may approve or reject them.

Gray stressed that the minimum stream flow rights are junior to older, established water rights with earlier priority dates.

-30-

Kay Weaver
Information Specialist

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