

# WENATCHEE NATIONAL FOREST

NACHES RANGER DISTRICT  
10061 HWY 12  
NACHES, WA 98937  
(509) 653-2205 (VOICE/TTY)

TO: Eric Anderson

FROM: Scott Hoefler

DATE: 9/14/98

TOTAL NUMBER OF PAGES INCLUDING THIS ONE: 3

IF YOU DO NOT RECEIVE ALL THE PAGES OR IF THERE IS ANY TROUBLE WITH THE TRANSMISSION, PLEASE CALL (509)653-2205.

OUR FAX PHONE NUMBER IS (509) 653-2638.

COMMENTS:

Eric,

These are the numbers from the first passes we did. The most interesting find was 2 definites, 1 probable, and 3 possibles on Kettle Creek. Didn't see any on Kettle until we were about 1/4 mile up it. Went a total of 3/4 mile. If you have questions, give me a call.



Caring for the Land and Serving People

Thanks,

Scott

1  
9  
9  
8

**1998 Rattlesnake Creek Bull Trout Spawning Survey - First Pass**

<u>Segment of Stream</u>	<u>Definite</u>	<u>Probable</u>	<u>Possible</u>	<u>Temp./Time</u>	<u>Date</u>
1114 trail crossing (below MJB x-ing) to MJB trail crossing	1		1	46/1230	9/9/98
MJB trail crossing to Shell Creek	2	1	3	44/0845	9/9/98
Shell Creek to Little Wildcat Creek	7	2	2	46/1200	9/8/98
Little Wildcat Creek	0	0	0	49/1415	9/8/98
Little Wildcat Creek to Mc-Neil Creek	13	3	6	44/1505	9/8/98
<b>TOTAL</b>	<b>23</b>	<b>6</b>	<b>11</b>		

**1998 American River Bull Trout Spawning Survey - First Pass**

<u>Segment of Stream</u>	<u>Definite</u>	<u>Probable</u>	<u>Possible</u>	<u>Temp./Time</u>	<u>Date</u>
Union Creek - mouth to falls	3	2	2	45/1400	9/10/98
American River - 1/4 mile below Union Creek	3	0	2	--	9/10/98
American River - Timber Creek to Mesatchee trail crossing	4*	0	0	47/1745	9/10/98
Kettle Creek - lower 3/4 mile	2	1	3	44/1030	9/11/98
American River - 1/4 mile below Kettle Cr. to Kettle Creek	0	0	0	49/1200	9/11/98

1  
9  
9  
8

TOTAL	12	3	7
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\* Only 2 of these redds were marked, because the other 2 were initially thought to be chinook redds. After talking to Eric Anderson and looking at chinook redds downstream, it is likely that these are bull trout redds for the total of 4.

1  
9  
9  
8

9/14/98 N.F. Ahtanum Cr. BLC  
Spawning Survey H<sub>2</sub>O Temp 46°F

From Grayrock Trailhead Bridges  
to Junction of Shellneck Cr.

0900 Hrs - 1230 Hrs.

Def II (2 redds)

Prob.  $\phi$

Pos. I (one)

Fish III (3)

E. Anderson  
T. Cummins

1

Shellneck Cr. BLC Spawning Survey

~~1230~~ 1230 - 1430 Hrs.

Def.  $\phi$

Prob.  $\phi$

Pos. II (two)

Fish.  $\phi$

2

Cows in stream along spawning  
index area. Riprap

Large boulders in stream at bridge  
near snowcabin campground - placed by  
backhoe? Barrier - No. - Poor Design.

9/25/98 N.F. Artanum Cr. BLC  
Spawning Survey H<sub>2</sub>O Temp. 44°F

From Grayrock Trailhead Bridge to  
Junction of Shellneck Cr.

1

0830 - 1200 Hrs.

Old Def. 11 (2 Redds)

No Fish  
observed.

New Def. 1 (One Redd)

(1 Pos. changed to 1 Def.)

1% Cows in stream bottom - tracks by redds

Shellneck Cr. 9/25/98

1200 - 1400 Hrs.

2

No old redds but two  
possible changed to  
two new definite.

Def - 2

E. Anderson  
J. Cammins

Deep Cr. BLC Spawner Survey  
8/27/98 E. Anderson, Aaron Krieger  
Falls to downstream, H<sub>2</sub>O Temp. 45°  
Def. 11 (2) Redds ↓ above RD  
1800  
(see J. Collins data)  
1890

Streambed dry for  $\approx$  .5 mile.  
No BLC passage possible.

1 Dead EB  $\approx$  8". Two Redds  
1 Stranded BLC  $\approx$  8". found above  
Numerous stranded fry. dry area.

(Tim Eickler + Aaron Krieger)  
Below Rd 1800 Bridge 14 Def  
Redds

CWR / BOR Fish Technicians  
Tim Eickler + Aaron Krieger

Below Rd 1800 Bridge  
14 Redds.

9/9/98 Indian Cr. BLC

Spawner Survey

0920 Hrs - 1345 Hrs

E. Anderson H<sub>2</sub>O Temp. 44 °F

Lower S. Spring @ end of Rd. Trail

Crossing to upstream.

Def. II

Prob.

Pos.

Fish

Mainstem @ end of Rd. Trail

Crossing - upstream to falls

Def. ~~II~~ I

Prob. II

Pos.

Fish. IIII

Very low flow  
@ Trail crossing  
probably block  
to migrating fish  
down or up.  
Fish were observed  
to the falls.

Upper S. Spring

Def. ~~II~~ III

Prob. II

Pos.

Fish I

.9-9-98 Indian Cr - continued  
Mainstem at end of Rd  
Trail crossing - down-  
stream to R. Spring.

Def. ~~III~~ III

Prob. I

Pos. II

Fish III

This section also has a  
short side channel.



9/10/98 S.F. Tieton R. BLC

Spawner Survey

E. Anderson 0950 Hrs - 1315 Hrs.

H<sub>2</sub>O Temp. 45°F

Corral Creek C.G. to downstream  
to Blue Slide (Red junction).

↓ Boulders (steeper gradient  
higher velocity)

Def. III III I

Prob.

Pos. II

Fish III I

H<sub>2</sub>O was turbid + made  
visibility less than desirable.  
still possible to count redds.

9/15/98 Deep Cr. BLC SPANNER  
Survey H<sub>2</sub>O Temp 45°F  
E. Anderson, J. Cummins 0930-1130 Hrs  
above Rd 1600 Bridge.

Det. ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~  
~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ||

Prob. ||

Pos. 1

Fish. ||

(2 Redds above subterranean/dry  
channel area included in above)

Below Rd 1600 Bridge 1230-1400 Hrs

Det. ~~||||~~ ~~||||~~ ~~||||~~ ||||

Prob.

Pos. ||

~~Left~~ Right channel  
dry

Fish.

Total Redd Count (Old & New)

98 Jim & Eric

~~98~~  
~~98~~  
~~98~~

~~98~~

9-17-98

Rattlesnake Cr. BLC Spawning  
Survey. E. Anderson 0820-1220  
H<sub>2</sub>O Temp. 45°F

1

From Trail Crossing below Burnt Mtn.  
Trail Junction <sup>(near shell creek)</sup> to upstream @ trail  
crossing above L. Wildcat Cr.

above Wildcat Cr.  
above Wildcat Cr.

old Def. ~~||||~~ ~~||||~~ → below Wildcat cr.  
old Prob. +++ — canceled or changed  
old Pos. ++ | + + + +

No Fish

New Def. ~~||||~~ |||| → below Wildcat Cr.  
New Prob.  
New Pos.

Note: Area between  
Little Wildcat + Trail xing  
had 5 Old Def + 5 New Def.  
included in above totals

From Trail Crossing above L. Wildcat Cr.  
to upstream near McNeil Creek (beaver ponds)

old Def. |||| |||      New Def. |||| ||||  
old Prob. ++ )      New Prob.  
old Pos. + }      New Pos.

2

ran out of  
H<sub>2</sub>O - dry channel  
near McNeil  
canceled or  
changed

9/17/98 Rattlesnake drainage  
Little Wildcat Cr. BLC

Spinner Survey from mouth  
to upstream approx 10 min,  
upstream of rock slide  
area on Left bank.

(approx 50 min upstream from  
trail crossing)

1255 - 1415 Hrs.

Det. MH 1

Fish 1

All Redds above trail  
crossing - none below.

H<sub>2</sub>O Temp 47°F

9-17-98 Rattlesnake Cr. BLC  
Spawning Survey E. Anderson  
1620 - 1800 Hrs.

From Trail Crossing below MJB  
Trail ( $\approx$  1.5 mile); to MJB Trail  
Crossing. H<sub>2</sub>O Temp 45°F

old Def.  $\pm$  — Changed to  
old Prob chinook  
old Pos. Redds

New Def. III

Located approx  
S26 T15 R13 NE<sup>1/4</sup>  
(1.25 mi. below MJB)

No fish observed

1 chinook carcass found

$\frac{1}{4}$  -  $\frac{1}{2}$  mile above Trail Crossing

chinook found in bend in  
River in pool - decomposing  
 $\approx$  34"

Redd above chinook  $\approx$  100'  
another Redd above this one  
about another  $\frac{1}{4}$  mile. Both empty

9-21-98

Gold Cr. BLC Spawning Surveys

E. Anderson S. Croci (USFWS)

H<sub>2</sub>O Temp. 46°F 0800-1330 Hrs.

From Gold Cr. Pond Outlet to Falls  
Def. ~~III~~ ~~III~~ ~~III~~ ~~III~~ (Block)

Prob.

Pos. III

Fish ~~III~~ III

Stream channel dry in 3 areas!  
(2 areas below silver Cr. + 1)  
(above. Large dry areas.)

Fish + Redds observed in  
all areas above dry reaches,  
~~clear to Falls.~~

No Fish or Redds observed  
between the cascades + falls  
but is possible.

Silver is dry.

9/22/94

Indian Cr. BLC Spawning Survey  
E. Anderson, C. Confer

H<sub>2</sub>O Temp 46°F 0915-1230 Hrs.

Hwy 12 Bridge to N. Spring

Old Redds

New Redds

Def. <del>    </del> <del>    </del> <del>    </del> <del>    </del>	<del>    </del> <del>    </del> <del>    </del> <del>    </del> <del>    </del>
<del>    </del> <del>    </del> <del>    </del> <del>    </del> <del>    </del> <del>    </del>	
Pro. ++ <del>    </del>	
Pos. +	<del>    </del>

1

Fish ||||

N. Spring 1315-1440 Hrs E. Anderson  
J. Cummins

old Redds

New Redds

Def. <del>    </del> <del>    </del> <del>    </del> <del>    </del>	<del>    </del> <del>    </del> <del>    </del>
<del>    </del> <del>    </del> <del>    </del>	
Pro.	
Pos. +	

2

Fish ~~||||~~ ~~||||~~ |||| (1 10" Fish)

(N. Spring includes beaver pond area)

9/23/98 0945-1230 Hrs.

S.F. Tieton R. BLC Spawning  
Survey; H<sub>2</sub>O Temp. 42°F

E. Anderson, Pat Monk

Falls to Bear Creek

Old Redds

New Redds

Def. II

~~||||~~ ~~||||~~ |

Prob.

1

Pos.

1

Fish ~~||||~~ ~~||||~~ |

Bear Cr. (Mouth to Falls)

1300 - 1420 Hrs

45°F

Old Redds

New Redds

Def. ~~||||~~ ~~||||~~ ||||

~~||||~~ ||||

Prob. 1

11

Pos.

~~||||~~

2

Fish ~~||||~~ ~~||||~~ ~~||||~~



9/23/98

S.F. Tietom Continued

BLC Spawner Survey

Bear cri. to downstream @ 1050

1450 - 1545 Hrs Bridge

E. Anderson + P. Monk

<u>Old Redds</u>	<u>New Redds</u>
Def. III	III III
Prob.	
Pos.	II

Fish II

~~1050 Bridge to downstream~~

Evidence of recent fishing activity  
in area above 1050 Bridge  
(bait containers, etc.)

10/5/98 1015-1245 Hrs.

Box Canyon Cr. BLC Spawner  
Survey. (WDFW)

E. Anderson, S. Croci (USFWS)

H<sub>2</sub>O Temp. 46°F

Footbridge @ Kachess L. Campground to  
1st Falls.

Old Redds       $\phi$

New Redds

Def. ~~NI~~ IIII

Pro.

Pos. 1

Fish III

3 Redds above  
~~and canyon~~  
(Below Peek a boo)

Lower than I  
have ever  
seen!

H<sub>2</sub>O level  $\approx$  1.5-2 FT lower  
than usual in Box Canyon Cr.

H<sub>2</sub>O level @ mouth breaks out  
into 3 channels  $\frac{1}{2}$ -4" depth,  
questionable fish passage in  
<sup>all</sup> areas near mouth.  
(Right channel H<sub>2</sub>Oed, Left dry.)

10/6/98 E. Anderson

Indian Cr. BLC Spawning Survey

H<sub>2</sub>O Temp 45°C 0910-1310 Hrs.

Hwy 12 Bridge to upstream @ N. Spring

Old Redds

New Redds

Def. ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~

||||

~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ||

Prob. ++ ++++++

Pos. ++++++

Fish

Ten old Prob. changed to Ten New Def.

10-7-98

S. F. Tieton BLC Spawner Survey

0940-1120 Hrs. E. Anderson

H<sub>2</sub>O Temp. 43°F

1050 Bridge to Corral Cr. C.G.

Old Redds

New Redds

Def. ~~||||~~ ~~||||~~ ~~||||~~ |||

~~||||~~ |

Pro.

Pos. ++

Fish  $\emptyset$

1

Corral Cr. C.G. to Blue Slide <sup>1120-1150</sup> Hrs

Old Redds

New Redds

Def. ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~

~~||||~~ |

~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~

Pro. ++

Pos. ++++

Fish 2

2

2 Pro changed to 2 Def

+ = deleted or changed

9-2-98 Wapitus R. above  
lake & below Crest Trail  
Bridge 1015 Hrs. - 1345 Hrs.

H<sub>2</sub>O Temp 55°F

Hook-n-line & BLC Spanner  
Surveys

RB 18.5 - Very Dark, many Spots.

EB 18 cm, 21, 11.5, 18, 20.5,  
20 cm

✓ Miltting male EB

≈ 4 cm YOY Fry observed (unidentified)

H<sub>2</sub>O Temp 58°F in Beaver  
side channel/Ponds.

main channel subterranean for ≈ 50 m.

No BLC or Redds observed.

E. Anderson

9-17-98 Rattlesnake Cr. BLC

Spawning Survey E. Anderson

1620 - 1800 Hrs.

From Trail Crossing below MJB

Trail ( $\approx 1.5$  mile) to MJB Trail

Crossing.  $H_2O$  Temp 45°F

old Def.  $\pm$  — Changed to

old Prob

Chinook

old Pos.

Redds

Located approx

S26 T15 R13 NE $\frac{1}{4}$

New Def. IIII

(1.25 mi. below MJB)

No fish observed

1 Chinook carcass Found

$\frac{1}{4}$  -  $\frac{1}{2}$  mile above Trail Crossing

Chinook Found in bend in

River in pool - decomposing

$\approx 34$ "

Redd above chinook  $\approx 100'$

another Redd above this one

about another  $\frac{1}{4}$  mile. Both Flipped!

9/10/78 S.F. Tinton - 25

Falls to Bear Cr

0930 - 1130

Temp 45°F

Reeds

1

Fish

Det Prob Pos Tag Untag Unknown

111

1

1

11

3 BLC

Bear Cr to 1050 Bridge 1130-215

Det Prob Pos Tag Untag Unknown

111

111

11

1111

10 BLC

2

Water slightly off color -  
glacial - but gravel visibly

Bear Cr 1130 76 40°F

Det Prob Pos Tag Untag Unknown

111111

1°

1111

1111111111

3

1111

11111111

111111

1111

46 BLC

S.F Tipton BLC (Cont.) - 26

Beer Cr has a debris jam  
≈ 15' high that is a fish  
(BLC) barrier about 50' below  
falls

1050 Bridge to Corral CR CG

2:15 pm - 3:10

def	Prob	Pos	Tas	Untas	Unknown
III			I	II	III

Water clearer pm - could  
have missed reddets earlier.

S.F Tipton Totals Eric + Jim Fish

def	Prob	Pos	Total	Fish
-----	------	-----	-------	------

10	0		10	19
----	---	--	----	----

11	0	2	11	6
----	---	---	----	---

---

21	0	2	21	25
----	---	---	----	----

Beer Cr

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14	1		15	46
----	---	--	----	----

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35	1		36	71
----	---	--	----	----



S.F. Tiston - Coral Creek (32)  
to Blue Slide 9/23/98  
1010 - 440 F

Old Radds  
def IIII IIII  
Prob +  
Res II

New Radds  
def IIII IIII IIII IIII IIII IIII IIII IIII  
Prob II  
Res IIII  
BLC  
II  
Vmas III I WFP  
Unk III

S. F. Tieton - Corral Creek (33)  
UP - to 1050 Bridge

Old BLC ~~red~~

Def II

Prob

Res

Fish

New BLC redds

Def III III III I

Prob

Res II

Fish III

Toy II

Unbr III

Unbr III

S. F Tinton R 10/16/98  
Falls to Bear Creek 7  
0935 41°F

Old Redds

def ~~||||~~ ~~||||~~ ||

prob

pos 1

1

New Redds

def ~~||||~~ 1

NO fresh water clean excellent visibility

500 G - 1120 43°F

Old Redds

def ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ 1

prob III

pos IIII

New Redds

def ⊖

2

prob ⊖

pos ⊖

fish ⊖

S.F. Tinton - Bear to 1050 Rd  
1300 —

Old Redds

det III III I

Pos

Pos

New Redds

det III I

~~August 10~~  
Gold Cr - 10/5/98  
0915 42°F

dry from near Gold Cr Pond to  
1/8 mile above private pond,  
Started just below official  
trailhead (at private pond) &  
walked to upper falls

Old Reds	New Reds
Def IIII IIII IIII IIII	III III III
Prop	I
Asst II	
Fish	II

Found 1st fish about 300' above  
1st (downstream) reed,  
well above Silver Creek there  
is one area that is almost  
dry - impassible to fish, but  
trickle of water.



Kettle Cr  
1320-1420  
450 F

Old Redds		New Redds	
Def	Pro 4 Pro	Def	Pro Pas
		HCC	1
Not Flagged		11	
by USFS			

Stop at a pink ribbon that says "END Recch 1 9/29/93". Also, a small creek is flowing into right bank (looking downstream)

9/17/98 Rattlesnake C <sup>(18)</sup>

BLC / hook + line Survey 1140  
from MTRB Trail to Trail Hill  
Crossing below Strawberry Mead.  
Start: 1045 - 16<sup>00</sup>

Ct all released

21.0 21.0

23.0 28.5

28.0 16.0

26.0 21.0

16.5 24.0

near  
shell  
cri

fishing relatively slow - maybe  
because of low water temps.  
Took temp @ 1045 - 45° F

BLC

Redds

BLC

Drf Prob for 1 - 20"

HH

1

Box Canyon Cr. 9/21/98

(29)

BLC passage potential at mouth + lower Creek is excellent. Near the mouth, in the reservoir sed, all of the flow is in the right (looking upstream) channel. Appears that the left channel has been blocked by placing river rock/gravel in the upper end of the channel. Passage is best I have seen in several years.

Flow is low (normal).

1130 - 1250 Mouth to 1st falls

Reeds	Fish
Dot Pick Pos	BLC
○ ○ ○	-1
	1111

water 50°F to warm for spawning.



Box Canyon Cr. 10/16/98  
16

Old Redds (BNC)

def ~~HH~~ IIII

prob

pos 1

New Redds

def ~~HH~~ I

prob 1

pos

fish ~~HH~~ ~~HH~~ (BNC)

Redds w fish

1 - 2 fish

1 - 1 fish

1 - 2 fish

1 - 1 fish

1 - 2 fish

2 fish not on redds

8/27/98

①

Deep 61 - Culvert Upstream

Def	Prob	Pos	Fish
HHH HHT	HHH	HHH	HHH HHT HHT
HHH HHT			

42 ~~HHH HHT HHT~~

~~12~~ HHT HHT ||

56 Tag  
HHH HHT ||

32 HHT || + 13

Summary

23	7	7	56 Unknown + untagged
			32 Tagged
			<hr/> 88

Below Culvert from  
Paul James by Redd's  
Trap 120 BHC @ 9/11

Deep Ck BIC 9/15/98

(27)

Culvert Up. - Eric  
has most of data

dot

Pos

Pos

###

###

###

OK - included in Eric's  
previous total

---

###

||

###

###

###

###

OK - included in Eric's  
previous total.

My totals

34 dot

2 Pos

1 Pos

Totals include Eric

75 dot

2 Pos

1 Pos

Eric has data below culvert.

no redds in right channel - mostly  
dry.

Wapt vs R. F. Snow Cr (14)  
Pacific Crest Tr Crossing  
9/2/98 Wed

10:05 - 55° F

RB/Ct	Ct	RB
23.0	15.0	16.0
11.5	19.3	18.2
13.0	14.0	17.0
19.5	16.5	18.6
16.5	24.0	18.0

22.5

EB 24.0

14.0 18.5

15.5

16.5

21.5

19.0

Ct Not Measured - RB

12.0

||||

11

||||

||||

XXXXXXXXXXXX

7/2/98 (cont)

(15)

Most of above fish data  
is from Shovel Cr. almost  
all<sup>p</sup> Since weather was dry above shovel  
Cr I got confused about my location.  
1245 - arrived at falls - a  
40' high 4 step cascade -  
probably not passible. Pool  
below falls loaded with  
Ct.

Mostly Ct upper section.

Tailed frog tadpoles observed.

saw a few fry right up  
to falls.

Shovel Cr. 57°F @ 1pm

9/2/98

(16)

Found Wartus R. - dry  
channel + followed down  
to Shovel Cr - flows into  
Shovel about 1/8 mile below  
Shovel Cr falls? Most of  
data there is for Wartus.

walked 200 ft up Wartus  
R + found ever increasing  
water. also saw fish fry  
+ tailed frog tadpoles

Wartus R above Shovel  
150 pm water TEMP. 57 F  
Fished 150 - 2<sup>40</sup>

Released fish

Ct Ct/Rb

17.5 12.0

3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

9/2/98

(17)

Chief Ck

2:40 pm

55° F

Fished 2:45 pm - 3:30 pm

Ct. all released

RS

21.0      23.0      28.0

17.5

26.5      26.      23.0

28.5      24.5

Falls - 80' feet - not possible

Slimy green algae in this  
Ck.

Steep gradient - boulders.

Pool below falls loaded  
with fish. Saw fry.

Dry just below trail crossing

Wapitus R. 9/3/98

(18)

Walked fished 1 mile section  
below + ending due east of Cone Mtn.  
SE 1/4 Sec 9 E 1/2 Sec 30 T23N R14E  
Start 12<sup>00</sup> pm - 45<sup>00</sup> pm.

At lower end river channel  
almost all large boulders -  
covered with green algae -  
moderate gradient. 60 F

Estimated widths - wetted area

95'	130'	
65'	115'	
110'	155'	
15	100'	
35	85'	
130		
60		
75		

$\frac{1,170}{13} = \bar{x} = 90 \text{ feet}$

APR 1998



Wapiti River  
Fish Caught + released

(19)

EB

RB

17.0

15.8

13.5

19.0

12.0

16.2

15.8

19.0

30.0

20.0

13.0

18.0

12.3

13.5

12.5

20.0

Saw a very few fry.

Middle of section had more smaller boulders, rubble & some gravel, but fewer pools & holding water. Poor habitat, Green & brown color algae very abundant.

Wapetus R. (Cont.)

Upper  $\frac{1}{4}$  of section was wide, very slow moving, shore muddy - one very deep 20' pool. Rocks + gravel heavily silted, brown - green algae growth heavy.

Hooked + lost Rs larger than caught. Rs to 11"

Saw more ES in upper  $\frac{1}{4}$  of section - one that may have been 14" in the large deep pool.

The lower  $\frac{3}{4}$  of this section - boulders, bedrock is stained rust color.

Fish in this 1 mile stretch of Wapatus R were not as plentiful as in the upper Wapatus, Chief Ck or Shovel Ck, but are in good numbers. The lower part of this section appeared to have more R<sub>6</sub> than E<sub>6</sub>. The upper part far more E<sub>6</sub> than R<sub>6</sub>.

Wapatus R flow is much less than when we walked through this area last Sept + October.

Frogs plentiful.

7  
H  
111

# Waptus R. (Cont.)

Approximate section of  
river surveyed. USGS

Kachess Lake Quad 75 min

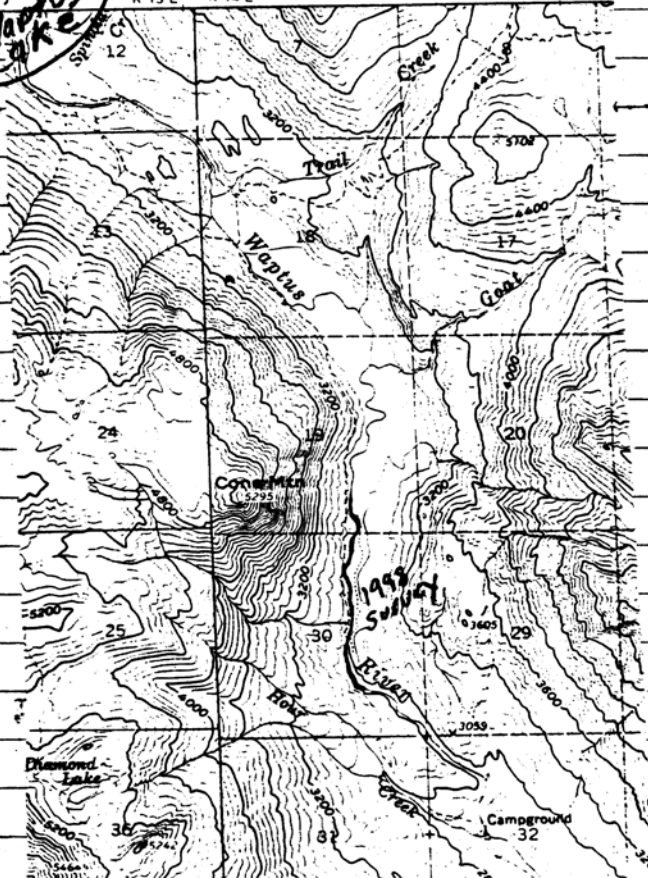
(22)

Waptus  
Lake

R 13E R 14E

641

642



Inman Creek Bridge to (23)  
 North Spring 0905 - 48°F  
 Redds (B/C) Fish 9/9/98

Def	Prob	Pos	Tag	Untag	Unknown
###	###	###	###	###	
###		1	###	###	
###				###	
###				###	
###				1	
###					
###					
###					
###					
###					
###					
1					

56 9 6 14 + 21 + 3 = 38 fish

|||

Indian Cr - North Spring  
2 pm.

Redd's

Fish

def.	Prob.	Pos	Tag	Unk	Unkn
HHH			HHH	HHH	
HHH			HHH	HHH	
HHH					
HHH					
HHH					
HHH					

35 2 3 13 18 3

North Spring @ Source 450' @ 3:35 pm.

Indian Cr		Total (Eric + Jim)
def.	Prob	Total
56	9	65
35	2	37
26	65	<del>37</del> 138

Indian Cr (end of road up)

9/22/98 0930

(30)

Indian Cr - L. South Spring to  
U. South Spring

Old Redds

New Redds

Def II

⊙

Prob -

⊙

Pos -

⊙

Fish

⊙

Dry area in this section above  
lower S. Spring water 43°F

@ 1010

South Spring (lower) 0930 - 44°F

Old Redds

New Redds

Def II ✓

### ##

Prob

I

Pos

III

Fish

⊙



Indian Cr. - Upper South Spring  
9/22/98 42°F @ 1015

Old Redds	New Redds
Def IIII	III
Prob 1	
Pos	1
Fish	0

Indian Cr - U. South Spring to falls

Old Redds	New Redds
Def IIII	IIII III
Prob 1+	
Pos.	IIII
Fish	1

water temp @ falls - 115° - 42°F

L1 South Spring to North Spring

1235 - -

Old Redds	New Redds
Def IIII IIII 1	IIII 1
Prob 1	11
Pos + 1	
Fish	0



Indian Cr D16/98  
0915 - 430F

(39)

South Spring New Redds  
Old Redds f.

def ~~||||~~ |

Prob 1

1

1

Pos |||

Fish

0

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Indian Cr - Lower South Spring to  
Upper South Spring

Old Redds

def |||

No New

0 F

2

Upper South Spring

Old Redds

def ~~||||~~ ~~||||~~ |

Prob 1

Pos

No new  
redds

3

No fish

Indian Cr - 10/5/98

U. South Spring to falls

Old Redds New

Def ~~||||~~ ~~||||~~ || 1

Pss ||

fcs |||

L. S. Spring to North Spring

Old Redds

def ~~||||~~ ~~||||~~ ~~||||~~ | NO

Pss ||| New reds

Pss 1 NO fish

Removed Juv 5" BLc from  
stranding saw 1 other 3"

Indian Cr. (Cont.)

41

North Spring 44F @ 1405

Old Redds Jim + Eric

Def ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~

prob ||

pos ++

New Redds

10/06/98

Def ||||

Indian Creek 10/6/98

Totals Def + Pos Old + New

Eric 92

Jim 65

58

215

Revised

212

Don't add up.

American R. 9/24/98 (34)

Union Creek - mouth to falls  
0950 - 1020 44°F

1

Old Redds			New Redds		
Def	Prob	Pos	Def	Prob	Pos
HH	H	++	HH	H	
1			11	(3)	

American R below Union  
Ck down 1/2 mile. 1020-

Old Redds			New Redds		
Def	Prob	Pos	Def	Prob	Pos
1			0		

2

Note: Scott Hocter called the  
area of Union Ck that is  
near the confluence of the  
American, the American R.  
Combine the 2 areas, & our "old"  
redd counts are identical

American R. 9/24/98 (35)  
Timber Creek - to upstream  
3/4 mile 1115 - 1230; 45° F

Old Redds  
det Pad Pas  
||

New Redds  
det Pad Pas  
|||

I ended where the river  
split into 3 channels about  
10 minutes up Mesatler Cr.  
trail from official trail  
head.

Did not locate flags for  
2 "010" redds.