

FAX Transmission Sheet

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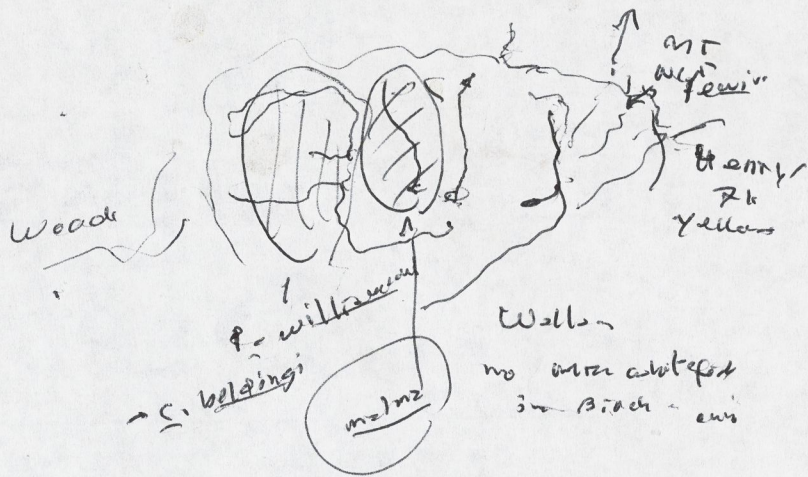
From: Don Johnson
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University of Northern Iowa
College of Business Administration

Subject: Reply

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COMMENTS:

Lost, Little Lost, Birch, Medicine Lodge, Beswan, Comer



HEM 48

Wood R. S. clarkii
very

Shortland sculpin S. confusus

in all independent drainage

* only Col. (not no-

or Henry's 92

(not above
Shore's 7th)
526

BIRCH CREEK, IDAHO
STREAM SURVEY REPORT

*Preliminary
Copy*

BUREAU OF LAND MANAGEMENT
IDAHO FALLS DISTRICT

IDAHO DEPARTMENT OF FISH & GAME
IDAHO FALLS, IDAHO

JULY 1976

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BIRCH CREEK IDAHO STREAM SURVEY REPORT

Introduction

As a part of the intensive inventory of Birch Creek, a physical stream survey was conducted in June, 1975. The survey was an interagency project between the Idaho Department of Fish & Game, Fisheries Division, and personnel from the Bureau of Land Management. Training, assistance and analysis of the survey data was provided by the Fisheries Biologist from the BLM Oregon State Office.

The survey was conducted on the portion of Birch Creek from the Reno Ditch diversion up to and including all the tributaries forming the headwaters, a stream distance of approximately 22 miles.

Personnel involved in the survey were as follows:

- R. Culbertson, Wildlife Biologist, Idaho Falls District
- R. Borovicka, Oregon State Office, BLM
- H. Hendrick, Salmon District, BLM
- S. Robinson, Idaho Falls District, BLM
- W. Ball, Idaho Department of Fish & Game
- P. Jeppson, Idaho Department of Fish & Game

Description

Birch Creek is the major feature of the valley floor that drains the area between the southern end of the Lemhi Mountains on the west and the Beaverhead Mountains on the east. The stream originates from a complex of springs in the upper portion of the valley. The creek meanders through private, state and national resource lands. During the irrigation season, the water is completely diverted into the Reno irrigation ditch, approximately 20 miles downstream from the headwaters. The stream system is in a closed basin where undiverted water sumps out on the Idaho National Engineering Laboratory of the Energy Research and Development Administration. It is presumed that the water becomes a part of the Snake River Aquifer.

The stream carries a flow of high quality water on a perennial basis that averages between 53 to 149 cfs. Birch Creek is considered from medium to rich in abundance and quantity of aquatic organisms. (Table 3) Water analysis is an indication of the nutrient load in the stream. (Table 2)

State Highway 28 parallels and crosses the creek in three locations through the valley. Several unimproved roads parallel the stream on natural resource lands. Physical access is available on all NRL and State lands and general fishing is permitted by permission on private lands. Birch Creek is located in Butte, Clark, and Lemhi Counties, Idaho and is in the eastern portion of the Birch Creek-Little Lost River Planning Unit.

The stream is considered one of the most important trout waters on NRL in eastern Idaho and is a very popular fishing area for both residents and tourists. Ease of access, good fish production and interesting outdoor habitat contribute to its popularity in Idaho. The extreme upper portion of the stream has abundant natural reproduction of trout, both Rainbow and Brook. The lower portion of the water on NRLs contains natural stocks of fish but is periodically stocked by the Idaho Department of Fish & Game with catchable Rainbow Trout.

The creek is characterized by having only one live tributary (Pass Creek) in the central portion of the watershed. Pass Creek is entirely diverted for irrigation of fields during the irrigation season.

Methodology

The Physical and Biological Stream Survey Book, 6670-1, was used by field personnel during the survey. Data collected was compiled from the field form and transferred to Form 6670-2, the Physical and Biological Stream Survey Report (Appendix 1-2).

The most intensive survey was conducted on the lower nine miles of stream. This section is almost entirely on NRL with some interspersed State of Idaho lands. The reason for the more intensive survey in this area was the condition of the habitat and the opportunity for management on NRL. All of the stream on private lands was surveyed to determine condition of the aquatic habitat, riparian cover and riffle-pool frequency. The upper portion of the stream near Kaufman Guard Station was surveyed to determine the amount of riffle and pool area and the general condition of the aquatic and riparian habitat. Aerial photographs (1-20,000) were used to divide the area in quarter-mile sections for purposes of the survey. Survey data was collected by sub-section in the normal quarter-mile section that is standard for this method of stream survey.

Little water quality data was collected because of the detailed analysis available in the files of Idaho Department of Fish & Game and the data available as a result of the Limnological investigations published in the thesis by Douglas A. Andrews. The study is listed as Appendix E in the Birch Creek Habitat Management Plan. (Table 2) This same study included extensive

collections and identification of aquatic organisms. (Table 3) Streamflow data was recorded at two USGS gauging stations and reproduced in Appendices A and B in the Birch Creek Habitat Management Plan.

Objectives

1. To record the physical parameters by specific location as listed in BLM Stream Survey Manual 6671.
2. To analyze the collected data to determine limiting factors.
3. To inspect and record the need and location of possible habitat improvements as a basis for future fishery habitat improvement.
4. To use the survey as an important part of the intensive inventory of the Birch Creek Aquatic Habitat Management Planning Area.

Results

Physical Survey. The physical inventory that delineated the stream bottom type, including pool area, clearly depicted the contrast between the fishery habitat on NRL as compared to private and protected lands under State ownership. The statistics indicate the low percentage of pool area and streamside cover in the lower nine miles of stream on NRL. (Figure 1, Table 4) The natural resource lands have had no protection from livestock grazing in the past, except for a small experimental area. The private lands from river mile 9 up to river mile 17 exhibit almost a 50-50 riffle-pool relationship and 75 percent stream shading. The majority of private lands along the stream have been fenced and have had limited livestock use because of cultivated fields or other agricultural uses.

Discussion

Factors that limit the maximum production of fish in the aquatic habitat of Birch Creek are as follows:

1. There is historical heavy utilization of riparian vegetation by livestock along the stream on NRL. This heavy use of the riparian area has broken down stream banks and suppressed growth of woody plants. As a result, fish habitat in the form of pools, undercut banks and deep meanders has been eliminated.
2. Past channel changing activities for water flow movement have increased the velocity of the water and destroyed trout habitat.
3. Increases in water turbidity and sediment due to unstable streambanks affect water quality and causes impaction of gravel and covering of gravel with silt.

4. Headwater streams need habitat protection to increase trout habitat and to protect water quality.
5. Excessive recreational use by campers along the stream has reduced riparian vegetation in some areas.
6. There may be a serious loss of trout in the irrigation ditches because they are not screened.
7. Winter conditions on the stream are not well documented. The stream habitat changes caused by anchor ice and concentrations of fish in the winter should be investigated.

Recommendations

1. Control livestock use by complete protection of the riparian area on NRL.
2. Use instream structures where necessary to provide the needed trout habitat. Location of structures should be determined from the detailed stream survey results.
3. Control the use of day and overnight camping to limit pressures on the riparian habitat.
4. Implement the Aquatic Habitat Management Plan.
5. Establish baseline studies of fish abundance and evaluate the operational activities.
6. Negotiate for the control of the riparian habitat on the stream and tributary complex above Kaufman Guard Station.

Table 1. Significant characteristics for trout stream condition found in Birch Creek, Idaho, June, 1975

<u>Item</u>	<u>Amount</u>
Gravel -	
Mile 0.00 - 9.00	84,059 square yards
" 9.00 - 17.00	62,050 " "
" 17.00 - 22.00	<u>25,420 " "</u>
Total	171,529 " "
Pool to Riffle Ratio	32 - 68
Pools	32%
Average area shaded	36%

Table 2

Limnological parameters of Birch Creek, Idaho
1970-71 (Andrews, 1972)

PARAMETER

Water Temp. °C	(15 May 1970) SPRING	19
	(23 Nov 1970) FALL	2
	(22 Jan 1971) WINTER	-0.5
pH	SPRING	8.2
	FALL	8.2
	WINTER	8.3
m.p. Alkalinity as CaCO ₃ -mg/1	SPRING	160
	FALL	144
	WINTER	140
Hardness as CaCO ₃ --mg/1	SPRING	128
	FALL	168
	WINTER	160
Specific Conductance--mhos/cm	SPRING	650
	FALL	530
	WINTER	580
Turbidity--J.T.U.	SPRING	54
	FALL	4
	WINTER	39
Nitrate (NO ₃)--mg/1	SPRING	T
	FALL	.15
	WINTER	.15
Phosphate (PO ₄)--mg/1 (total)	SPRING	.23
	FALL	.22
	WINTER	.38
Discharge--M ³ /sec	SPRING	2.605
	FALL	2.573
	WINTER	2.215

T = Trace

Table 3. Invertebrate fauna collected in Birch Creek
1970-71. (From Andrews, 1972)

TAXON

Diptera

Chironomidae
Simulium sp.
Tipula sp.
Dicranota sp.
Heleidae
Pericoma sp.

Coleoptera

Optioservus quadrimaculatus
Bidessus sp.
Hydaticus sp.
Dubiraphia sp.

Ephemeroptera

Baetis tricaudatus
Ephemerella grandis
E. inermis
Rhithrogena hageni
Paraleptophlebia heteronea
Ephemerella flavilinea
Ameletus oregonensis
A. velox
Tricorythodes minutus

Plecoptera

Acroneuria pacifica
Isoperla fulva
Arcynopteryx parallela
Pteronarcella badia
Alloperla sp.
Classcutia sabulosa
Isogonus sp.
Capnia sp.
Isoperla mormona
Pteronarcys californica
Nemoura sp.
Isoperla patrica

Trichoptera

Brachycentrus occidentalis
Hydropsyche sp.
Glossosoma sp.
Arctopsyche grandis
Lepidestoma sp.
Helicopsyche borealis
Hesperophylax sp.
Limnephilus sp.
Drusus sp.
Micrasema sp.
Parapsyche elais
Athripsodes sp.
Oecetis sp.
Chimarra sp.
Rhyacophila vaccua
Rhyacophila acropedes

Annelida

Hirudinea

Acarina

Hydracarina

Amphipoda

Gammarus lacustris
Hyaella azteca

Hemiptera

Callicorixa sp.

Neuroptera

Sialis sp.

Playhelminthes

Turbellaria

Mollusca

Lyrmaea sp.
Physa sp.
Gyraulus sp.
Pisidium sp.
Sphaerium sp.

Odonata

Argia sp.
Ophiogomphus sp.

Table 4. Comparison of percentage of pools and average stream area shaded by one mile sections.
 Birch Creek, Idaho, 1975

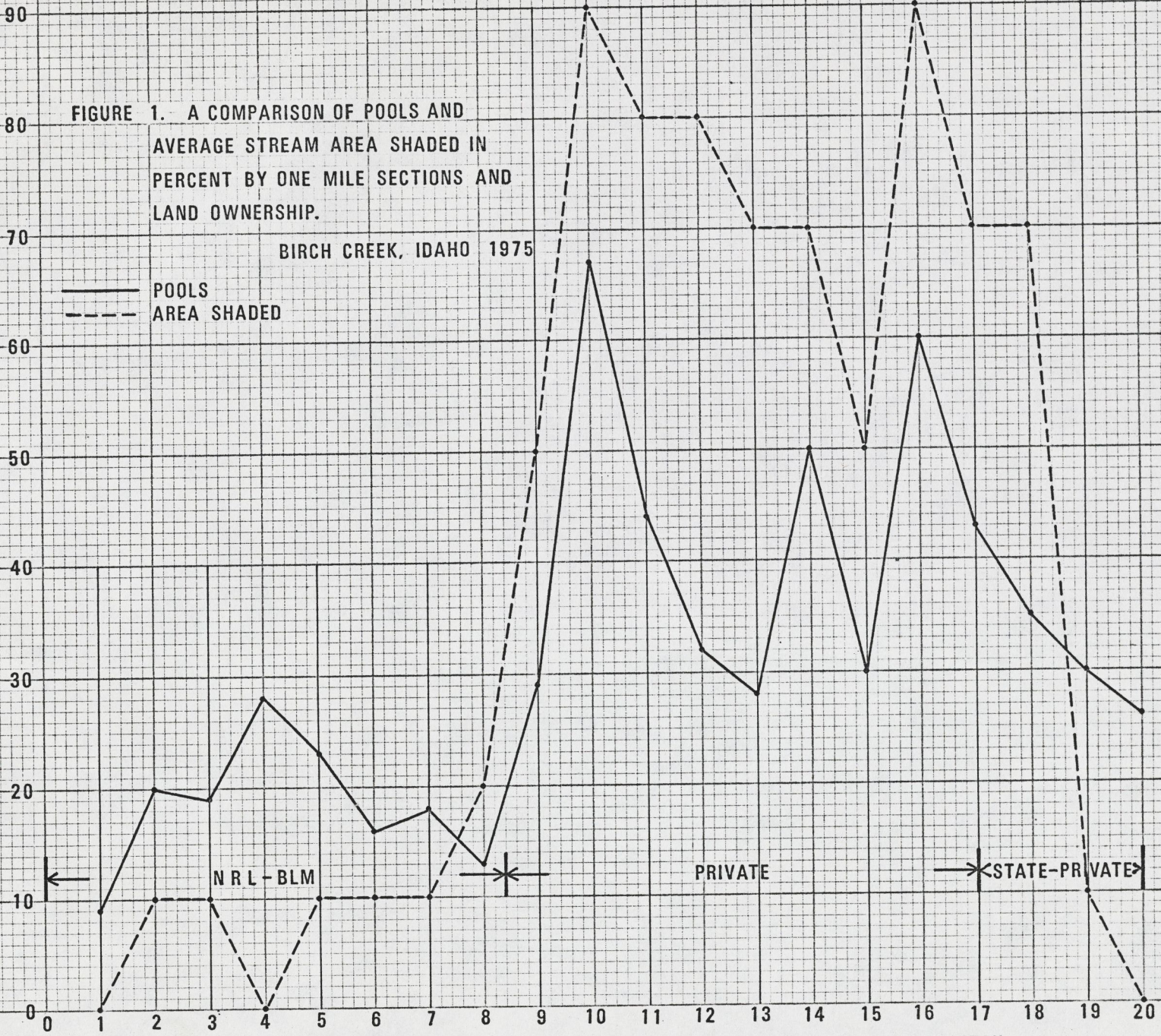
<u>Pools</u>	<u>Percent Area Shaded</u>	<u>Stream Milepost</u>	<u>Major Land Ownership</u>
9	0	1	National Resource Lands
20	10	2	"
19	10	3	"
28	0	4	"
23	10	5	"
16	10	6	"
18	10	7	"
13	20	8	State-Private
29	50	9	Private
67	90	10	"
45	80	11	"
32	80	12	"
28	70	13	"
50	70	14	"
30	50	15	"
60	90	16	"
44	70	17	Private-State
35	70	18	Private
30	10	19	"
26	0	20	"
0	0	21	"
0	0	22	"
		8	

FIGURE 1. A COMPARISON OF POOLS AND
AVERAGE STREAM AREA SHADED IN
PERCENT BY ONE MILE SECTIONS AND
LAND OWNERSHIP.

BIRCH CREEK, IDAHO 1975

POOLS
AREA SHADED

P
E
R
C
E
N
T



STREAM MILES UPSTREAM FROM RENO DITCH

NRL-BLM

PRIVATE

STATE-PRIVATE

FIG. 2 - Birch Creek Survey - Profile - Typical Type "A" Pool (lower stream)

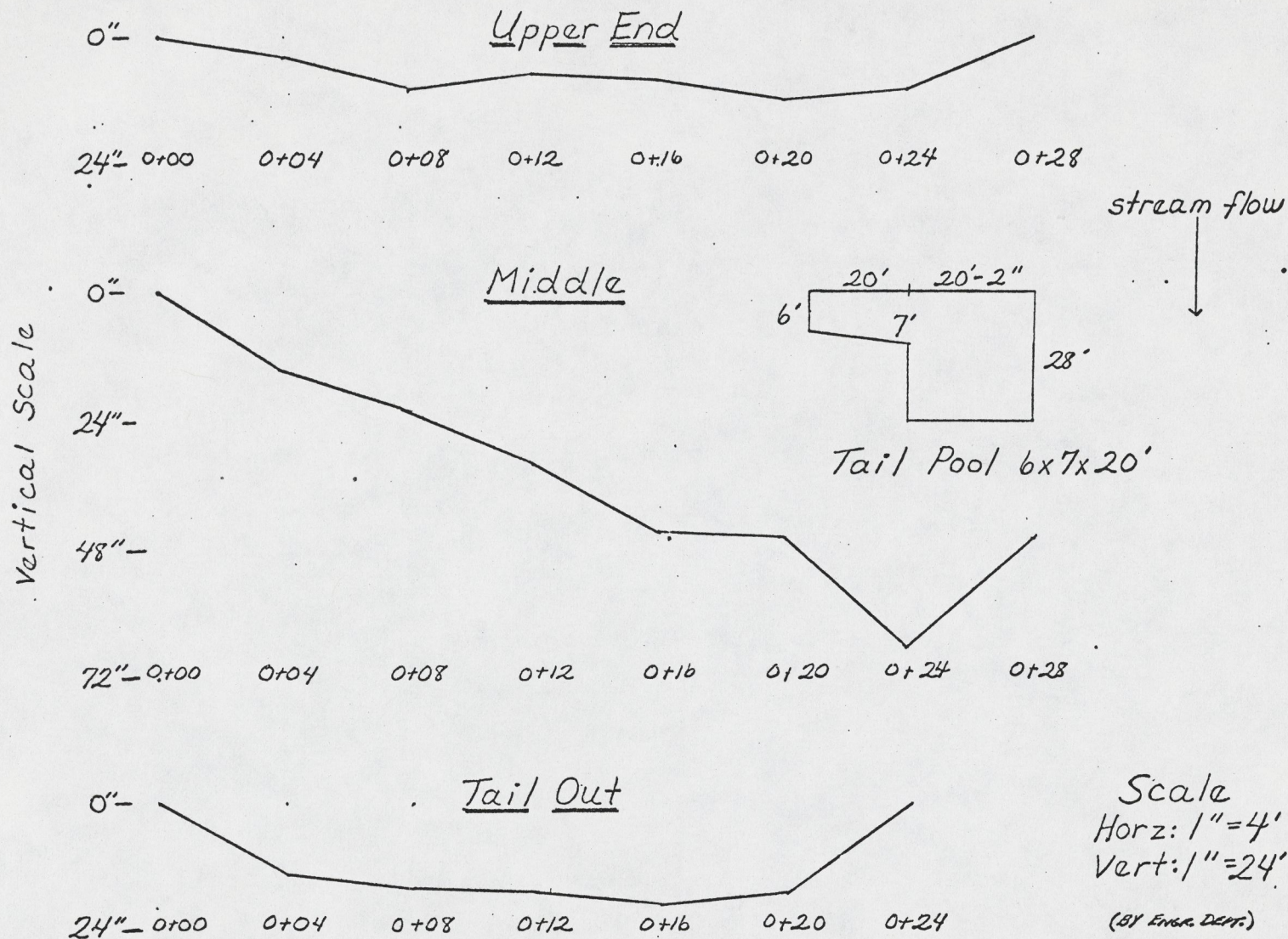
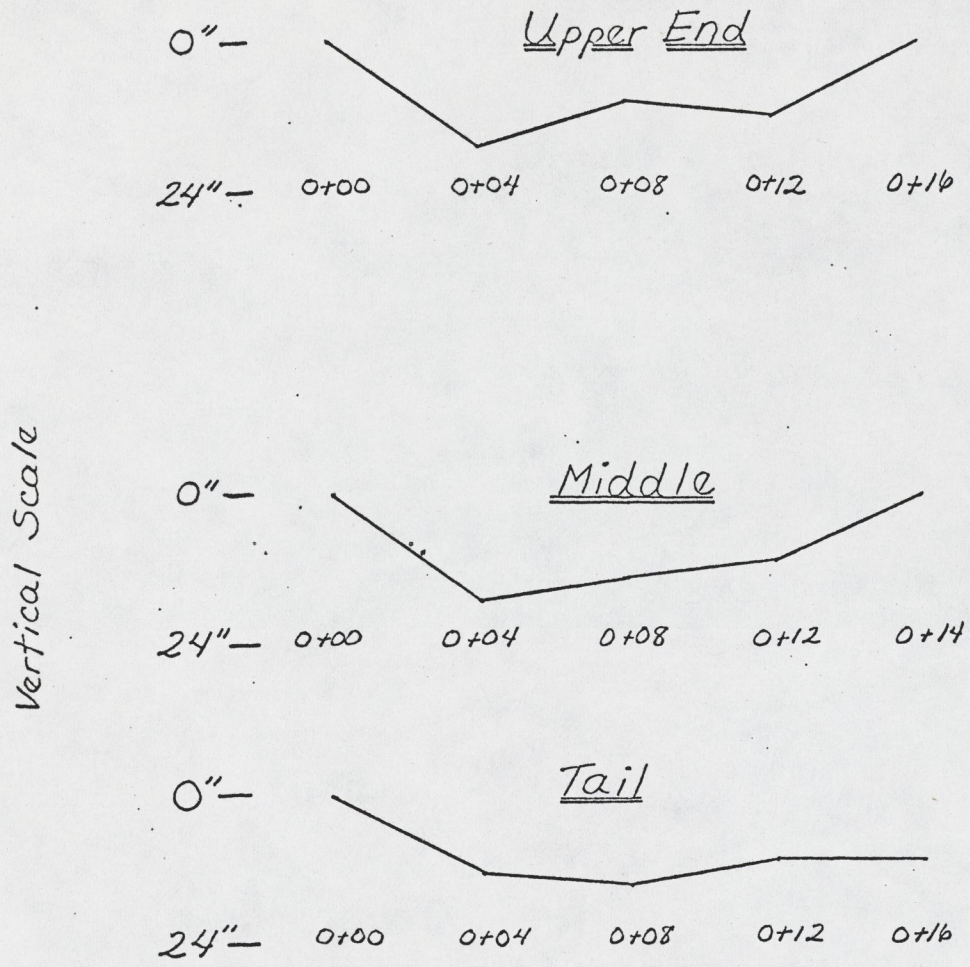


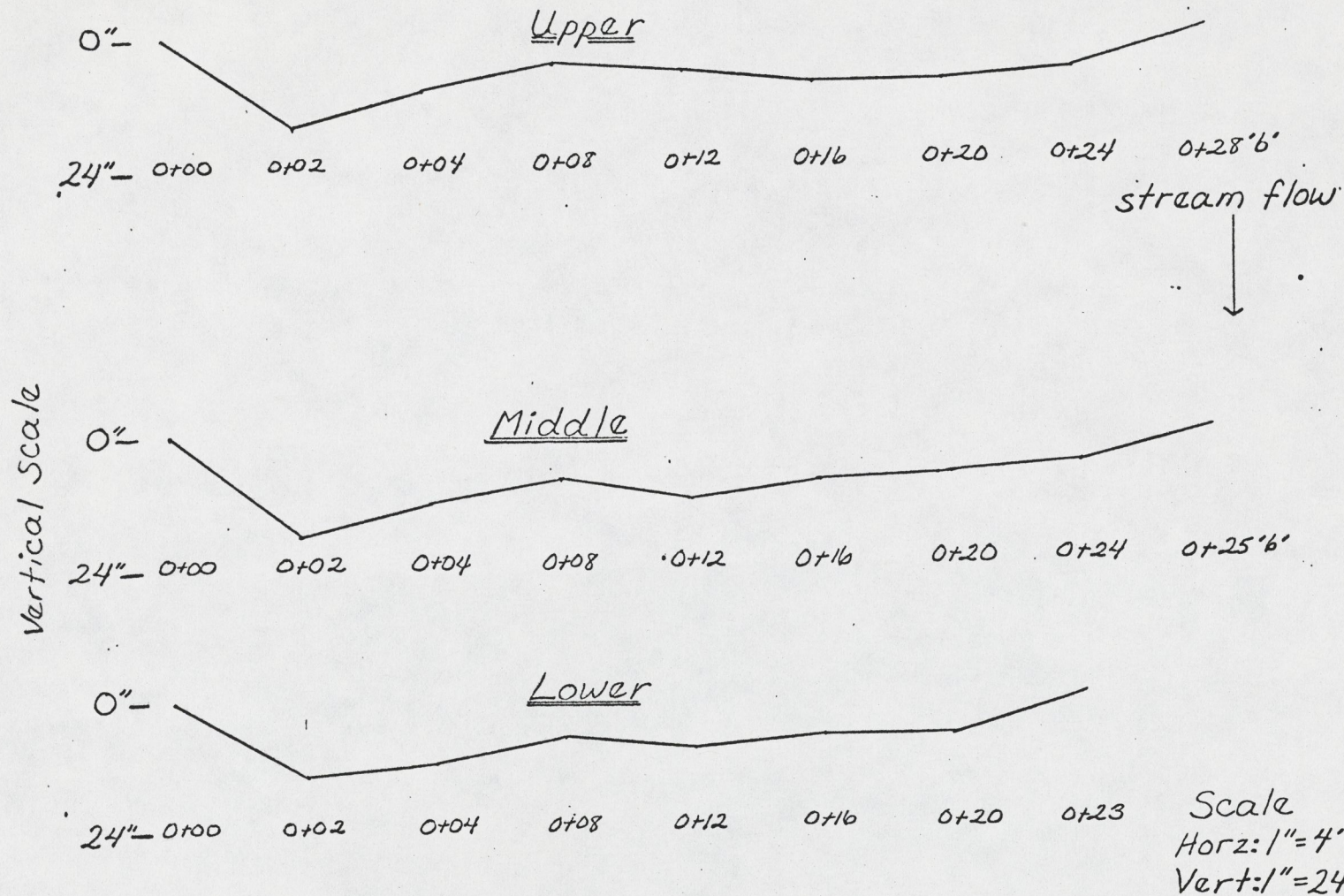
FIG. 3- Birch Creek Survey - Profile - Typical Type "B" Pool average (fast)



stream flow
↓

Scale
Horz: 1" = 4'
Vert: 1" = 24'
(BY ENGR. DEPT.)

FIG-4 - Birch Creek Survey - Profile - Typical Type "C" Pool (run)



Scale
 Horz: 1" = 4'
 Vert: 1" = 24'
 (BY ENGR. DEPT.)

Physical and Biological Stream Survey Report

BLM Form 6670-2

Consolidated Reports for:

1. Birch Creek
2. Tributaries of Birch Creek A to H

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 5/28/75 - 6/18/75

1. Surveyor A. Culbertson
H. Hendrick P. Jeppson
B. Borovicka

Agency BLM
Idaho Dept. Fish & Game

2. Stream Birch Creek		a: Tributary closed		b. Basin Snake River	
3. Location (stream mouth)	Township 6 N	Range 32 E	Section 11		
4. County Lemhi		5. State Administration Unit Number Idaho - 6		Code Number	

6. PHYSICAL SURVEY DATA

a. Station 1.00 - 22.00		to 22.00		distance (miles) 22	
b. Stream width (average)		c. TURBIDITY (Visibility in feet)			
_____ ft. today		MUDDY		MURKY	
15-30 ft. when Rainbow Trout spawn		<.5	.5-1	1-2	2-5
_____ ft. when Brook Trout spawn					5-10
				X	10+
d. Jackson Turbidity Units					

e. Temperature: Air		°F, Water		°F, Time		Flow (c.f.s.) Now		High		Low	
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)		
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH				
	0.00-9.00				84,059	24,266		7,994	116,319		
	9.00-17.00				62,050	58,820		1,210	122,080		
	17.00-22.00				25,420	3,780		-	29,200		
	Total				171,529	86,866		9,204	267,599		

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
			32%								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
			X								<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
			X								0-5	6-10	2nd	OLD		
			36%												X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

Black Birch; Willow;
Aspen

a. Method of collection No collections made - ocular observations									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rainbow Tr.	5-12"		X						
Brook Tr.	5-10"			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors No barriers. Unscreened irrigation ditches. Heavy livestock use in many areas. Lack of streamside vegetation. Pools and runs lacking in some areas.

9. Access Possible pollution from livestock.
Good on NRL and state lands. Cooperative agreements needed on private lands.

(Continued on reverse)

10. Additional Comments

See stream survey narrative.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/19/75

1. Surveyor

R.L. Borovicka

Agency

BLM

2. Stream	Birch Creek	a. Tributary	"A"	b. Basin	Snake R.	
3. Location (stream mouth)	Township	11 N	Range	29 E	Section	35
4. County	Lemhi	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	0.00	to	0.50	distance (miles)	1/2 mile
b. Stream width (average)	15-2	ft. today		c. TURBIDITY (Visibility in feet)	
	15-2	ft. when	Rb & BT	spawn	
		ft. when		spawn	
			d. Jackson Turbidity Units		
e. Temperature: Air	54 °F	Water	48 °F	Time	3:20pm
			Flow (c.f.s.)	Now	3, High 3, Low 3

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			0.00-0.50	Rb -BT		1,270	1,270		
	Total		1,270	100			410	1,780	

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
X											<input type="checkbox"/> Moderate (1.0 to 2.5 %)					
1%											<input checked="" type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		
															X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rb.	3-6		X						
BT	3-8			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors No pools

9. Access Good - public (state) land.

10. Additional Comments

One trash catcher near mouth is not working. Does make a small pool.

This section is a small spring run to the main channel. Watercress-lined channel with fine gravel. Abundant fish population considering lack of deep water.

There are numerous small rock scattered on the fines in the small spring channels.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

10. Additional Comments

Survey indicated heavy siltation entire length of tributary. Heavy horse and cow use on west side of stream. Very marshy area and well trampled.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/17/75

1. Surveyor S. Robinson

Agency BLM

2. Stream Birch Cr.	a. Tributary B - 2	b. Basin Snake	
3. Location (stream mouth)	Township 11 N	Range 29 E	Section 26
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station Mouth	to	Source	distance (miles)						
b. Stream width (average) 5-20 ft. today	c. TURBIDITY (Visibility in feet)								
ft. when Rb & BT spawn				MUDDY		MURKY		CLEAR	
ft. when spawn				<.5	.5-1	1-2	2-5	5-10	10+
d. Jackson Turbidity Units				X					

e. Temperature: Air	°F, Water	°F, Time	, Flow (c./s.) Now	, High	, Low				
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	No data collected.								
	Total								

G. PERCENT OF SECTION IN POOLS										h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
X											<input type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input checked="" type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection	None collected									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.			
		0-5	6-50	50+			0-5	6-50	50+	

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Siltation from livestock use

9. Access Private land

(Continued on reverse)

10. Additional Comments

Depth of water - 3 - 12 inches - no pools. Heavy cow use on west side of stream, none on east side up to the fence. The soil is very moist. Soil compact on the west side. Horse use heavy on upper stream. Heavy siltation in this area. One mallard duck seen.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/17/75

1. Surveyor
S. Robinson

Agency
BLM

2. Stream Birch Cr. a. Tributary C b. Basin Snake

3. Location (stream mouth) Township 11 N Range 29 E Section 26

4. County Lemhi 5. State Administration Unit Number Idaho - 6 Code Number

6. PHYSICAL SURVEY DATA

a. Station Mouth to Source distance (miles)

b. Stream width (average)
4-8 ft. today Depth 3-10"
ft. when spawn
ft. when spawn

c. TURBIDITY (Visibility in feet)

MUDDY		MURKY		CLEAR	
<.5	.5-1	1-2	2-5	5-10	10+
				X	

d. Jackson Turbidity Units

e. Temperature: Air °F, Water °F, Time , Flow (c./s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
		Stream bottom all marginal gravel.							
	Total								

G. PERCENT OF SECTION IN POOLS

0	10	20	30	40	50	60	70	80	90	100
X										

h. Gradient
 Steep (2.5 + %)
 Moderate (1.0 to 2.5 %)
 Flat (0 to 1 %)

i. AVERAGE STREAM AREA SHADED (percent)

0	10	20	30	40	50	60	70	80	90	100
X										

j. STREAMSIDE COVER TYPE

LOGGED WITHIN (years)		GROWTH		HERB	OTHER
0-5	6-10	2nd	OLD		
				X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection No observation

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Livestock control needed

9. Access Private lands

10. Additional Comments

Stream banks are stable, but there is heavy livestock use along the stream. Approximately 10 springs feed the tributary. Deer pellet groups noted.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

10. Additional Comments

Three springs feed this tributary. Heavy cow use the entire length of stream. Rank vegetation is beginning to grow across the upper stream. Part of the sod forms a floating mat over saturated subsoil.

Protection would no doubt control the problems.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/22/75

1. Surveyor
S. Robinson

Agency
BLM

2. Stream Birch Cr. a. Tributary D 1 b. Basin Snake

3. Location (stream mouth) Township 11 N Range 29 E Section 35

4. County Lemhi 5. State Administration Unit Number Idaho - 6 Code Number

6. PHYSICAL SURVEY DATA

a. Station Mouth to Source distance (miles) 1,000 yds.

b. Stream width (average) 10-1 ft. today Depth 6" spawn spawn

c. TURBIDITY (Visibility in feet)

MUDDY		MURKY		CLEAR	
<.5	.5-1	1-2	2-5	5-10	10+
					X

d. Jackson Turbidity Units

e. Temperature: Air °F, Water °F, Time , Flow (c.f.s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			Sand and silt						
	Total								

G. PERCENT OF SECTION IN POOLS

0	10	20	30	40	50	60	70	80	90	100
X										

h. Gradient

Steep (2.5 + %)

Moderate (1.0 to 2.5 %)

Flat (0 to 1 %)

i. AVERAGE STREAM AREA SHADED (percent)

0	10	20	30	40	50	60	70	80	90	100
X										

j. STREAMSIDE COVER TYPE

LOGGED WITHIN (years)		GROWTH		HERB	OTHER
0-5	6-10	2nd	OLD		
				X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rb & BT	2-4"			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Heavy siltation

9. Access Private property

10. Additional Comments

Fry seen in extreme upper end of the tributary. Part of the upper end is heavily silted. Heavy cow use in upper portion. No high vegetation. Rank growth of vegetation beginning to grow across the stream at the upper end. Heavy livestock use on entire stream. General bog area in upper reaches.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/22/75

1. Surveyor

S. Robinson

Agency

BLM

2. Stream Birch Cr.	a. Tributary D-2	b. Basin Snake	
3. Location (stream mouth)	Township 11 N	Range 29 E	Section 35
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station Mouth to Source distance (miles) 500 yds.

b. Stream width (average)

1 - 3 ft. today
1 - 3 ft. when Rb spawn
ft. when BT spawn

c. TURBIDITY (Visibility in feet)

MUDDY		MURKY		CLEAR	
<.5	.5-1	1-2	2-5	5-10	10+
					X

d. Jackson Turbidity Units

e. Temperature: Air °F, Water °F, Time , Flow (c./s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			No data taken.						
Total									

G. PERCENT OF SECTION IN POOLS

0	10	20	30	40	50	60	70	80	90	100
X										

h. Gradient

- Steep (2.5 + %)
 Moderate (1.0 to 2.5 %)
 Flat (0 to 1 %)

i. AVERAGE STREAM AREA SHADED (percent)

0	10	20	30	40	50	60	70	80	90	100
X										

j. STREAMSIDE COVER TYPE

0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
											0-5	6-10	2nd	OLD		
X															X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection ---

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.						
		0-5	6-50	50+			0-5	6-50	50+				

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
X				?				
					?	?	?	?

Other factors

Dam is 100 yds. upstream from mouth.

9. Access

Private land.

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Lower 70 yards of stream has a floating sod mat over subsoil. Upper part of stream overloaded with silt. Bank vegetation beginning to take over the stream. Light cattle use in upper portion of stream. Some bank sloughing of stream.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/22/75

1. Surveyor
S. Robinson

Agency
BLM

2. Stream Birch Cr.	a. Tributary D-3	b. Basin Snake	
3. Location (stream mouth)	Township 11 N	Range 29 E	Section 35
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station Mouth to Source distance (miles) 900 yds.

b. Stream width (average) 3-8 ft. today " ft. when Rb. spawn " ft. when BT spawn	c. TURBIDITY (Visibility in feet)					
	MUDDY		MURKY		CLEAR	
	<.5	.5-1	1-2	2-5	5-10	10+
					X	
d. Jackson Turbidity Units						

e. Temperature: Air °F, Water °F, Time , Flow (c.f.s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			Mostly fine sand & gravel with some silt.						
Total									

G. PERCENT OF SECTION IN POOLS										h. Gradient			
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)		
X											<input type="checkbox"/> Moderate (1.0 to 2.5 %)		
											<input checked="" type="checkbox"/> Flat (0 to 1 %)		

i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection ---									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
X				?	?		?	

Other factors Stream diversion 200 yds. upstream from mouth.

9. Access Private

(Continued on reverse)

10. Additional Comments

Most of the water is diverted at the stream dam. Heavy cow use at upper end and other parts of stream. Vigorous plant growth 8 ft. from shoreline. Soil is in poor condition at upper end.

one Mallard w/six ducklings.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

10. Additional Comments

Present cow use has destroyed soil structure. Cattle trail up west side. Bank on lower end well established; some bank sloughing around springs. Lower end has little siltation. Lower end has some undercutting. Aquatic vegetation overrunning upper end.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/22/75

1. Surveyor
S. Robinson

Agency
BLM

2. Stream	<u>Birch Cr.</u>	a. Tributary	<u>E-2</u>	b. Basin	<u>Snake R.</u>	
3. Location (stream mouth)	Township	<u>11 N</u>	Range	<u>29 E</u>	Section	<u>27</u>
4. County	<u>Lemhi</u>	5. State Administration Unit Number	<u>Idaho - 6</u>	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	<u>Mouth</u>	to	Source	distance (miles)	<u>425 yds.</u>
b. Stream width (average)	<u>10</u>	ft. today	<u>4"</u>	depth	
		ft. when		spawn	
		ft. when		spawn	

c. TURBIDITY (Visibility in feet)					
MUDDY		MURKY		CLEAR	
<.5	.5-1	1-2	2-5	5-10	10+
					X

d. Jackson Turbidity Units

e. Temperature: Air	°F, Water	°F, Time	, Flow (c./s.) Now	, High	, Low				
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
		<u>None taken</u>							
		<u>Total</u>							

G. PERCENT OF SECTION IN POOLS										
0	10	20	30	40	50	60	70	80	90	100
X										

h. Gradient

Steep (2.5 + %)

Moderate (1.0 to 2.5 %)

Flat (0 to 1 %)

i. AVERAGE STREAM AREA SHADED (percent)										
0	10	20	30	40	50	60	70	80	90	100
X										

j. STREAMSIDE COVER TYPE					
LOGGED WITHIN (years)		GROWTH		HERB	OTHER
0-5	6-10	2nd	OLD		
				X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection	<u>None recorded</u>								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Livestock control needed

9. Access

(Continued on reverse)

10. Additional Comments

Some bank sluff at springs. Vigorous green vegetation at spring head. No siltation the upper 100 yards. Cow use downstream has destroyed soil structure. Algae growth with the siltation. Plenty of aquatic invertebrates.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/23/75

1. Surveyor

S. Robinson

Agency BLM

2. Stream	Birch Cr.	a. Tributary	E-3	b. Basin	Snake R.	
3. Location (stream mouth)	Township	11 N	Range	29 E	Section	27
4. County	Lemhi	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	Mouth	to	Source	distance (miles)	250 yds.			
b. Stream width (average)	6 ft. today	4 in. depth	c. TURBIDITY (Visibility in feet)					
			MUDDY	MURKY	CLEAR			
			<.5	.5-1	1-2	2-5	5-10	10+
								X
			d. Jackson Turbidity Units					
e. Temperature: Air	°F, Water	°F, Time	, Flow (c.f.s.) Now	, High	, Low			

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
		None collected							
		Total							

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
X											<input type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input checked="" type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection	None observed								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors

9. Access Private

(Continued on reverse)

10. Additional Comments

Length 250 yards; width 6 feet; depth 4 inches.

Mouth mostly gravel with some silt. Bank at mouth undercut. Vigorous plant growth at mouth. Past livestock use has trampled soil. Little siltation upstream. Plenty of invertebrate food.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/17/75

1. Surveyor
B. Ball

Agency
Idaho F&G

2. Stream Birch Cr.	a. Tributary F. (west fork Birch Creek)	b. Basin Snake R.	
3. Location (stream mouth)	Township	Range	Section
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 0.00	to 1.00	distance (miles)				
b. Stream width (average) 12-25-50 ft. today 12-25-50 ft. when Rb & Bt spawn ft. when spawn	c. TURBIDITY (Visibility in feet)					
	MUDDY	MURKY	CLEAR			
	<.5	.5-1	1-2	2-5	5-10	10+
						X
	d. Jackson Turbidity Units					

e. Temperature: Air °F, Water °F, Time °F, Flow (c.f.s.) Now , High , Low									
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	0.00-0.25				2,200	2,200	20	1.5'	-
0.25-0.50			300	500	800	125	1.5'	-	925
0.50-0.75			1,000	1,000	2,000	30	0.6'	-	2,030
0.75-1.00			900	900	1,800	140	0.5'	-	1,940
	Total		2,200	4,100	6,800	315	1.0'		7,115

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
X											<input type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input checked="" type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		
															X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rb & Bt	3-8			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors

9. Access

(Continued on reverse)

10. Additional Comments

Banks are generally stable and gravel is clean. Near points of access there is heavy people use. Aquatic vegetation is abundant, but little overhead cover. This is a shallow area with good quality spring water. Small trout are numerous-- probably up to the carrying capacity of the stream. Very little livestock trampling. Most use noted was from previous year. Shallow, but undercut pools along bank. The upper portion breaks into many small springs and side channels.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/17/75

1. Surveyor

Bill Ball

Agency

Idaho F&G

2. Stream Birch Cr.	a. Tributary F (West Fork Birch Cr.)	b. Basin Snake R.	
3. Location (stream mouth)	Township	Range	Section
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 1.00 to 1.25 (source) distance (miles) 0.25

b. Stream width (average)

7 ft. today

ft. when spawn

ft. when spawn

c. TURBIDITY (Visibility in feet)

MUDDY		MURKY		CLEAR	
<.5	.5-1	1-2	2-5	5-10	10+
					X

d. Jackson Turbidity Units

e. Temperature: Air °F, Water °F, Time , Flow (c./s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			1.00-1.25	Rb - Bt	200	500	700		
1.25-1.50	" "	80	100	180	390	1.0'		570	
	Total		280	600	880	410			1,290

G. PERCENT OF SECTION IN POOLS

0	10	20	30	40	50	60	70	80	90	100
	X									

h. Gradient

- Steep (2.5 + %)
 Moderate (1.0 to 2.5 %)
 Flat (0 to 1 %)

i. AVERAGE STREAM AREA SHADED (percent)

0	10	20	30	40	50	60	70	80	90	100
X										

j. STREAMSIDE COVER TYPE

0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
											0-5	6-10	2nd	OLD		
X																X

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.					
		0-5	6-50	50+			0-5	6-50	50+			
Bt				X	Very abundant							

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Pools

9. Access Private

(Continued on reverse)

10. Additional Comments

A few large pools in this section that hold large numbers of trout. The bank has been heavily trampled by past livestock use. Now recovering. No people use in this area--even though there is an abundance of small fish.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 7/23/75

1. Surveyor

S. Robinson

Agency

BLM

2. Stream	Birch Creek	a. Tributary	G	b. Basin	Snake R.	
3. Location (stream mouth)	Township	11 N	Range	29 E	Section	27
4. County	Lemhi	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	Mouth	to	Source	distance (miles)	625												
b. Stream width (average)	6 ft. today	4" depth		c. TURBIDITY (Visibility in feet)													
				<table border="1"> <tr> <th colspan="2">MUDDY</th> <th colspan="2">MURKY</th> <th colspan="2">CLEAR</th> </tr> <tr> <td><.5</td> <td>.5-1</td> <td>1-2</td> <td>2-5</td> <td>5-10</td> <td>10+</td> </tr> </table>		MUDDY		MURKY		CLEAR		<.5	.5-1	1-2	2-5	5-10	10+
MUDDY		MURKY		CLEAR													
<.5	.5-1	1-2	2-5	5-10	10+												
				d. Jackson Turbidity Units													
e. Temperature: Air	°F, Water	°F, Time	, Flow (c.f.s.)	Now	, High	, Low											
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)								
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH										
			Not recorded														
		Total															
g. PERCENT OF SECTION IN POOLS										h. Gradient							
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)						
											<input type="checkbox"/> Moderate (1.0 to 2.5 %)						
											<input checked="" type="checkbox"/> Flat (0 to 1 %)						
i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE							
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER	
											0-5	6-10	2nd	OLD			
X																X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection	None								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Livestock protection needed at spring head.

9. Access Private

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Present cow use along stream. Some bank sluff at spring head.
Juncus, Carex, Iris, and grass overrunning creek. Siltation on
lower end.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 6/17/75

1. Surveyor
Bob Ball

Agency
Idaho Fish & Game

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

2. Stream Birch Cr.	a. Tributary H (East Fk., Main Channel)	b. Basin Snake R.
3. Location (stream mouth)	Township 11 N	Range 29 E
		Section 27
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number

6. PHYSICAL SURVEY DATA

a. Station	0.00	to	2.44	distance (miles)													
b. Stream width (average)	6-8	ft. today															
		ft. when	spawn														
		ft. when	spawn														
c. TURBIDITY (Visibility in feet)																	
		MUDDY	MURKY	CLEAR													
		<.5	.5-1	1-2													
			2-5	5-10													
				10+													
				X													
d. Jackson Turbidity Units																	
e. Temperature: Air °F, Water °F, Time °F, Flow (c.f.s.) Now , High , Low																	
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)								
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH										
	0.00-0.25	Rb.	30	35	65	115	1'	-	180								
	0.25-0.50	Rb.	20	30	50	18	1'		68								
	0.50-0.75	Rb.	21	25	46	23	1'		69								
	0.75-1.00	Rb.	21	18	39	13	0.8'		52								
	1.00-1.25	Rb.	55	95	150	20	0.6'		170								
	1.25-1.44	Rb.	20	30	50	13	0.6'		63								
	Total		167	233	400	202	1'		602								
g. PERCENT OF SECTION IN POOLS					h. Gradient												
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)						
			X								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)						
			32%								<input checked="" type="checkbox"/> Flat (0 to 1 %)						
i. AVERAGE STREAM AREA SHADED (percent)					j. STREAMSIDE COVER TYPE												
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER	
											0-5	6-10	2nd	OLD			
	X															X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection	No collections								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rb. and Bt				X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Livestock control needed.

9. Access Good - near highway, but private land

(Continued on reverse)

10. Additional Comments

Streambanks unstable, but some improvement over lower sections. Undercut banks and pools under banks. Most of the area has heavy livestock use, but light people use. Pools are usually associated with very sparse shrubs. One large pool under the old bridge in 0.25-0.50. Stream is heavily silted in this area. Livestock use is unusually heavy in the upper subsection.

Portions of bottom heavily coated with precipitate.

Upper portion has less livestock use and the stream gradient increases, moving sediments downstream.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

APPENDIX 2

Form 6670-2 in 1 mile sections of Birch Creek

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 5/28/75

1. Surveyor
H. Hendrick

Agency BLM

2. Stream Birch Creek	a. Tributary closed	b. Basin Snake River	
3. Location sink (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 0.00	to 1.0	distance (miles) 1
b. Stream width (average) 15-18 ft. today	c. TURBIDITY (Visibility in feet)	
" ft. when Rb spawn	MUDDY MURKY CLEAR	
" ft. when Brook spawn	<.5	.5-1 1-2 2-5 5-10 10+
		X
	d. Jackson Turbidity Units Not recorded	
e. Temperature: Air 45 °F, Water 44 °F, Time 1100, Flow (c./s.) Now 45, High 62, Low 42		

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			0.00 - 0.25	Rb			1,442		
0.25 - 0.50	Rb			1,294	488	2.8'	221	2,003	
0.50 - 0.75	Rb			1,673	397	3.5'	210	2,280	
0.75 - 1.00	Rb			1,726	412	2.5'	174	2,312	
Total				6,135	1,655		773	8,563	

G. PERCENT OF SECTION IN POOLS										h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
	9%										<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
	X										<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		
															X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection									
ocular - no sampling									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rainbow	5-12"		X						

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
			None					

Other factors Lack of overhead cover. Bank sloughing, no fish holding water

9. Access Good

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Fast section with little holding water and little bank cover.

No shade

Channel changes numerous

Some silt deposits noted

Stream meanders more in middle section (.5 - .75)

Area .50 - .75 some wild rose and grasses near bank

Good holding water in only one 110 yd. section

Good shade in few areas where Black Birch is over water

Pool to riffle ratio - 9:91

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 5/28/75

1. Surveyor
H. Hendrick

Agency
BLM

2. Stream	Birch Creek	a. Tributary	closed	b. Basin	Snake River	
3. Location sink (stream mouth)	Township	6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	1.0	to	2.0	distance (miles)	1
b. Stream width (average)	19 ft. today			c. TURBIDITY (Visibility in feet)	
	19 ft. when Rb spawn				
	18 ft. when Brook spawn				
				d. Jackson Turbidity Units	
e. Temperature: Air 45 °F, Water 44 °F, Time 0730 Flow (c.f.s.) Now 45, High 62, Low 42					

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			1.0 - 1.25	Rb			1,772		
1.25 - 1.50	Rb			1,935	642	3.8	360	2,937	
1.50 - 1.75	Rb			2,113	590	3.8	170	2,873	
1.75 - 2.00	Rb			1,990	586	3.0	245	2,821	
	Total			7,810	2,180		895	10,885	

G. PERCENT OF SECTION IN POOLS											h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)						
		X									<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)						
											<input type="checkbox"/> Flat (0 to 1 %)						
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER	
	X										0-5	6-10	2nd	OLD			
																X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection	No observations								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type) None				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Poor overhead cover

9. Access Good

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Heavy to extreme sloughing of banks in some areas.

Very little shade in this section

Meandering channel with little holding water. Fast - shallow water with few pools.

Heavy use of vegetation by livestock - no overhanging grasses and forbs.

Two small sections had good shade from Black Birch.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 5/28/75
1. Surveyor R. Culbertson
H. Hendrick
Agency BLM

2. Stream Birch Cr. a. Tributary closed b. Basin Snake River
3. Location sink (stream mouth) Township 6N Range 32E Section 11
4. County Clark 5. State Administration Unit Number Idaho-6 Code Number

6. PHYSICAL SURVEY DATA

a. Station 2.0 to 3.0 distance (miles) 1
b. Stream width (average) 21 ft. today 21 ft. when Rb spawn 20 ft. when Brook spawn
c. TURBIDITY (Visibility in feet)
MUDDY MURKY CLEAR
<.5 .5-1 1-2 2-5 5-10 10+
X
d. Jackson Turbidity Units

e. Temperature: Air °F, Water °F, Time , Flow (c./s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	2.0 - 2.25			X	2,075	396		291	2,762
	2.25 - 2.50			X	1,880	374	3.7	279	2,533
	2.50 - 2.75			X	1,330	454		143	1,927
	2.75 - 3.00			X	2,000	685	3.0	218	2,903
	Total				7,285	1,909		931	10,125

G. PERCENT OF SECTION IN POOLS
0 10 20 30 40 50 60 70 80 90 100
19%
h. Gradient
 Steep (2.5 + %)
 Moderate (1.0 to 2.5 %)
 Flat (0 to 1 %)
i. AVERAGE STREAM AREA SHADED (percent)
0 10 20 30 40 50 60 70 80 90 100
X
j. STREAMSIDE COVER TYPE
LOGGED WITHIN (years) GROWTH HERB OTHER
0-5 6-10 2nd OLD X

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection None collected

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
			X					X

Other factors Culvert has been removed on eight mile crossing. Originally was a barrier to migration

9. Access Good

(Continued on reverse)

10. Additional Comments

Trout rearing and holding water scarce.

No overhead shade from trees.

Bank sloughing serious in some locations (see field notes).

Overgrazed riparian vegetation - heavy livestock use.

Meandering channel areas.

Culvert was removed from 8 mile crossing, in SM 2.25 - 2.50.

A few good pools.

Stream channel straight, shallow with fast water in many locations.

No tree or browse seedlings evident.

Largest pool in this section 10 yd. x 8 yd. x 5 ft.

Heavy recreation use noted.

Pools are primarily runs along gravel bars.

Near MP 3.00 numerous Birch trees.

General problems include few pools, no streambank cover, unstable banks and heavy livestock use.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 5/28-29/75

1. Surveyor R. Culbertson
H. Hendrick

Agency
BLM

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

2. Stream Birch Cr.		a. Tributary Closed		b. Basin Snake River	
3. Location Sink (stream mouth)		Township 6N	Range 32E		Section 11
4. County Clark		5. State Administration Unit Number Idaho - 6		Code Number	

6. PHYSICAL SURVEY DATA

a. Station 3.00 to 4.00		distance (miles) 1					
b. Stream width (average)		c. TURBIDITY (Visibility in feet)					
25 ft. today		MUDDY		MURKY		CLEAR	
25 ft. when Rb spawn		<.5	.5-1	1-2	2-5	5-10	10+
24 ft. when Brook spawn					X		
		d. Jackson Turbidity Units					

e. Temperature: Air °F, Water °F, Time °F, Flow (c./s.) Now , High , Low		GRAVEL (sq. yards)		POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH
	3.00 - 3.25	Rb		X	2,499	786	3.2'
	3.25 - 3.50	Rb		X	3,080	670	5.0'
	3.50 - 3.75	Rb		X	2,025	2,405	6.0'
	3.75 - 4.00	Rb		X	3,195	885	5.0'
	Total				10,799	4,746	1,227

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
			28%								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
			X								<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD	X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

B1. Birch

a. Method of collection									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
X				1/2 ft.	X			

Other factors 14 K-Dam fish habitat structures fenced from livestock - except upper portion

9. Access Good

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Several sections have good supply of Black Birch.

More meandering.

First part of section in poor condition especially that part out of enclosure. Some sections straight, wide and fast. Several areas of bank sloughing. In area fenced and containing K dams, there is good holding water, bank vegetation, no sloughing of banks, and good pools.

Young birch and willows noted in enclosure.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 5/29/75

1. Surveyor R. Culbertson
H. Hendrick

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Agency
BLM

2. Stream Birch Cr.	a. Tributary Closed	b. Basin Snake River	
3. Location sink (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 4.00	to 5.00	distance (miles) 1				
b. Stream width (average)	c. TURBIDITY (Visibility in feet)					
24 ft. today	MUDDY	MURKY	CLEAR			
24 ft. when Rb spawn	<.5	.5-1	1-2	2-5	5-10	10+
22 ft. when Brook spawn			X			
d. Jackson Turbidity Units						

e. Temperature: Air 65 °F, Water °F, Time , Flow (c.f.s.) Now , High , Low									
f. GRAVEL, POOL, AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	4.00 - 4.25	Rb		x	2,480	520		250	3,250
	4.25 - 4.50	Rb	(estimated)	x	2,000	650		240	2,890
	4.50 - 4.75	Rb		x	1,722	982	3.0	213	2,917
	4.75 - 5.00	Rb		x	2,283	690	3.5	308	3,281
Total				8,485	2,842	3.2	1,011	12,338	

G. PERCENT OF SECTION IN POOLS										h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
		23%									<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
		X									<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)	GROWTH	HERB	OTHER		
	X										0-5	6-10	2nd	OLD	X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

Black Birch

a. Method of collection		None							
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
X				6"	X			

Other factors 1 K dam fish facility

9. Access Good - road along stream

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

1. Very little trout holding waters.
2. Pools are more like "runs" along riffle areas.
3. Heavy livestock use on riparian vegetation.
4. Heavy recreation use in this area.
5. Bank sloughing in many areas.
6. Some fair to good pools in this area.
7. Hatch of aquatic insects heavy during survey.
8. Some young birch noted in Section 4
9. Evidence of extensive gravel deposit during runoff.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 5/29/75

1. Surveyor

H. Hendrick

Agency
BLM

2. Stream Birch Cr.	a. Tributary Closed	b. Basin Snake River	
3. Location sink (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 5.00	to	6.00	distance (miles)	1		
b. Stream width (average)	c. TURBIDITY (Visibility in feet)					
23 ft. today	MUDDY		MURKY		CLEAR	
23 ft. when Rb spawn	<.5	.5-1	1-2	2-5	5-10	10+
21 ft. when Brook spawn				X		

e. Temperature: Air		°F, Water	°F, Time	, Flow (c.f.s.) Now	, High	, Low			
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	5.00 - 5.25	Rb		X	1,995	1,045	3.0	392	3,432
	5.25 - 5.50	Rb		X	2,455	535	3.0	324	3,314
	5.50 - 5.75	Rb		X	2,640	545	3.5	260	3,445
	5.75 - 6.00	Rb		X	3,110	120	2.0	287	3,517
	Total			10,200	2,245	3.0	1,263	13,708	

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
	16%										<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
	X										<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
	X										0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

B. Birch

a. Method of collection										No collections										
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.													
		0-5	6-50	50+			0-5	6-50	50+											

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Heavy livestock use

9. Access good

(Continued on reverse)

10. Additional Comments

Very little overhead cover in most stream reaches. Bank sloughing common in this area. First 1/4 mile cat has dug a new channel - straight & fast. Middle portion of stream has some good holding water and shade.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 5/29/75

1. Surveyor

H. Hendricks

Agency

BLM

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

2. Stream	Birch Cr.	a. Tributary	closed	b. Basin	Snake River	
3. Location sink (stream mouth)	Township	6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	6.00	to	7.00	distance (miles)	1
b. Stream width (average)	23	ft. today			
	21	ft. when	Rb	spawn	
		ft. when		spawn	
c. TURBIDITY (Visibility in feet)					
MUDDY		MURKY		CLEAR	
<.5	.5-1	1-2	2-5	5-10	10+
			X		
d. Jackson Turbidity Units					
e. Temperature: Air °F, Water °F, Time , Flow (c.f.s.) Now , High , Low					

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	6.00 - 6.25	Rb		X	2,475	555	3.0	287	3,317
	6.25 - 6.50	Rb		X	2,850	388	3.0	255	3,493
	6.50 - 6.75	Rb		X	2,330	660	3.6	280	3,270
	6.75 - 7.00	Rb		X	2,065	745	3.8	337	3,147
	Total				9,720	2,348		1,159	13,227

G. PERCENT OF SECTION IN POOLS										h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
	18%										<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
	X										<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)	GROWTH	HERB	OTHER		
											0-5	6-10	2nd	OLD		
	X														X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

B. Birch

a. Method of collection		No collection							
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Road crosses creek - Heavy livestock use.

9. Access Good

10. Additional Comments

Stream bank sloughing in this section.
Holding water poor in most sections.

Black Birch is the only shade. Some willow in
restricted areas.

Stream meanders well in some locations.

Second 1/4 mile - road crossing creek.

6.75 - 7.00 - good holding water, good shade.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

5/29/75 7 - 7.75
6/18/75 7:75 - 8:00

Date

1. Surveyor H. Hendricks
R. Borovicka

Agency

BLM

2. Stream	Birch Cr.	a. Tributary	closed	b. Basin	Snake River	
3. Location sink (stream mouth)	Township	6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	7.00	to	8.00	distance (miles)	1
b. Stream width (average)	23	ft. today		c. TURBIDITY (Visibility in feet)	
	21	ft. when	Rb	spawn	
		ft. when		spawn	
			d. Jackson Turbidity Units		
e. Temperature: Air			68 °F, Water	55 °F, Time	5 pm
			Flow (c./s.) Now		
			, High		
			, Low		

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			7.00 - 7.25	Rb		X	2,500		
7.25 - 7.50	Rb		X	4,110	290	3.5	170	4,570	
7.50 - 7.75	Rb		X	3,640	416	3.5	90	4,146	
7.75 - 8.00	Rb		X	2,795	755	3.0	0	3,550	
Total				13,045	2,091		735	15,871	

G. PERCENT OF SECTION IN POOLS										h. Gradient		
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)	
	X										<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)	
	13%										<input type="checkbox"/> Flat (0 to 1 %)	

i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
		X									0-5	6-10	2nd	OLD		
														X	B. Birch	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection		none collected							
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Fast moving stream - needs pools

9. Access Good - road adjacent to stream

10. Additional Comments

Meandering channel in some sections. Bank sloughing in many areas. Fast, shallow channel with little holding water except in some restricted areas. 7.00 - 7.25 has good shade and holding water. The section immediately above the John Day Memorial has heavy recreation use on the east bank. Very heavy livestock grazing on both sides of the stream. Stream banks flat and stable. Black Birch good, but no willows. Several sections are channelized.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/19/75

1. Surveyor
R. Borovicka

Agency
BLM

2. Stream Birch Cr.	a. Tributary Closed	b. Basin Snake River	
3. Location (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 8.00	to 9.00	distance (miles) 1				
b. Stream width (average)	c. TURBIDITY (Visibility in feet)					
30 ft. today	MUDDY	MURKY	CLEAR			
30 ft. when Rb spawn	<.5	.5-1	1-2	2-5	5-10	10+
ft. when spawn			X			
	d. Jackson Turbidity Units					

e. Temperature: Air 48 °F, Water 44 °F, Time 9		Flow (c./s.) Now		High	Low				
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	8:0 - 8:25	Rb		X	3,550	1,050	3'		4,600
	8:25 - 8:50	Rb		X	2,200	1,400	3'		3,600
	8:50 - 8:75	Rb		X	2,430	900	3'		3,330
	8:75 - 9:00	Rb		X	2,400	900	2.5'		3,300
Total				10,580	4,250	3'		14,830	

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
			X								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
			29%								<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
					X						0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

Black Birch

a. Method of collection	None collected								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO
						X		

Other factors Irrigation diversion ditch 8-8:25 - No screen, no gate on ditch.

9. Access Good - adjacent road

(Continued on reverse)

10. Additional Comments

Heavy livestock use in this section. First portion of section is mostly straight channel. A side draw has had heavy erosion--possible source of pollution. Some areas have fair, high cover. Fence starts at 8.2 - 8.5. Bank erosion 30%. Several Bentonite dumps noted in this section. Several Class A pools noted. Some sections have fair habitat and could recover with protection. Water gauging station (USGS) near Bridge & Highway crossing. Some areas contain fair habitat, but some riparian vegetation heavily used. Three Bentonite dumps in this section.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/19/75

1. Surveyor

R. Borovicka

Agency

BLM

2. Stream	Birch Cr.	a. Tributary	closed	b. Basin	Snake River	
3. Location (stream mouth)	Township	6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	9:00	to	10:00	distance (miles)	1
b. Stream width (average)	20	ft. today		c. TURBIDITY (Visibility in feet)	
	20	ft. when	RB	spawn	
		ft. when		spawn	
			d. Jackson Turbidity Units		

e. Temperature: Air		°F, Water	°F, Time	, Flow (c./s.)	Now	, High	, Low		
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	9.00 - 9.25	Rb		X	850	2,050	3.5		2,900
	9.25 - 9.50	Rb		X	1,400	1,900			3,300
	9.50 - 9.75	Rb		X	1,100	2,600			3,700
	9.75 - 10.00	Rb		X	900	2,200			3,100
	Total			4,250	8,750	3.5		13,000	

G. PERCENT OF SECTION IN POOLS										h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
							X				<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
							67%				<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)										j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)	GROWTH	HERB	OTHER		
									X		0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

Black Birch
Aspen

a. Method of collection	None collected								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Needs protection from livestock - East bank. Pollution potential horse corral on stream.

9. Access Private land, not posted, some angler use.

10. Additional Comments

First subsection has heavy livestock use on East side causing some bank erosion. Good pool areas. Most of this section has good Black Birch and Aspen cover. Aspen are old with little, if any, new reproduction. A little more protection would improve this section. Generally there has been very light livestock use and the habitat shows this fact. Riparian vegetation consists of Aspen, Birch, rose and a large variety of forbs and grasses. Some areas have been fenced from livestock. Excellent trout habitat. Abundance of Class "A" pools.

Irrigation return water on Wagoner ranch causing some erosion of bank. Some old beaver sign through this section. This one mile section is a complete contrast to the stream on public land. This section has almost entirely been protected from livestock. Heavy overhead cover of Aspen and Black Birch, good bank cover of forbs, grass and shrubs. Many class "A" pools and , in general, excellent trout habitat.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/19/75

1. Surveyor
R. Borovicka

Agency
BLM

2. Stream	Birch Creek	a. Tributary	closed	b. Basin	Snake River
3. Location (stream mouth)	Township 6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station	10.00	to	11.00	distance (miles)	1
b. Stream width (average)	c. TURBIDITY (Visibility in feet)				
20 ft. today	MUDDY		MURKY		CLEAR
20 ft. when _____ Rb _____ spawn	<.5	.5-1	1-2	2-5	5-10 10+
ft. when _____ spawn					X
	d. Jackson Turbidity Units				
e. Temperature: Air _____ °F, Water _____ °F, Time _____, Flow (c.f.s.) Now _____, High _____, Low _____					

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			10.00-10.25	Rb		X	2,250		
10.25-10.50	Rb		X	2,850	2,450		5,300		
10.50-10.75	Rb		X	2,700	1,900	4'	4,600		
10.75-11.00	Rb		X	2,200	1,800	4'	4,000		
	Total			10,000	8,200	4'		18,200	

G. PERCENT OF SECTION IN POOLS											h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)						
					X						<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)						
					45%						<input type="checkbox"/> Flat (0 to 1 %)						
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER	
								X			0-5	6-10	2nd	OLD			
														X		X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE Black Birch, Aspen, Willow

a. Method of collection										Ocular
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.			
		0-5	6-50	50+			0-5	6-50	50+	
Rb	6-10"		X							
	8-12"		X							

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors

9. Access Private land - evidence of some use, but probably farthest point from the highway

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

An irrigation headgate on East side of Subsection 1--no fish screen. Good Willow, Aspen and Birch cover. Excellent trout water. Very little people use. Pass Creek enters from West side in first subsection. Some bank erosion below Pass Creek. Aspen ends at start of subsection 2. Several scenic rock bluffs in this area. Good pool-riffle ratio. Probably fairly heavy fall and winter use of livestock. Old growth Aspen present.

Some hunter and angler use evident. Subsection 3 - fast deep pools--one of the best pools on Birch Creek. Start of heavy livestock use on grass, forbs and willow. Even Birch is heavily grazed. Streambanks stable. Still a heavy stand of old Aspen. In general, this is still good trout habitat, but could be improved with protection.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 6/19/75

1. Surveyor
R. Borovicka

Agency
BLM

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

2. Stream	Birch Cr.	a. Tributary	closed	b. Basin	Snake R.	
3. Location (stream mouth)	Township	6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	11.00	to	12.00	distance (miles)	1
b. Stream width (average)	25	ft. today		c. TURBIDITY (Visibility in feet)	
	25	ft. when	Rb	spawn	
		ft. when		spawn	
			d. Jackson Turbidity Units		
e. Temperature: Air	°F, Water	°F, Time	, Flow (c.f.s.) Now	, High	, Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			11:00-11:25	Rb		X	2,200		
11:25-11:50	Rb		X	2,700	1,300		4,000		
11:50-11:75	Rb		X	3,700	900		4,600		
11:75-12:00	Rb		X	2,950	1,600	3.0			
Total					11,550	5,400	3	16,950	

G. PERCENT OF SECTION IN POOLS											h. Gradient		
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)		
			X								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)		
			32%								<input type="checkbox"/> Flat (0 to 1 %)		

i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
								X			0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

B1. Birch

a. Method of collection									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors This is a year-long Bull pasture. Private - near highway.
Possible extensive stream pollution in runoff.

9. Access Near highway

10. Additional Comments

Fairly diversified trout water, but the stream narrows and is fast. Good overhead cover with Aspen and Birch, but small reproduction is heavily grazed. This is a bull pasture. Livestock is using and breaking 2-3" diameter Black Birch.

This whole section is amazingly good trout water even with heavy grazing. Continued heavy use may change the riparian habitat drastically. The portion of the section in the pasture near the highway has heavy angler use, but this area is the poorest habitat. The upstream half of section (11:50-12:00) is on public land and heavily overgrazed. The stream again becomes typical of the habitat on lower Birch Creek. There is a good heavy, overhead Birch cover in this upper area, but heavy livestock use on grasses, forbs and low woody plants.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/19/75

1. Surveyor
R. Borovicka

Agency
BLM

2. Stream	Birch Creek	a. Tributary	closed	b. Basin	Snake River	
3. Location (stream mouth)	Township	6N	Range	32E	Section	11
4. County	Clark	5. State Administration Unit Number	Idaho - 6	Code Number		

6. PHYSICAL SURVEY DATA

a. Station	12.00	to	13.00	distance (miles)	1	
b. Stream width (average)	c. TURBIDITY (Visibility in feet)					
_____ ft. today	MUDDY		MURKY		CLEAR	
_____ ft. when _____ spawn	<.5	.5-1	1-2	2-5	5-10	10+
_____ ft. when _____ spawn					X	
d. Jackson Turbidity Units						

e. Temperature: Air		°F, Water	°F, Time	, Flow (c.f.s.) Now	, High	, Low			
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	12.00-12.25	Rb		X	3,200	1,200			4,400
	12.25-12.50	Rb		X	2,550	1,800	4'	110	4,460
	12.50-12.75	Rb		X	3,000	520	4'		3,520
	12.75-13.00	Rb		X	3,000	1,200			4,200
Total				11,750	4,720	4'	110	16,580	

G. PERCENT OF SECTION IN POOLS											h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)						
			X								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)						
			28%								<input type="checkbox"/> Flat (0 to 1 %)						
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER	
							X				0-5	6-10	2nd	OLD			
																X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

Black Birch
good cover

a. Method of collection	none collected								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Irrigation ditch - west bank. No screen for fish. Channel change - high velocities

9. Access Most of the section on private land, but intermixed with NRL

10. Additional Comments

Old abandoned irrigation ditch in this section, however flow returns to stream. First part of section has good Black Birch cover. Heavy angler and camper use. One pit toilet next to stream. Active irrigation ditch on West bank in upper section - carrying 2 cfs H₂O. Much of stream is fast, but with good meanders. Much of the last section (12.50-13.00) is in back of the property above and below the Lone Pine store and cabins. Subsection 12.75-13.00 is in a straight channel change. Only 5 deep runs and holes in this subsection. This area needs rock placements or groins to slow velocity. Good meanders and habitat below Lone Pine store.

INSTRUCTIONS

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3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 6/18/75

1. Surveyor
R. Borovicka

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Agency
BLM

2. Stream Birch Cr.	a. Tributary closed	b. Basin Snake River	
3. Location (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 13.00	to	14.00	distance (miles)	1		
b. Stream width (average)	c. TURBIDITY (Visibility in feet)					
20 ft. today	MUDDY		MURKY		CLEAR	
20 ft. when Rb spawn	<.5	.5-1	1-2	2-5	5-10	10+
ft. when spawn					X	
d. Jackson Turbidity Units						

e. Temperature: Air °F, Water °F, Time , Flow (c.f.s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)	
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH			
			13.00-14.00	Rb		X	7,000			7,500
Total						7,000	7,500	4'	500	15,000

G. PERCENT OF SECTION IN POOLS												h. Gradient		
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)			
					X						<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)			
											<input type="checkbox"/> Flat (0 to 1 %)			

i. AVERAGE STREAM AREA SHADED (percent)												j. STREAMSIDE COVER TYPE				
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
							X				0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE Good cover of Black Birch

a. Method of collection none collected

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Heavy livestock use. Irrigation diversion ditch is not screened for fish.

9. Access Private land, but heavy people use. Adjacent to highway.

10. Additional Comments

This section is primarily on private land and intensity of survey was not as high as on the lower NRL area.

The riffle pool ratio is good (50-50). The stream has good meander and some excellent trout habitat. With heavy livestock use in some areas, bank erosion is severe in restricted locations. The stream, just above the channel change near the highway, has some excellent examples of the value of rock placement for habitat improvement.

Wherever there is a holdup of water, as observed at headgate of irrigation ditch, there was a heavy buildup of silt. The areas of bank erosion may be the source of this silt.

INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/18/75

1. Surveyor
R. Borovicka

Agency
BLM

2. Stream Birch Cr.	a. Tributary closed	b. Basin Snake River	
3. Location (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6		Code Number

6. PHYSICAL SURVEY DATA

a. Station 14.00		to 15.00		distance (miles) 1				
b. Stream width (average) 60 ft. today 60 ft. when Rb spawn ft. when spawn			c. TURBIDITY (Visibility in feet)					
			MUDDY		MURKY		CLEAR	
			<.5	.5-1	1-2	2-5	5-10	10+
							X	
d. Jackson Turbidity Units								
e. Temperature: Air °F, Water °F, Time , Flow (c.f.s.) Now , High , Low								

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	14.00-15.00	Rb				4,200	9,800	4'	500
	Total				4,200	9,800		500	14,500

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
			X								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
					X						0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE

Black Birch

a. Method of collection none collected									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors

9. Access

(Continued on reverse)

10. Additional Comments

This section has fast water through narrow channel. Deep water, good overhead cover and many class "A" pools. Light angler use, but heavy livestock use in some areas. Some bank erosion. Middle section has some poor habitat with heavy LSU and frost heaving. Some larger rubble present for aquatics such as stonefly.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/18/75

1. Surveyor

R. Borovicka

Agency

BLM

2. Stream Birch Cr.	a. Tributary closed	b. Basin Snake R.	
3. Location (stream mouth)	Township 6 N	Range 32 E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 15.00	to 16.00	distance (miles) 1
b. Stream width (average) 60 ft. today	c. TURBIDITY (Visibility in feet)	
ft. when _____ spawn	MUDDY MURKY CLEAR	
ft. when _____ spawn	<.5	.5-1 1-2 2-5 5-10 10+
		X
	d. Jackson Turbidity Units	

e. Temperature: Air _____ °F, Water _____ °F, Time _____, Flow (c.f.s.) Now _____, High _____, Low _____									
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	15.00-16.00	Rb.		X	5,600	8,400	5'		14,000
	Total				5,600	8,400	5'		14,000

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
						X					<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
									X		0-5	6-10	2nd	OLD		
															X	X

7. FISH SPECIES, SIZE, AND ABUNDANCE Black Birch

a. Method of collection	None collected								
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors

Heavy livestock use.

9. Access

Private - visible public use

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Heavy livestock use, but well stocked with Black Birch. All private land. Most of the section is good trout habitat. An old irrigation ditch leads to an abandoned house on west side of stream. Several islands present with a heavy Birch cover.

Basically good habitat, but very little overhanging grass and forbs. The upper subsection is more heavily grazed, causing some unstable banks.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/19/75

1. Surveyor R. Borovicka

Agency BLM

2. Stream Birch Cr.	a. Tributary sump	b. Basin Snake River	
3. Location (stream mouth)	Township 6N	Range 32E	Section 11
4. County Clark	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 16.00	to 17.00	distance (miles)								
b. Stream width (average)	c. TURBIDITY (Visibility in feet)									
30 ft. today	MUDDY									
30 ft. when Rb spawn	<.5	.5-1	MURKY							
ft. when spawn	1-2	2-5	CLEAR							
			5-10							
			10+							
			X							
	d. Jackson Turbidity Units									
e. Temperature: Air °F, Water °F, Time °F	, Flow (c.f.s.) Now , High , Low									
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)	
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH			
	16.00-16.25	Rb		X	1,860	1,800	4'		3,660	
	16.25-16.50	Rb		X	1,900	1,500	4'		3,400	
	16.50-16.75	Rb		X	1,730	1,550	4'		3,280	
	16.75-17.00	Rb	160	2,050	2,210	1,200	3'	100	3,510	
Total		160	2,050	7,700	6,050	4'	100	13,850		
g. PERCENT OF SECTION IN POOLS										
0	10	20	30	40	50	60	70	80	90	100
				X						
				44%						
h. Gradient										
<input type="checkbox"/> Steep (2.5 + %)										
<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)										
<input type="checkbox"/> Flat (0 to 1 %)										
i. AVERAGE STREAM AREA SHADED (percent)										
0	10	20	30	40	50	60	70	80	90	100
							X			
j. STREAMSIDE COVER TYPE										
LOGGED WITHIN (years)										
GROWTH										
HERB OTHER										
0-5 6-10 2nd OLD X										

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection										
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.			
		0-5	6-50	50+			0-5	6-50	50+	

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Livestock bank use.

9. Access Private, but close to the highway.

(Continued on reverse)

10. Additional Comments

The lower portion of this section is excellent trout habitat marred only by some areas of heavy people use. Contains deep runs and pools. Center section has heavy livestock use with some bank erosion. Good overhead cover, but no streambank low riparian vegetation. The upper portion of the section is excellent trout habitat. Some livestock use that is causing bank trampling. Very little angler use in this area. The upper portion of the section contains good rainbow trout habitat for spawning.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/18/76

1. Surveyor

Bob Bovicka

Agency BLM

2. Stream	Birch Creek	a. Tributary	Closed	b. Basin	Snake River
3. Location (stream mouth)	Township 6 N.	Range	32 E.	Section	11
4. County	Clark & Lemhi	5. State Administration Unit Number	Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station	17.00	to	18.00	distance (miles)	1
b. Stream width (average)	25 ft. today				
	21 ft. when Rb. spawn				
	ft. when spawn				
			c. TURBIDITY (Visibility in feet)		
			MUDDY	MURKY	CLEAR
			<.5	.5-1	1-2 2-5 5-10 10+
					X
d. Jackson Turbidity Units					

e. Temperature: Air 52 °F, Water 48 °F, Time 9 am, Flow (c.f.s.) Now 50, High, Low

f. GRAVEL, POOL, AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ YARDS	DEPTH		
	17.00-17.25	Rb	50	1,250	1,300	1,590	3'		2,890
	17.25-17.50	Rb	150	1,570	1,720	790	3'		2,510
	17.50-17.75	Rb	-	-	1,716	884	3'		2,600
	17.75-18.00	Rb	-	-	2,187	513	3'		2,700
	Total		200	2,820	6,920	3,780			10,700

G. PERCENT OF SECTION IN POOLS											h. Gradient						
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)						
				X							<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)						
				35%							<input type="checkbox"/> Flat (0 to 1 %)						
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE						
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER	
							X				0-5	6-10	2nd	OLD			
																X	

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection

SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Could use rock placements.

9. Access

10. Additional Comments

Stream narrows in first part of section. Good deep runs with good riparian cover. Undercut banks and good trout habitat. Starting at the bridge there is an absence of trees. Livestock use. After reaching fence and livestock exclusion the habitat improves. The middle and upper portion are in the enclosure of IDF&6. Heavy recreation use - no livestock. No high shade cover from here upstream. Abundance of submerged aquatic plants. Aquatic organisms very abundant on substrate. Structures (digger logs) start in this area. The logs have made good habitat.

The south side of the stream has the best riparian habitat - still no trees. Numerous small springs enter on side channels. The section goes through the fence into area used by livestock. A noticeable change in habitat conditions.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/18/75

1. Surveyor R. Borovicka
R. Culbertson

Agency
BLM

2. Stream Birch Cr.	a. Tributary closed	b. Basin Snake River	
3. Location (stream mouth)	Township 6N	Range 32E	Section 11
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 18.00	to 19.00	distance (miles) 1			
b. Stream width (average) 35 ft. today 35 ft. when Rb & BT spawn ft. when spawn	c. TURBIDITY (Visibility in feet)				
	MUDDY		MURKY		CLEAR
	<.5	.5-1	1-2	2-5	5-10 10+
					X
d. Jackson Turbidity Units					

e. Temperature: Air °F, Water °F, Time , Flow (c.f.s.) Now , High , Low

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			This section not evaluated for bottom type Riffle--pool ratio only						
	18.00-18.25					31%	2 1/2'		
	18.25-18.50					29%	2 1/2'		
	18.50-18.75					26%	2 1/2'		
	18.75-19.00					34%	2 1/2'		
	Total					30%	2 1/2'		

g. PERCENT OF SECTION IN POOLS											h. Gradient		
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)		
			X								<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)		
											<input type="checkbox"/> Flat (0 to 1 %)		

i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
	X										0-5	6-10	2nd	OLD		

7. FISH SPECIES, SIZE, AND ABUNDANCE

a. Method of collection OCCULAR									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rainbow	6-12			X					
Bt	6-12			X					
Rainbow ?	0-2			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Lack of pools and deeper water.

9. Access Mostly private - could be closed.

10. Additional Comments

First sub-section pools are mostly long runs. Some excellent trout habitat. Abundance of trout in this area - mixed rainbow and Brook. Most of the area is grazed and there is some bank sloughing that could cause turbidity. Second sub-section has some Class "A" pools. Several digger logs in this area that have helped improve the habitat. Good, low riparian vegetation in this area. Third sub-section is low on pool area, mostly pools are from digger logs. Some willow in this area but sparse higher vegetation.

Fourth sub-section is similar to the entire section. Artificial log dams still provide most of the pool habitat. About a 15% cover of aquatic vegetation on stream bottom (Elodea). Several areas have bank sloughing started by heavy livestock use.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/18/75

1. Surveyor R. Borovicka
R. Culbertson

Agency
BLM

2. Stream Birch Cr.	a. Tributary closed	b. Basin Snake River	
3. Location (stream mouth)	Township 6N	Range 32E	Section 11
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 19.00	to 20.00	distance (miles)				
b. Stream width (average)	c. TURBIDITY (Visibility in feet)					
ft. today	MUDDY	MURKY	CLEAR			
ft. when _____ spawn	<.5	.5-1	1-2	2-5	5-10	10+
ft. when _____ spawn	d. Jackson Turbidity Units					
e. Temperature: Air 60 °F, Water 56 °F, Time 3:00 pm						
Flow (c.f.s.) Now _____, High _____, Low _____						

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	This section not evaluated for bottom type - Pool Ratio Only								
	19.00-19.25	Rb-BT				26%	2'		
	19.25-19.50	Rb-Bt				36%	2½'		
	19.50-19.75	"				13%	2'		
	19.75-20.00	"				13%	2'		
	Total					26%	2'		

G. PERCENT OF SECTION IN POOLS											h. Gradient Pool-Riffle-26-73					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
		X									<input type="checkbox"/> Moderate (1.0 to 2.5 %)					
		26%									<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		X

7. FISH SPECIES, SIZE, AND ABUNDANCE Willow - low cover

a. Method of collection		NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
SPECIES	SIZE	0-5	6-50	50+			0-5	6-50	50+
Rb & BT	4-12"			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Lack of pools - No high cover (not needed for temperature)

9. Access Private property - good roads and trails

(Continued on reverse)

10. Additional Comments

The lower portion of the section is good fishery habitat as evidenced by the high fish population. The water quality is good--temperature rather constant due to spring water as source. Some areas have banks that are bare of vegetation due to livestock trampling and poor soil type. These areas could be stabilized by protection.

The upper portion is similar, but probably less pools. Marsh areas are common adjacent to the stream. Severe buildup of alkaline formations on all rocks. Deep water is lacking. May be easy predation on fish population.

Excellent wildlife habitat. Curlews fairly abundant in this area. Protection of the riparian habitat could be the best management objective.

INSTRUCTIONS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/17/75

1. Surveyor Paul Jeppson

Agency IDFG&6

2. Stream Birch Creek	a. Tributary Sump	b. Basin Snake River	
3. Location (stream mouth)	Township 6N.	Range 32E.	Section 11
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 20.00	to 21.00	distance (miles) 1					
b. Stream width (average) 40-60 ft. today	c. TURBIDITY (Visibility in feet)	MURKY	CLEAR				
" ft. when Rb spawn		<.5	.5-1	1-2	2-5	5-10	10+
" ft. when BT spawn							X
d. Jackson Turbidity Units							
e. Temperature: Air 58 °F, Water 54 °F, Time noon, Flow (c.f.s.) Now 50-30, High 50, Low 50							

f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
			20.00-20.25	Rb-BT	2700	500	3,200		
20.25-20.50	"	2650	250	2,900	0		2,900		
20.50-20.75	"	3500	-	3,500	0		3,500		
20.75-21.00	"	4500	-	4,500	0		4,500		
Total			13,350	750	14,100	0		10,100	

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
X											<input type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input checked="" type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		

7. FISH SPECIES, SIZE, AND ABUNDANCE grasses & forbs

a. Method of collection Ocular										
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.			
		0-5	6-50	50+			0-5	6-50	50+	
Rb	2-8"			X						
	2-6			X						

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Heavy livestock use in parts. Stream bank protection

9. Access Private, but near highway

(Continued on reverse)

10. Additional Comments

Livestock use moderate to heavy. People use is light. Margins of the stream lined with watercress. No high vegetation except for willow clumps and scattered Cinquefoil.

Some bank sloughing especially near bank heaves that contributes a fine clay and suspended silt.

Abundant chara beds. Mostly a gravel bottom with some rubbles that is lightly cemented.

Private land, but protection from livestock would be the best management too.

This is near the extreme headwaters.

INSTRUCTIONS

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2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PHYSICAL AND BIOLOGICAL STREAM
SURVEY REPORT

Date 6/17/76

1. Surveyor Paul Jeppson

Agency IDF&6

2. Stream Birch Creek	a. Tributary Sump	b. Basin Snake River	
3. Location (stream mouth)	Township 6N.	Range 32E	Section 11
4. County Lemhi	5. State Administration Unit Number Idaho - 6	Code Number	

6. PHYSICAL SURVEY DATA

a. Station 21.00 to 22.00	distance (miles) 1
b. Stream width (average)	c. TURBIDITY (Visibility in feet)
25-35 ft. today	MUDDY MURKY CLEAR
ft. when _____ spawn	<.5 .5-1 1-2 2-5 5-10 10+
ft. when _____ spawn	X
	d. Jackson Turbidity Units

e. Temperature: Air 48 °F, Water 56 °F, Time 1310, Flow (c./s.) Now 15-7, High 15-7, Low 15-7									
f. GRAVEL, POOL AND RUBBLE AREA	SUBSECTION	FISH SPECIES	GRAVEL (sq. yards)			POOLS		RUBBLE (sq. yards)	TOTAL (sq. yards)
			GOOD	MARGINAL	TOTAL	SQ. YARDS	DEPTH		
	21.00-21.25	Rb-BT	2800		2800	0			2,800
	21.25-21.50	"	1600		1600	0			1,600
	End of survey - McFarland - Woolie Fence.								
Total					4400				4,400

G. PERCENT OF SECTION IN POOLS											h. Gradient					
0	10	20	30	40	50	60	70	80	90	100	<input type="checkbox"/> Steep (2.5 + %)					
X											<input checked="" type="checkbox"/> Moderate (1.0 to 2.5 %)					
											<input type="checkbox"/> Flat (0 to 1 %)					
i. AVERAGE STREAM AREA SHADED (percent)											j. STREAMSIDE COVER TYPE					
0	10	20	30	40	50	60	70	80	90	100	LOGGED WITHIN (years)		GROWTH		HERB	OTHER
X											0-5	6-10	2nd	OLD		X

7. FISH SPECIES, SIZE, AND ABUNDANCE Grass & Forbs

a. Method of collection Ocular									
SPECIES	SIZE	NUMBER PER 100 FT.			SPECIES	SIZE	NUMBER PER 100 FT.		
		0-5	6-50	50+			0-5	6-50	50+
Rb-BT	4-10"			X					

8. LIMITING FACTORS

BARRIERS (type)				HEIGHT (ft.)	PASSABLE		CORRECTIONS NEEDED	
DAM	FALLS	LOGJAM	CULVERT		YES	NO	YES	NO

Other factors Livestock use, medium to moderate.

9. Access Private property.

(Continued on reverse)

Form 6670-2 (April 1973)

10. Additional Comments

Livestock use is medium to light. People use light. This extreme headwater section has grassy banks, many springs - small and scattered.

Stream is heavily vegetated with watercress, wild iris, lupine, etc. Frost heaves are common in the wetted areas. During the thaw there may be turbidity problems. The stream should be inspected during extreme cold conditions in winter.

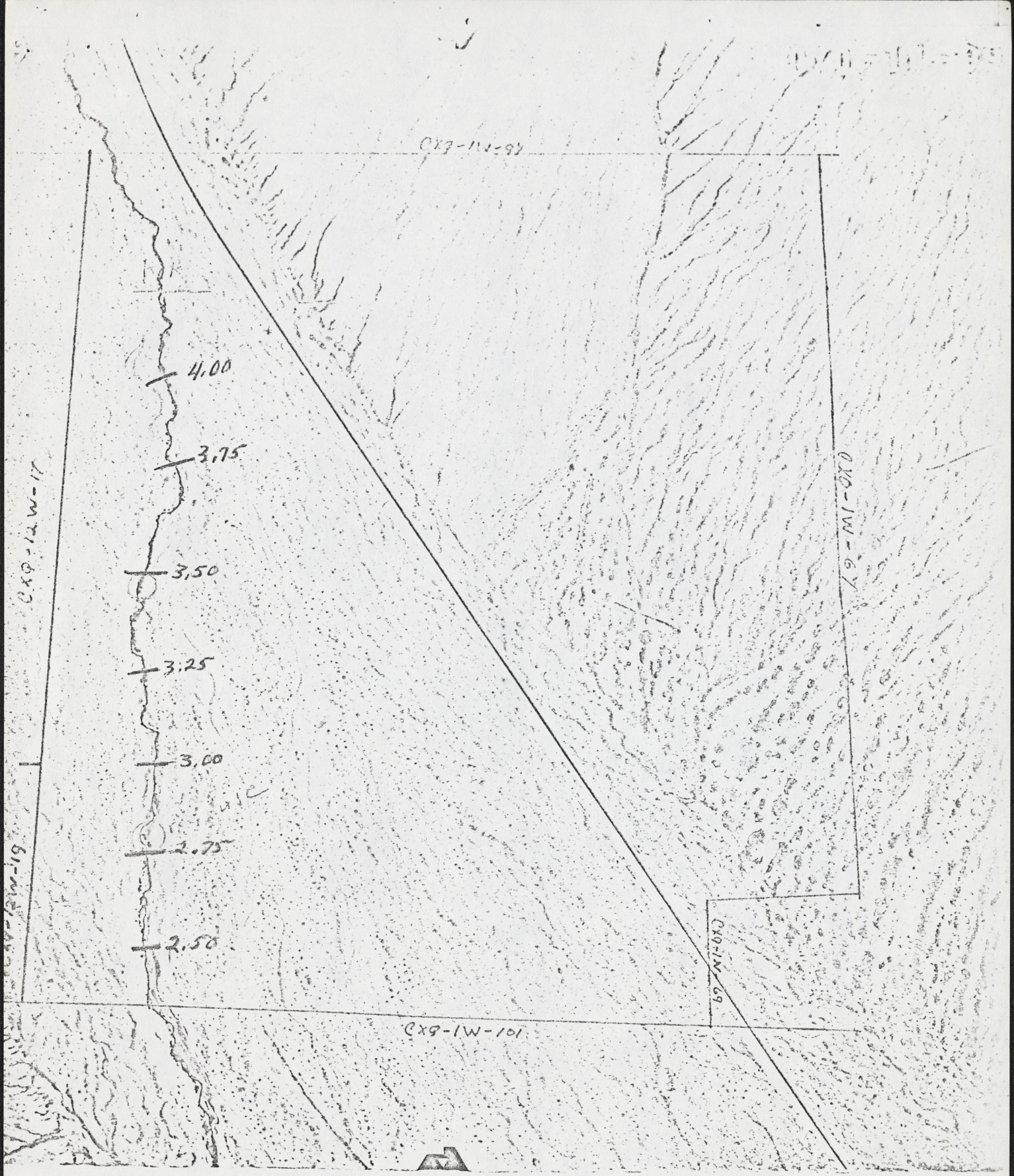
INSTRUCTIONS

1. District office completes two (2) copies upon request of Stream Surveyor.
2. Submit original to permanent District file and carbon to Stream Surveyor for final stream survey report.
3. See Form 6670-1 for specific instructions.

BIRCH CREEK

Subsections - Mile
0.00 to 21.00

Tributaries -
A - H



CX9-1W-99

CX9-12W-17

CX9-1W-19

4.00

3.75

3.50

3.25

3.00

2.75

2.50

CX9-1W-100

CX9-1W-69

CX9-1W-101

7-9-59

170

6.00

5.75

5.50

5.25

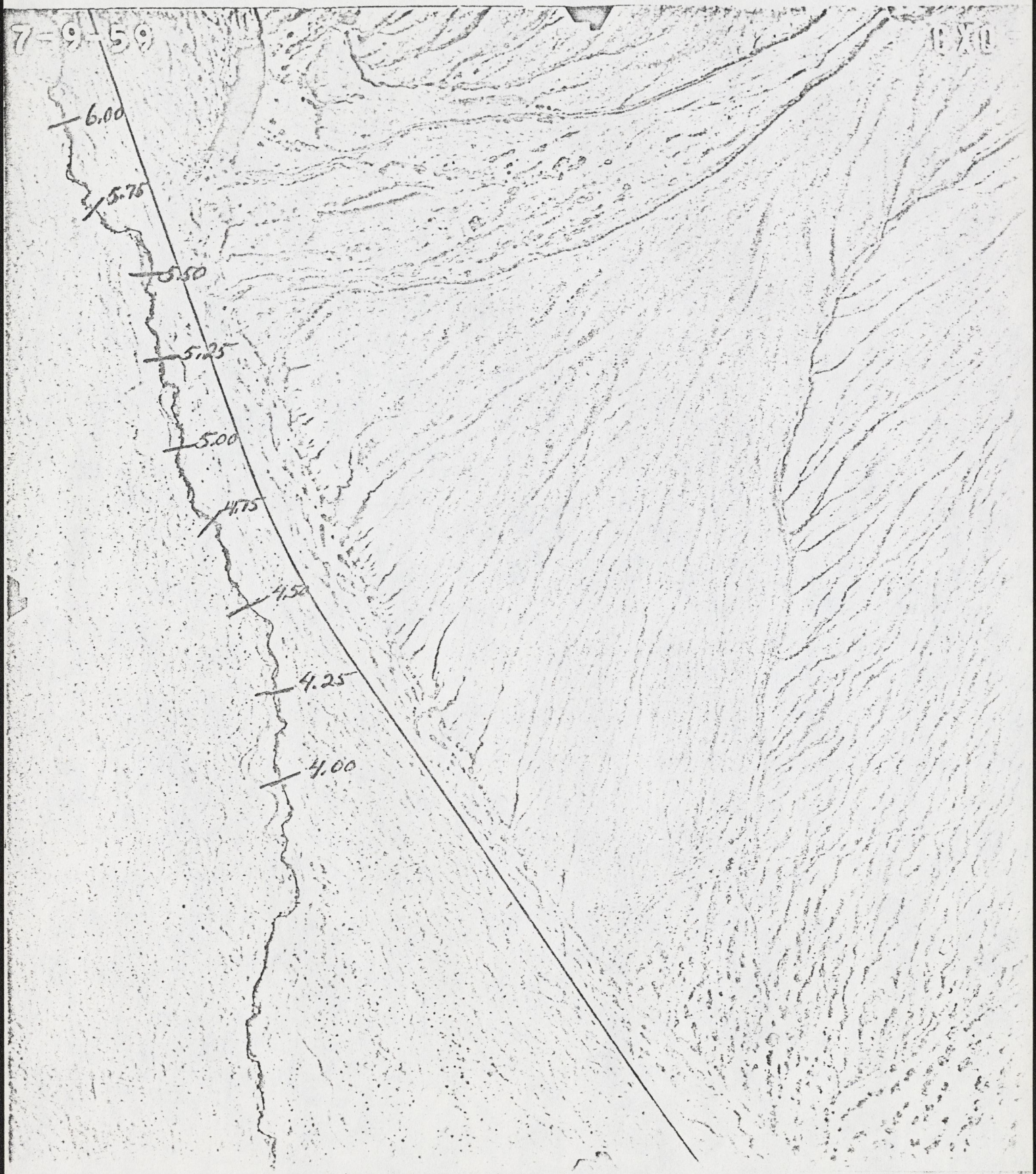
5.00

4.75

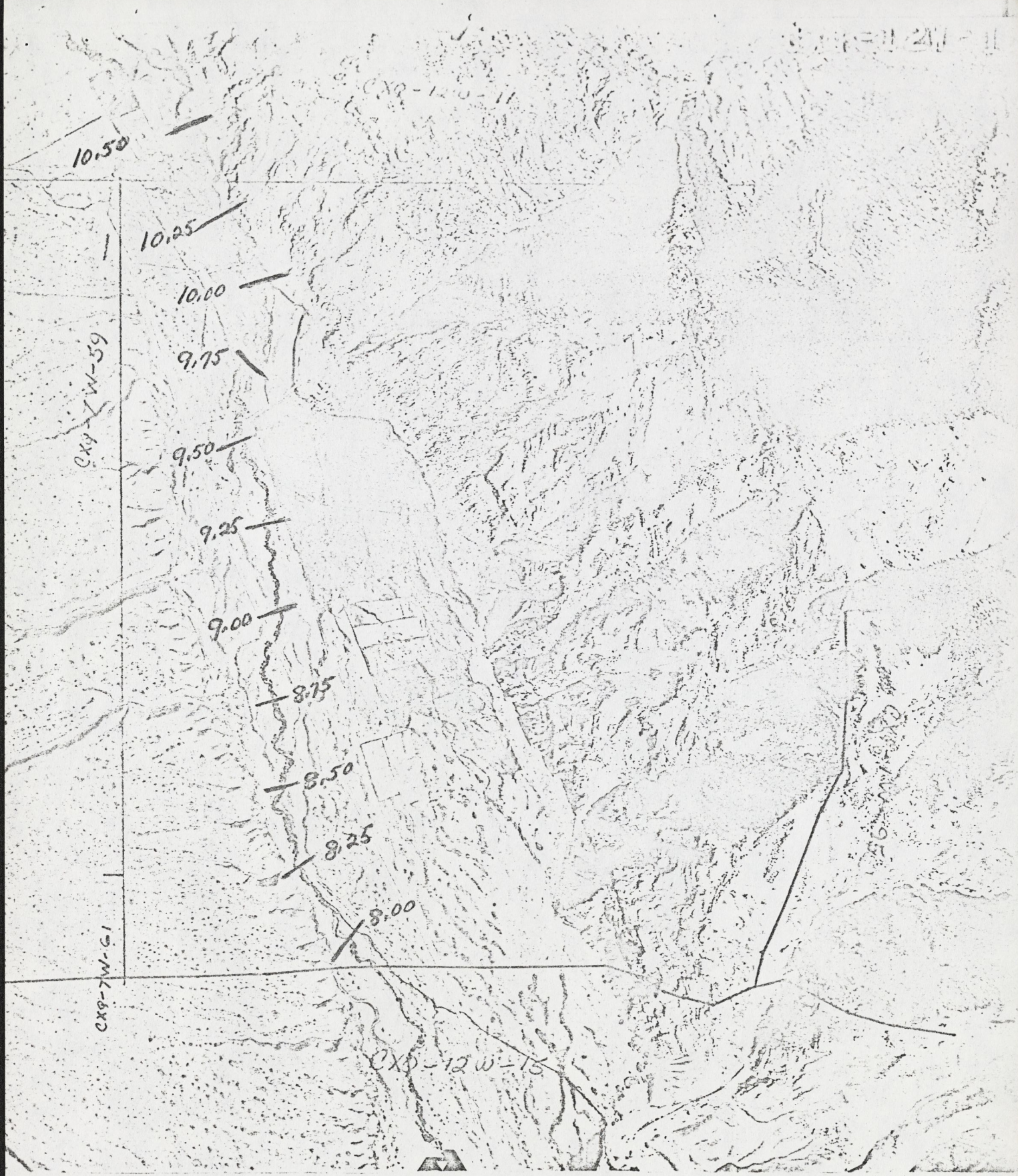
4.50

4.25

4.00









1650-01-13

16.75

16.50

16.25

16.00

15.75

15.50

15.25

15.00

14.75

14.50

14.25

14.00

13.75

13.50

13.25

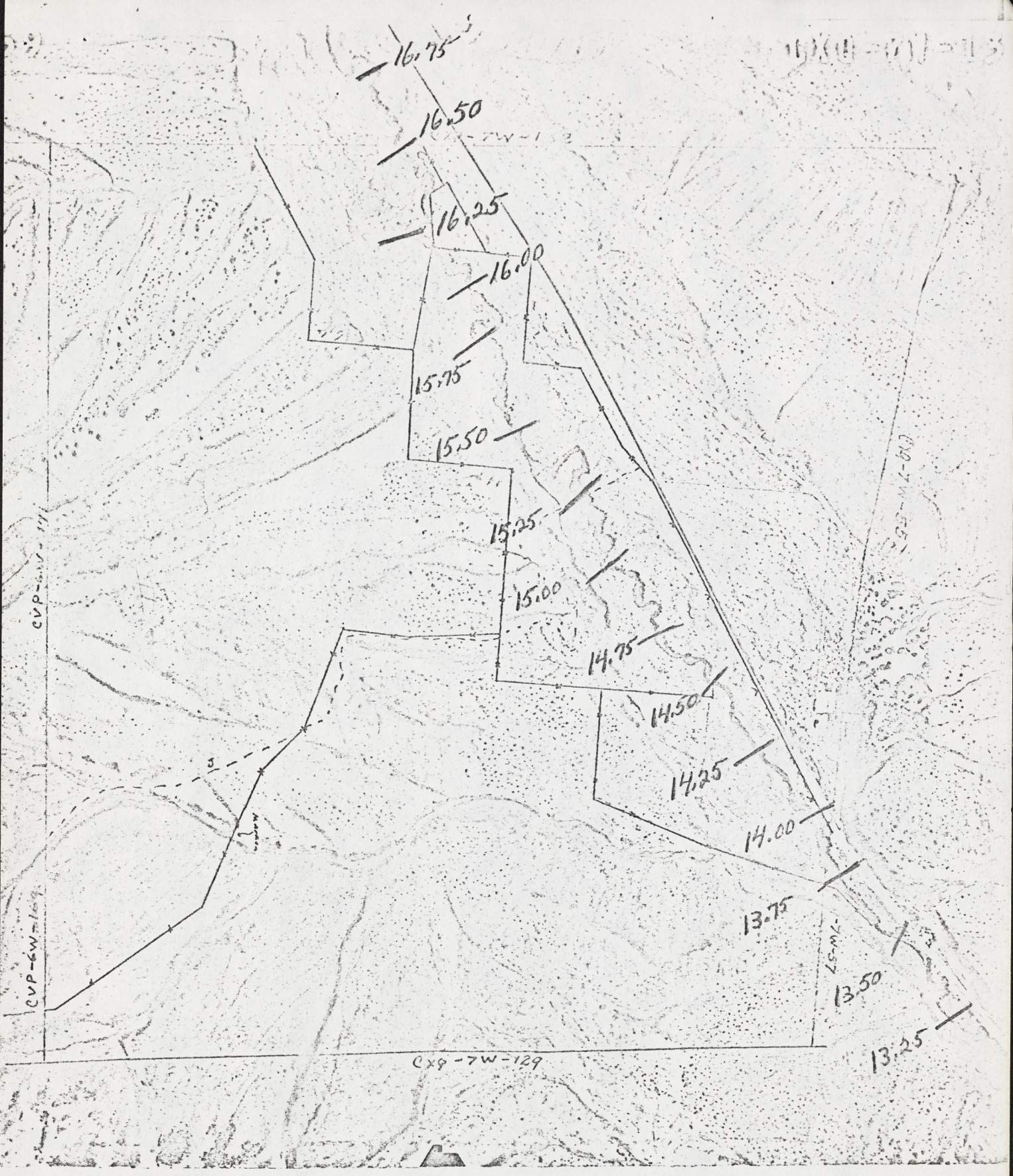
CX9-7W-129

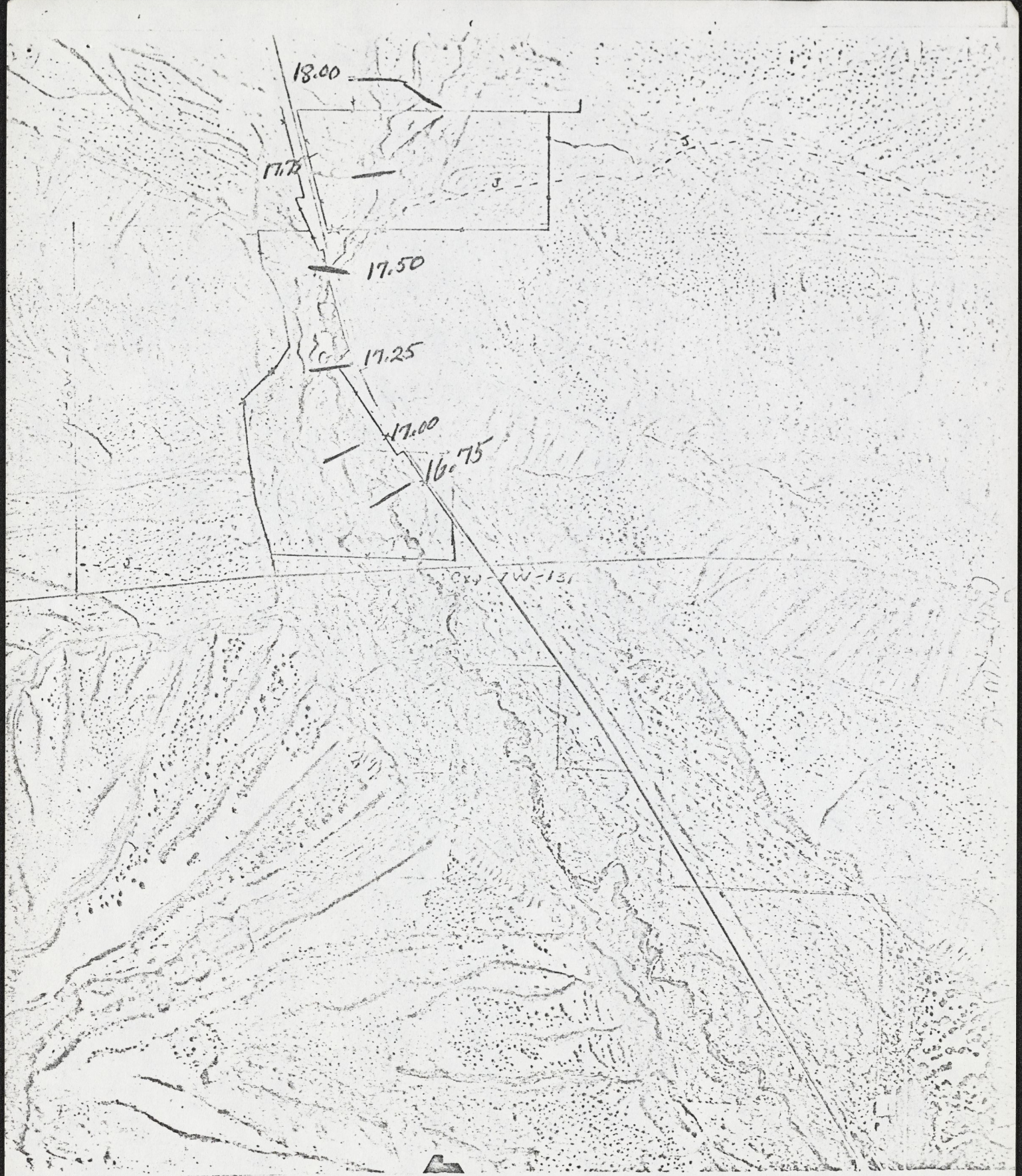
CVP-6W-171

CVP-6W-169

CVP-6W-168

CVP-6W-167





18.00

17.75

17.50

17.25

17.00

16.75

C&N 1W-131

34-26W-1

5

34-26W-1

19.50

19.25

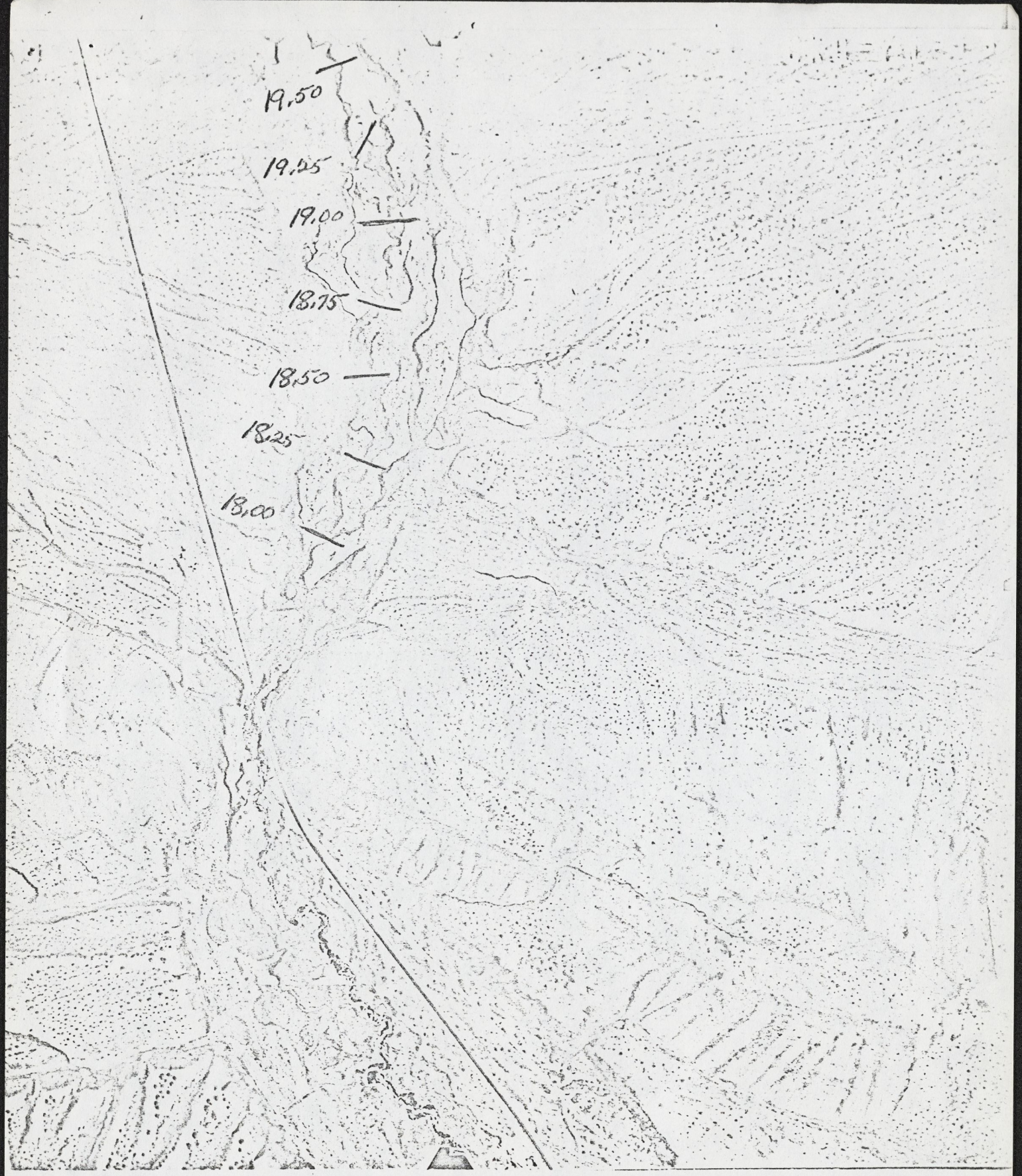
19.00

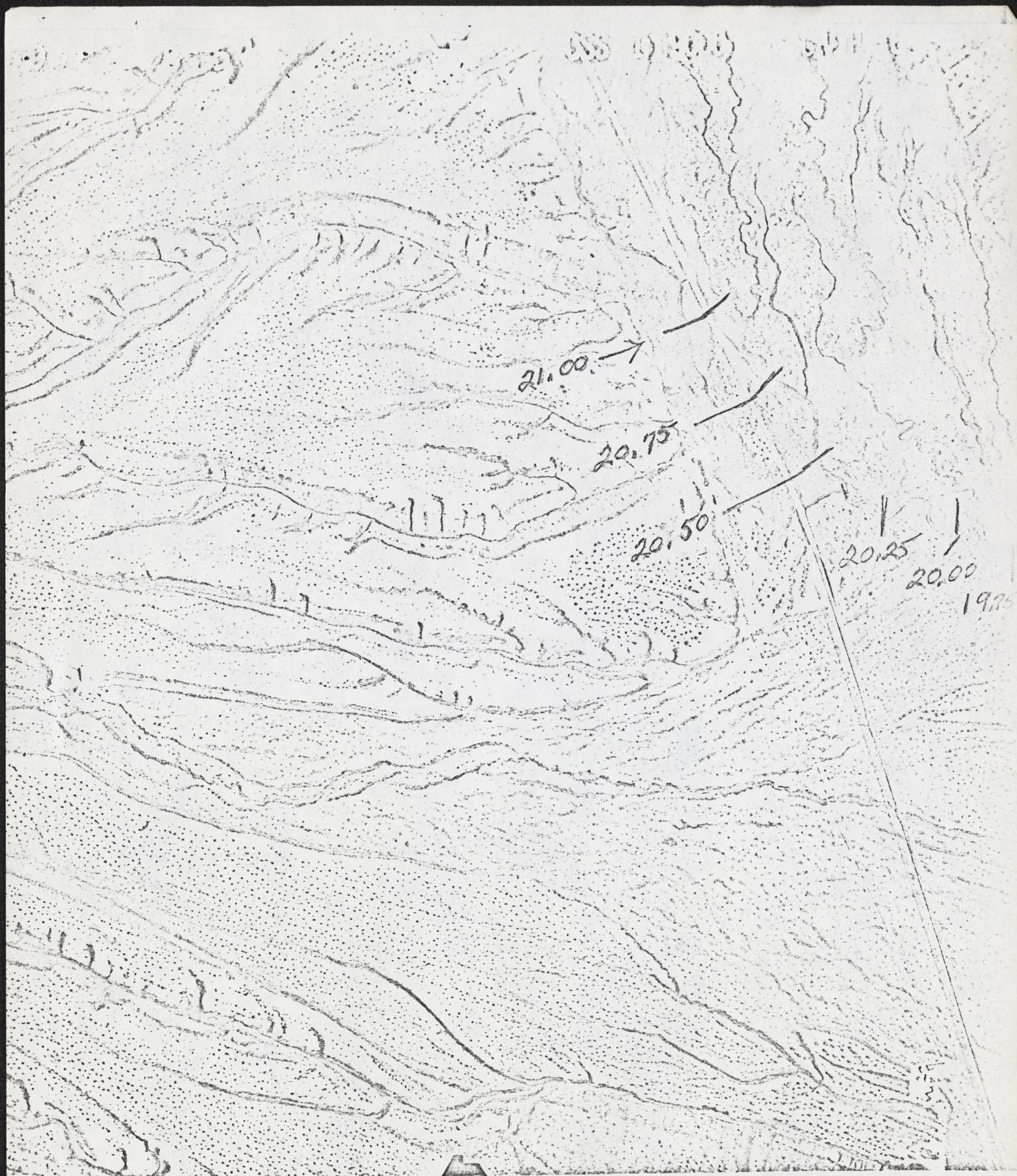
18.75

18.50

18.25

18.00





588 (1975)

21.00

21.00 →

20.75

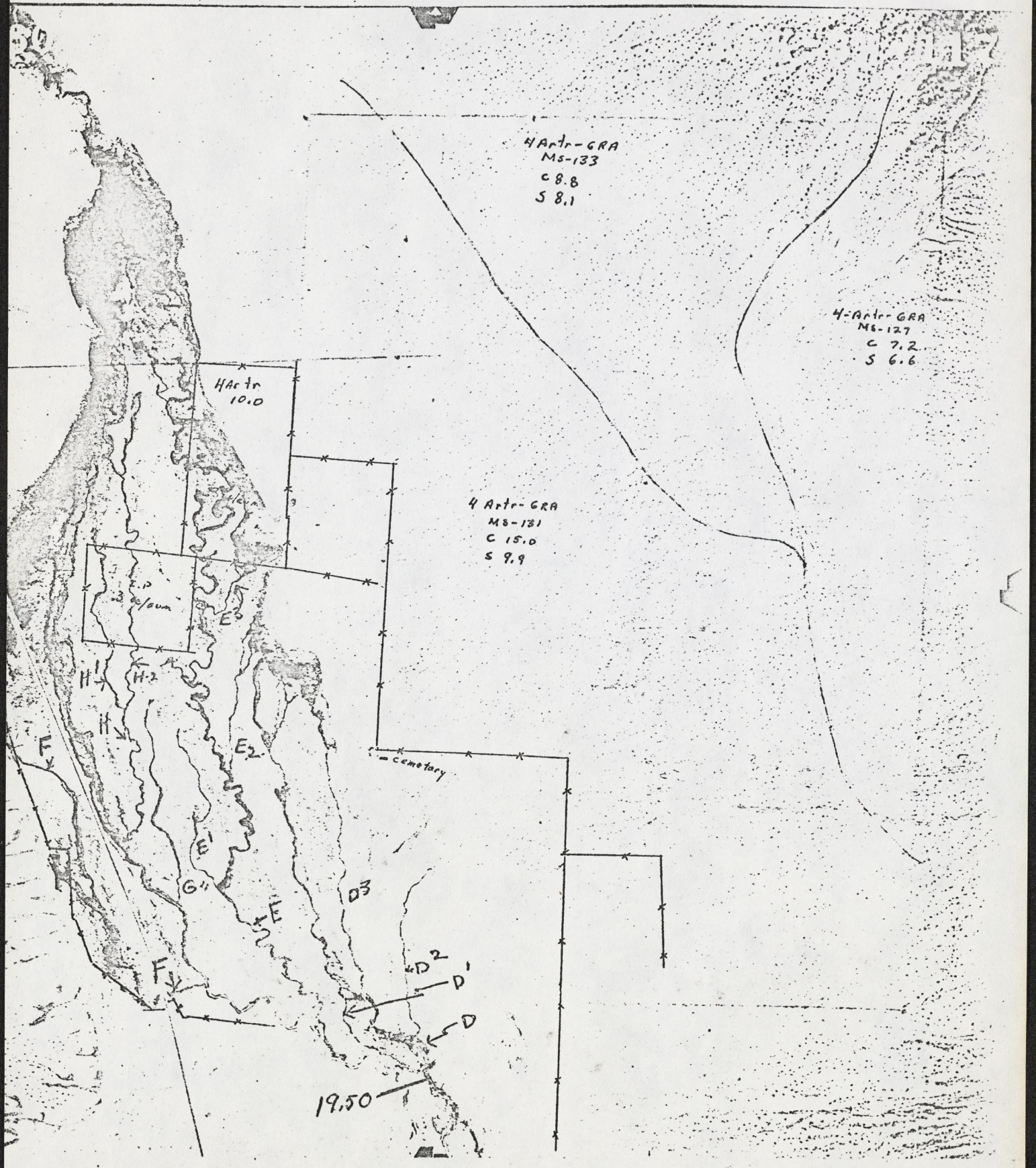
20.50

20.25

20.00

1975





4 Actr - GRA
MS-133
C 8.8
S 8.1

4-Actr - GRA
MS-127
C 7.2
S 6.6

H Actr
10.0

4 Actr - GRA
MS-131
C 15.0
S 9.9

cemetery

19.50

E.P.
3/oun

E3

E2

E1

G1

E

D3

D2

D1

D

F1

H1

H2

F

Photographs

Birch Creek

Rainbow collected in Big Creek in 1994.



Deer Creek
2 photos

Deer Creek near
Forest Boundry

165 mm
212 mm





Rainbow - 165 mm

Deer Creek - Near Forest Boundary

06 95 18 14 109 1052 H H H H 10 2

=7



LOST

Rainbow 212mm with Cut Spotting

Deer Creek - near forest boundary

06 95 18 12 169 1052 N N N N N N N N

#6

Hollinger Corp.
pH 8.5

Meadow Creek Trib

1 photo



another quality product of the

BARTCO

LOWER RANGER DISTRICT

6.28.95

Rainbow/Cutthroat? In unnamed tributary
to Meadow Creek. This fish had
a orange cutthroat " slash".

15 32+00 N19NN+16 450

Hollinger Corp.
pH 8.5

North Fork
5 Photos

North Fork of
Deer Creek.

141 mm - specimen

182 mm

167 mm





Rainbow (Hybrid ?) 141 mm
North Fork of Deer Creek
Preserved.

06 95 18 31 109 1052 N N N N N 10 2

16



Rainbow (Hybrid?) - 141 mm
North Fork of Deer Creek
Preserved

06 95 18 35 109 1052 N N N N N N N 2

#18



Rainbow (Hybrid?) - 182 mm

North Fork of Deer Creek

06 95 18 28 109 1052 H H H H 10 2

#14



Rainbow - 167 mm

North Fork of Deer Creek

06 95 18 25 169 1052 N N N N N 10 2

* 13



Rainbow - 167 mm

North Fork of Deer Creek

06 95 18 23 109 1052 N N N N N N N 2

12

Hollinger Corp.
pH 8.5

Badger Creek
4 photos

Badger Creek

- 169 mm - specimen
- 173 mm - specimen
- 177 mm - specimen
- 213 mm - specimen





Badger Creek

169mm. (collected)

06 95 18 45 169 1052 H H H H H H 2



Badger Creek

173 mm (collected)

06 95 18 41 109 1052 N N N N N N 2



Badger Creek

177mm (collected)

06 95 18 44 169 1052 N N N N N 10 2



Badger Creek

213mm (collected)

06 95 18 49 109 1052 H N H N H N N 2

Hollinger Corp.
pH 8.5



ROAD MAP OF IDAHO
 Prepared for
STANDARD OIL COMPANY OF CALIFORNIA
 SCALE OF MILES - ONE INCH EQUALS APPROXIMATELY 25 MILES

Populations of Cities and Towns

State Capital	2,500 to 5,000	25,000 to 50,000
Communities	5,000 to 10,000	50,000 to 100,000
	10,000 to 25,000	100,000 and over

Population symbols shown as to enclosed by \odot indicate County Seats.
 Copyright 1957 by The H.M. Gosselin Company, Chicago, Ill. U.S. Government is U.S.A.

Highway Markers

UNITED STATES M STATE AND CANADIAN S

Mileages

MILEAGE BETWEEN TOWNS AND JUNCTIONS

Map Symbols

POINTS OF INTEREST
 FISH HATCHERIES
 AIRPORTS

Mountain Passes

Usually closed in Winter
 Usually open in Winter

ROAD SURFACING

NUMBERED THRU ROUTES
 STATE ROUTES
 OTHER ROADS

PAVED ROADS: Concrete, Asphalt, Surface-treated
 IMPROVED ROADS: Gravel, Stone, Treated Sand/grit
 GRADED ROADS: Gravel and Mountain
 DIRT ROADS: Unimproved

STANDARD OIL COMPANY OF CALIFORNIA

THE GEM STATE

Capital: Boise
 Elevation: Highest 12,655 feet, Lowest 200 feet
 Average annual rainfall: 18 inches
 State flower: Sycamore
 State bird: Mtn. Bluebird
 St. song: "Here We Have Idaho!"

SPEED LAW-60 M.P.H. DAYS-55 M.P.H. NIGHTS

Pend Oreille Lake
 Famed for its huge Kamloops trout which sometimes attain 30 or more pounds in weight. The lake and its surrounding forests and mountains provide fine recreation for thousands.

Heyburn State Park
 From the slopes of this verdant park can be viewed the strange phenomenon of the St. Joe River winding in its own channel through the lakes, as is shown in this view at Chatcolet Lake.

Coeur d'Alene Lake
 Easily accessible and one of the most popular lakes in the north of Idaho, Coeur d'Alene is regarded as one of America's loveliest. It is less than an hour's ride by fine road from Spokane.

National Bison Range
 Here, in their native habitat, roam the famous American Bison, remainder of mighty herds of millions of animals that thrived over western plains in the days of the covered wagon.

Cataldo Mission
 Native Indian skills were employed in building this historic mission and paintings done in Indian eyes still hang on the walls. Constructed in 1848, Mission was restored in 1930.

Grand Canyon of the Snake River
 Forming the boundary between Idaho and Oregon, the Snake River has cut a canyon over 5500 feet in depth, believed to be the deepest in North America. Also called Hell's Canyon.

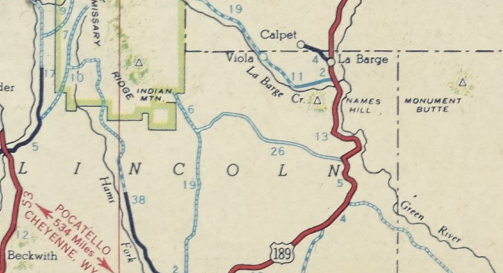
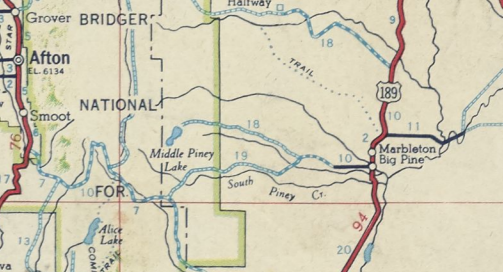
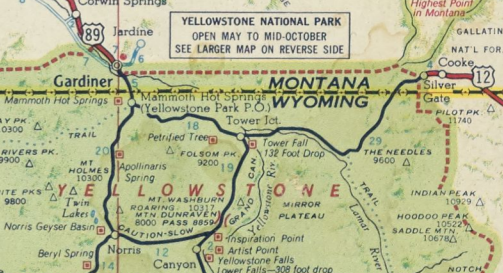
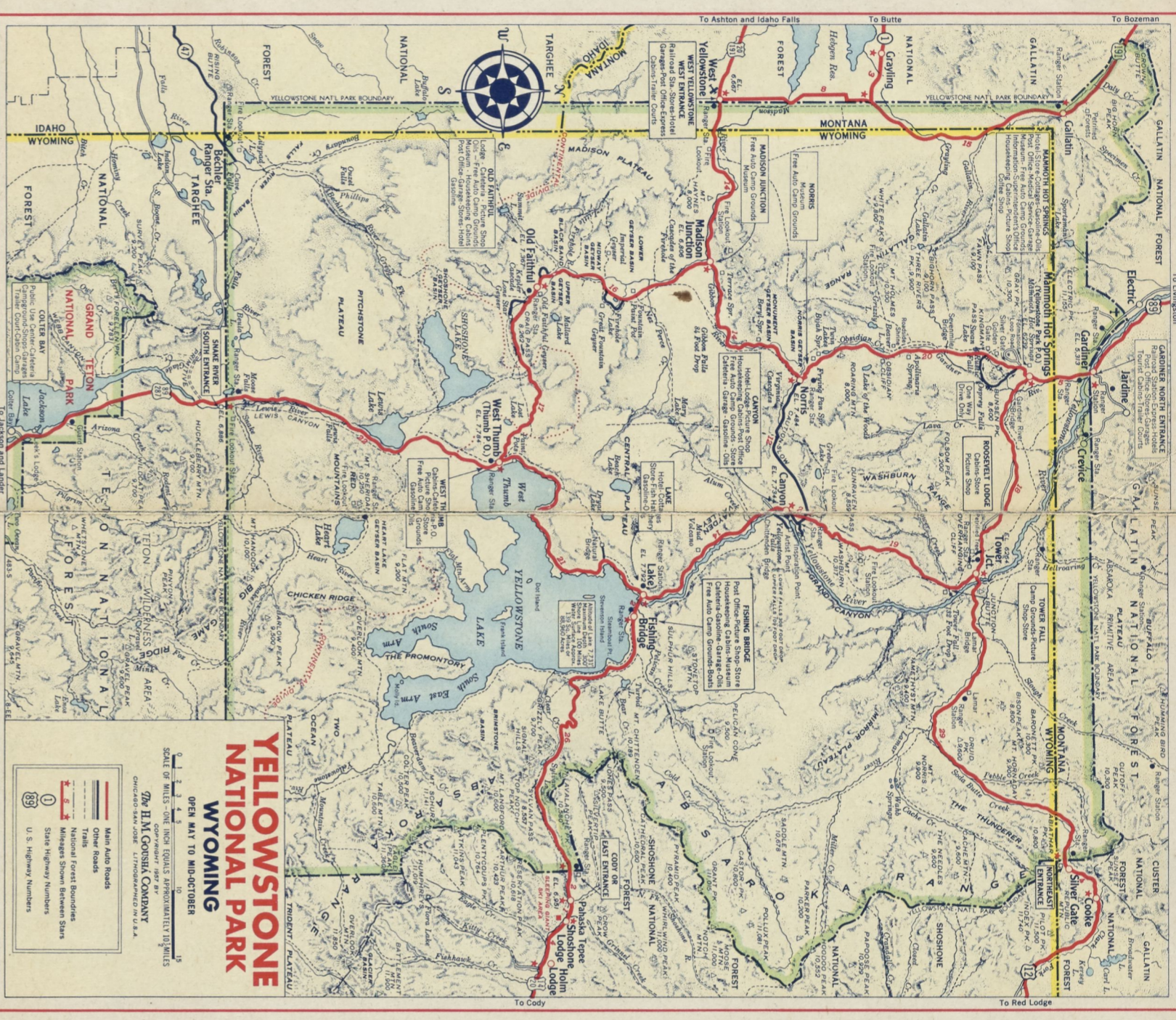
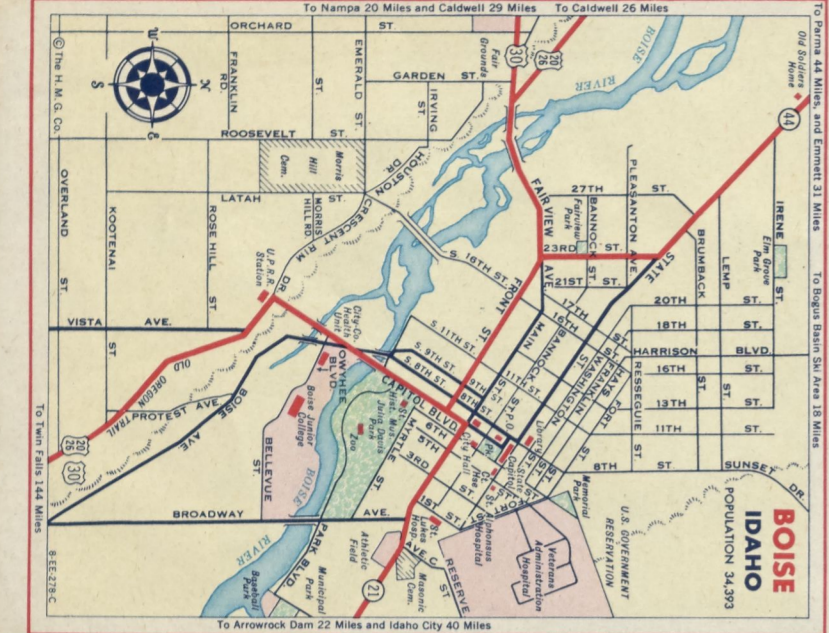


Table of contents listing various geographical features, cities, and counties with their corresponding page numbers in the index.



IDAHO MILEAGE CHART: A table listing distances between major Idaho cities and other locations. The table is organized with Idaho cities on the left and other locations on the right.



UNITED STATES ROAD MAP OF STANDARD OIL COMPANY OF CALIFORNIA. Includes a scale of miles and a map explanation legend.

National Parks and Monuments

List of National Parks and Monuments across the United States, including names, locations, and brief descriptions.

HELP PREVENT FOREST FIRES



Canal connecting Big Gulch in the
 Pahsimeroi River Drainage to the
 Little Lost. ~~It~~ Haven't been able
 to find a construction date

- Primary Highway
- - - Secondary Highway
- Improved Light Duty
- - - Unimproved Dirt
- - - Trail
- Power Transmission Line

Public Land
 U.S. Land
 and Lease

TOWNS

The Forest Service
 persons shall have a
 race religion, color.

