

Bull Trout Take Report - 2004

WDFW Monitoring: Fish Program - Yakima sub-basin

The WDFW monitoring report of bull trout take during 2004 in the Yakima sub-basin is outlined below. Additional details of field operations and data summaries are contained in WDFW reports (i.e., Sport Fish Investigations in Washington State) and in regional file records. Most of the carcasses reported in the following "take table" were observed during the course of conducting redd counts. Hence, they were not caused by, nor were they the result of WDFW monitoring activities.

WDFW survey biologists: Eric Anderson, Jim Cummins, William Meyer, Michael Mizell
Survey assistance provided by: Jeff Thomas, (USFWS); Gary Torretta, Yuki Reiss (USFS);
Scott Willey, Scott Kline (USBR); Brandon Rogers (YN).

Bull Trout Take Report - 2004

WDFW Monitoring: Fish Program - Yakima sub-basin

Take Location	Specific Date(s) of Take	Type of Take 1/	Number Taken	Biological Data Collected?	Type of Biological Data Collected 2/	Disposition of Bull Trout Taken 3/	Comments
Yakima/Naches drainage (Union Creek, Rattlesnake Cr., Tieton, R.)	1/1/04 – 12/31/04	Trapping, handling. Radio Tagging	51 handled (35 tagged, 16 genetic samples)	Yes	Length, weight, genetics, radio-telemetry	31 radio tagged (alive), (recovered 3 morts) 16 genetic samples only. 1 shed tag found	Info on recovered mortalities (tagged bull trout) is noted under individual streams in this table.
Deep Cr	Aug 31 Sep 2, 13, 24	Observation	0	Yes	Redd Count	None Taken	97 Redds, 10 Bulls Observed
Indian Cr	Sep 7, 16 Oct 5	Observation	1 Carcass (post spawn mort)	Yes	Redd Count	None – Carcass left in stream.	50 Redds, 35 Bulls Observed
SF Tieton R & trib (Bear)	Sep 10, 22, Oct 6, 9	Observation	2 Carcasses (post spawn mort)	Yes	Redd Count	None – Carcasses left in stream.	180 Redds, 213 Bulls Observed
N.F. Tieton R (above Clear Lk.)	Oct 7	Observation	0	Yes	Redd Count	None Taken	1 Redd, 0 Bulls Observed
American R & tribs (Union, Kettle)	Aug 25 Sep 3, 8, 17	Observation	See Union Cr –below.	Yes	Redd Count	See Union Cr.	40 Redds, 17 Bulls Observed
Union Creek	Sept. 9/3/04 and 10/14/04	Observation, radio tracked,	2 post spawn mortality.	Yes	Length, Weight, Genetics, Radio-telemetry	Both carcasses found in American R. Left in stream for nutrients.	Radio transmitters retrieved out of water. Carcasses left. 1 tagged in Jefferson hole on 3/23/04, 1 tagged at Wapataux Diversion on 2/4/04
Crow Cr	Sep 2, 21	Observation	0	Yes	Redd Count	None Taken	6 Redds, 4 Bulls Observed.
NF Ahtanum Cr & trib (Shellneck)	Sep 1, 9, 16, Oct 4	Observation	0	Yes	Redd Count	None Taken	8 Redds, 7 Bulls Observed.
MF Ahtanum Cr	Sep 10, 20, Oct 5	Observation	0	Yes	Redd Count	None Taken	11 Redds, 7 Bulls Observed.
SF Ahtanum Cr	Sep 22 & Oct 30	Observation	0	Yes	Redd Count	None Taken	5 Redds, 0 Bulls Observed (Reported by Yakama Nation)
Rattlesnake Cr & tribs (Little Wildcat) (Shell)	Sep 8, 15, Oct 5	Observation	3 Carcasses (2 adult skin & 1-8 inch mort)	Yes	Redd Count	None – Carcasses left in stream (natural morts)	32 Redds, 10 Bulls Observed
Rattlesnake Cr.	10/12/04	Observation, radio tracked.	No Carcass – 1 tag found.	Yes	Length, Weight, Genetics, Radio-telemetry	Tag Only no carcass found.	Radio transmitter retrieved. Probable mortality, no body found
Ahtanum Creek	9/24/04	Observ..radio tracked after	No carcass – 1 tag found	Yes	Length, Weight, Genetics, Radio-	Tag Only no carcass found, suspect fish	Radio transmitter retrieved. Fish may be alive & just shed transmitter

Box Canyon Cr	Aug 31, Sep 8-9, 28, Oct 5, 12, 19	Observation	1 Carcass (post spawn mort)	Yes	Redd Count	Carcass left in stream – genetic sample.	19 Redds, 25 Bulls Observed
Kachess R (upper)	Sep 23 Oct 6, 18, 28, Nov 11	Observation	2 Carcasses (1 post spawn mort, 1 otter kill?)	Yes	Redd Count	1 carcass retained for genetics, 1 left in stream (gene tissue sample only) .	8 Redds, 14 Bulls Observed.
Gold Cr	Sep 30, Oct 7, 13, 26	Observation	1 Carcass (entrails)	Yes	Redd Count	None Taken	20 Redds, 1 Bull Observed

1/ Take types include observation, trapping/handling, trapping/handling/sampling, lethal take (i.e. bull trout killed while handling).

2/ Includes measurement of fork length, scale sampling, Genetic sampling.

3/ Note release location, if released (e.g. "above trap" or "downstream of collection point"). If a mortality, please note location of specimen, or that carcass was destroyed, etc.

S.F. Tipton 1050 to Blue S.

9-22-04 S. Kline BR

40.3°F E. Anderson WDF

old Def ~~|||||~~

~~|||||~~

New Def ~~|||||~~

Fish 1 52 New ~~|||||~~

old Pro. +H

old Pos

New Pos. ~~|||||~~

New Pro. 1

64

52

116

16

End 1445 Hrs.

132

25

17

J.T. Falls to Bear cr 174

old Def 15 0 F 4

New Def 1 1 F Not on Re 70

" Pro 1 1 Mort.

3 Hrs

1 Mort. in Blue Slide.

10-6-04 S.F. Tieton

1050- Blue Slide.

E. Anderson J. Cummins

1030 Hrs.

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

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

old Pro. 1

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

~~|||||~~

old Pos. ~~|||||~~ ~~|||||~~

~~Now Def. |||~~

end 1330 Hrs.

~~47 old Def.~~
~~38700 Def.~~
~~1 Pro.~~

Grey creek to
Blue slide

1 old Def
1 old Pro.

2004

South Fork Tieton/Bear Creek Bull Trout Spawning Survey Results										
Date: September 10, 2004	Redds			Adult Bull		Start	End	Surveyor		
	Definite	Probable	Possible	Trout	Mort's	Temp	Time	Time		
Grey Creek CG to Blue Slide	1	1	0	*		41	1000	?	Torretta & Clark	
Blue Slide to Minnie Meadows	28	2	17	81	1-24"			1400	Torretta & Clark	
Minnie Meadows to 1050 Road	36	1	1	42			1400	1530	Torretta, Clark & Thomas	
1050 Road to Bear Creek	14	0	0	19			1320	1530	Thomas	
Bear Creek	20	3	2	38		48.7	1320	1500	Cummins	
Bear Creek to Falls	17	0	0	23		44.1	1030	1319	Cummins & Thomas	
Totals	116	7	20	203	1					
*Torretta reported fish for Grey Creek to Minnie Meadow as one total.										
Note: About 1/2 of redds had one or more fish on them. For example, 15 of the 23 redds in Bear Creek had 27 fish on them.										
Clear, sunny day, good visibility, but slight turbidity in the South Fork making visibility into deep pool difficult.										
Visibility was excellent on Bear Creek.										

Bull Trout Spawning Ground Survey Data Form

Stream: Beer Creek

Date: 9/22/04

Location: Mouth to falls

Water Temp.: 47.3 F (8.5 C) @ 1230

Investigator: Cummins

Start Time: 1205

End Time: 1326

<u>Redds:</u>	New	Old
Definite:	<u>6</u>	<u>19</u>
Probable:	<u>1</u>	<u>1</u>
Possible:	<u>0</u>	<u>2</u>

2
0
0
4

Bull Trout Observed:

Adults: 9 (1 with yellow tag)

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): _____

Changed 1 Prob to New der + 1 Pos to New Prob

Bull Trout Spawning Ground Survey Data Form

Stream: SF Tieton R

Date: 9/22/04

Location: 1050 Road to Bear Creek

Water Temp.: 10:32 - 44.4F (6.9C)

Investigator: CUMMINS

Start Time: 1033

End Time: 1155

Redds:	New	Old
Definite:	<u>3</u>	<u>15</u>

Probable: _____

Possible: _____

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): _____

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: S.F. Tipton R (Bear Creek)

Date: 10/9/04

Location: Falls to Bear Creek, Bear Creek, Bear Cr to 1050

Water Temp.: -

Investigator: Jim Cummins

Start Time: 0954

End Time: 1335 New Old

Redds:	Falls to Bear	Bear New	Bear Cr to 1050	Falls to Bear	Bear Old	Bear Cr to 1050
Definite:	0	0	0	17	25	16
Probable:	0	0	0	1	2	0
Possible:	0	0	0	0	2	0

2
0
0
4

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): No marks

Drive distance 1050 Rd bridge to fall 2.7 miles

Drive distance "Y" (near Bivestdr) to 1050 R 2.2 miles

"Y" to Grey Creek C.G. - 1.3 miles

2004- Total Road Miles Surveyed 6.2 miles

Summary of bull trout spawning surveys (redd counts) in index areas of the Yakima sub-basin, 1984-2004.
(R=Resident, F=Fluvial, F/R=Fluvial/Resident, AD=adfluvial). WDFW Files, Yakima, WA.

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
<u>Yakima River (F)</u>																						
Keechelus to Easton Reach *																	2	1	0	0		
<u>Ahtanum Creek (R)</u>																						
N.F. Ahtanum Cr. (Shellneck Cr.)										9	14	6	5	7	5	7	11	20	17	12	8	
M.F. Ahtanum Cr. *												1	1			0	10	1	6	8	11	
S.F. Ahtanum Cr. *																	5	14	13	7	5	
<u>Naches River (F)</u>																						
Rattlesnake Cr. * (L. Wildcat Cr., Shell Cr.)							2				4	26	38	46	53	44	45	57	69	54	32	
American R. (Union Cr., Kettle Cr.)													25	24	31	30	44	36	27	30	40	
Crow Cr.																19	26	6	9	9	6	
<u>Rimrock Lake (AD)</u>																						
S.F. Tieton R. * (Bear Cr.)							32			38	167	95	233	177	142	161	144	158	141	190	180	
Indian Cr. *	29	69	16	35	25	39	69	123	142	140	179	201	193	193	212	205	226	117	100	101	50	
N.F. Tieton (above Clear Lk)*																						1
<u>Bumping Lake (AD)</u>																						
Deep Cr. *						17	15	84	78	45	12	101	46	126	98	107	147	51	120	57	97	
Bumping River (upper)																						0
<u>N.F. Teanaway River (F/R)</u>																						
NF Teanaway/DeRoux Cr. *													2	0	0		0	0	0			
<u>Kachess Lake (AD)</u>																						
Box Canyon Cr.	5	4	3	0	0	0	5	9	5	4	11	4	8	10	16	17	10	14	15	8	19	
Kachess R (upper) *															0		15	14	0	16	8	
<u>Keechelus Lake (AD)</u>																						
Gold Cr.	2	2	21	15	12	3	11	16	14	11	16	13	51	31	36	40	19	15	31	9	20	
<u>Cle Elum Lake (AD)</u>																						
Cle Elum R. (upper) *																	0	0	0	0		
<u>Summary</u>	36	75	40	50	37	59	134	232	239	247	403	446	602	615	593	630	704	504	548	501	477	

* Incomplete survey; index area not fully defined or adequately monitored: Yakima R. 2000-2001, M.F. Ahtanum 1996-2001, S.F. Ahtanum 2000, Rattlesnake 1990-1995, S.F. Tieton 1990-1993, Indian 1984-1987, Deep 1989-1990, N.F. Teanaway 1996-2002, Kachess 1998, Cle Elum 2000-2001, N.F. Tieton 2004.

Redds in small tribs (parenthesis) included in total stream count.

Table A-3. Historical and present distribution of bull trout in the Yakima subbasin (updated and modified from Goetz, 1989). (R = Resident, F = Fluvial, F/R = Fluvial/Resident, AD = Adfluvial). (NOTE: Last Year Present refers to the latest year their presence was officially recorded).

Lake or Stream	Last Year Present	Last Year Checked
*Yakima River (Benton Co) (F)	1997 (1)	2003
Yakima River (Yakima Co)(F)	2003	2003
Satus Cr.	1953 (2)	1991
* Ahtanum Creek (R)	2003	2003
N.F. Ahtanum Cr.	2003	2003
Shellneck Cr.	2003	2003
M.F. Ahtanum Cr.	2003	2003
S.F. Ahtanum Cr.	2003	2003
* Naches River (F)	2003	2003
Cowiche Cr.	2002	2002
Tieton R.	2003	2003
Oak Cr.	1999	1999
Rattlesnake Cr.	2003	2003
N.F. Rattlesnake Cr.	1996	1996
Hindoo Cr.	1995	1996
Dog Cr.	1996	1996
Little Wildcat Cr.	2003	2003
Milk Cr.	1996	1996
Bumping R. (Lower)	2003	2003
American R.	2003	2003
Kettle Cr.	2003	2003
Timber Cr.	1993	1993
Union Cr.	2003	2003
Little Naches R.	1998	1998
Crow Cr.	2003	2003
Quartz Cr.	1998	1998
Pileup Cr.	1998	1998
* Rimrock Lake (AD)	2003	2003
S.F. Tieton R.	2003	2003
Short and Dirty Cr.	1994	1994
Spruce Cr.	1996	1996
Grey Cr.	1994	1994
Bear Cr.	2003	2003
Indian Cr.	2003	2003
N.F. Tieton R. (Lower)	2003	2003
Clear Lk.	1993	1994
N.F. Tieton R.(Up.)	1996	1996
Dog Lk	1950 (2)	1990

Table A-3 (continued). Historical and present distribution of bull trout in the Yakima subbasin (updated and modified from Goetz, 1989). (R = Resident, F = Fluvial, F/R = Fluvial/Resident, AD = Adfluvial). (NOTE: Last Year Present refers to the latest year their presence was officially recorded).

Lake or Stream	Last Year Present	Last Year Checked
* Bumping Lake (AD)	2003	2003
Deep Cr.	2003	2003
Bumping River (Upper)	1994	1994
* Yakima River (Kittitas Co.) (F)	2001	2001
Coleman Cr.	1970	1984
Swauk Cr.	1993	1999
Easton Lake	2000	2000
* N.F. Teanaway R. (F/R)	2003	2003
Jack Cr.	1997	1997
Jungle Cr.	1997	1997
DeRoux Cr.	2001	2001
* Cle Elum Lake (AD)	1993	1993
Cle Elum R. (Upper)	2003	2003
Cooper Lake	2003 (3)	2003
Waptus Lake	1997	1998
* Kachess Lake (AD)	2003	2003
Box Canyon Cr.	2003	2003
Kachess R. (Upper)	2003	2003
Mineral Cr.	2003	2003
* Keechelus Lake (AD)	2003	2003
Rocky Run Cr.	1983	1983
Gold Cr.	2003	2003

- (1) A single fish captured near Benton City by WDFW biologists (extreme rare occurrence).
- (2) This record possibly species mis-identification (brook trout).
- (3) A single fish reported by angler/biologist.

Indian 10-5

E. Anderson

May 12 to N. S. Spring end
1015 hrs
1220

old Def III IIII

old Pos + changed to New Def
New Def III

Thousands of Kokanee
actively spawning

44.4°F

Start N. Spring ^{start} 1225 E. Anderson
end 1330 hrs

old Defr III IIII

old Pos +

New Def. III I

Fish III - 2 of these were

1 large
admiral

small resident or
precocial forms

(also possible EB or
Hybrids)

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: 9/7/04

Location: End of road trail crossing to falls + down to confluence with N. sprng - including S. Springs

Water Temp.: 46.17 @ 0955

Investigator: Cummins + Lance Clarke (USEFWS)

Start Time: 0955

End Time: 1315

Redds:	Trail to falls	New Trail down to N. Springs	Old
Definite:	<u>4</u>	<u>2</u>	
Probable:	<u>0</u>	<u>0</u>	
Possible:	<u>0</u>	<u>0</u>	

Bull Trout Observed:

Adults: 0

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): No low flow passage barriers. Sunny day - great visibility.

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Cr.

Date: 9-7-04

Location: Hwy 12 Bridge to N. Fork Spring + N. Spring

Water Temp.: 44.8°F (0935 Hrs) N. Spring 43.5°F (1200 Hrs)

Investigator: Eric Anderson (WDFW) + Jeff Thomas (USFWS)

Start Time: 0935 Hrs, → mainstem 1200 Hrs, → N.F. Spring

End Time: 1130 Hrs, 1315 Hrs.

Redds:	<u>mainstem</u> Indian	New	<u>N. Spring</u>	Old
Definite:	<u>6</u>		<u>3</u>	<u>-</u>
Probable:	<u>1</u>			<u>-</u>
Possible:				<u>-</u>

2
0
0
4

Bull Trout Observed:

Adults: mainstem - 2 N. Spring 3

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): 1 Bull Trout

Natural
mort.
likely

Carass observed - left in stream.

Indian Creek Bull Trout Spawning
Survey - Redd Count

E. Anderson (WOFW) & J. Thomas (USFW)

9-7-04 0935 Hrs

Hwy 12 Bridge to N.F. Spring
44.8°F

Def III

Fish

Carcass I

No
me

Pro. I

Live II

t

end 1130 Hrs.

Start N.F. Spring 1200 Hrs.

43.5°F

Def III

Fish III

Ended 1315

Eric Anderson - Fw: 9/16 Indian Cr. Redd Survey

From: Gary D Torretta <gtorretta@fs.fed.us>
To: <cummijlc@dfw.wa.gov>, <anderea@dfw.wa.gov>
Date: 9/17/04 9:18 AM
Subject: Fw: 9/16 Indian Cr. Redd Survey
CC: <jthomas@pn.usbr.gov>

Eric/Jim

Here is a summary of the bull trout survey on Indian Creek on Sept 16, from Hwy 12 bridge to falls.

New Definite: 27
 New Probab: 2
 New Possibl: 2

Old Definite: 15 (27new +15 old = 42 definite)

Fish Observed: 18

Notes:

Survey began at 1000 hours, completed at 1400 hours. Water temp 46 F at bridge at 1000 hours. Yuki thinks she observed a 6" brook trout on a redd. Jeff said he definitely observed a brook trout in the large pool at the head of North spring by the road. Shall we open up angling in Indian for brook trout harvest?!?! :) Observed hundreds of kokanee, many actively spawning, from the highway up through the second side channel where you all flagged the upper ends for field identification. Unfortunately, the numbers are still dismal.

Gary Torretta - District Fisheries Biologist
 Naches Ranger District, Wenatchee National Forest
 (509) 653-1433
 email: gtorretta@fs.fed.us

----- Forwarded by Gary D Torretta/R6/USDAFS on 09/17/2004 08:58 AM -----

"Jeff Thomas"
 <jthomas@pn.usbr.gov>
 To: <gtorretta@fs.fed.us>
 09/16/2004 04:00 PM
 cc:
 Subject: Indian Creek data

2
0
0
4

Date: 9/16/04

Reach: Upper (extending from approximately 300 yard downstream of South Spring upstream to the falls)

Results: 6 new definite redds, 1 new probable, and 1 new possible. Also observed 5 previously identified redds although one located just below the falls on the left side (facing upstream) I could not find. There is a redd there which was occupied by two actively spawning fish. I flagged that one as new.

Observed 3 bull trout associated with redds-- the two I just mentioned and one more which was guarding. Also observed 4 bull trout which were not associated with any nearby redds.

Survey took approximately three hours (not counting the time it took me to hike back from the falls or an extremely short lunch break).

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Indian -

Date: 10/5/04

Location: North Sprint to trail Crossing

Water Temp.: _____

Investigator: Cummins

Start Time: 1310

End Time: 1445

<u>Redds:</u>	New	Old
Definite:	<u>2</u>	<u>3</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>1</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): _____

No warts

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: 10/5/04

Location: Indian Creek - Trail Crossing to falls
plus S. Springs.

Water Temp.: 47.7 @ 1220

Investigator: Cummins

Start Time: 1039

End Time: 1215

Redds:	New	Old
Definite:	<u>2</u>	<u>8</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): _____

Deleted 1 old det + 1 old Prob. Did I miss some? walked
twice, once up + once back down. I think
Torgetta may have marked 1 redd (det) where
there was already a flag (marked det)
No Redds in S. Spring

2004

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 8/31/04

Location: 1800 Rd' divert to Copper Cr

Water Temp.: 48°F @ 10:28

Investigator: Cummins

Start Time: 10:28 am

End Time: 1:15 pm

Redds:	New	Old
Definite:	<u>6</u>	
Probable:	<u>0</u>	
Possible:	<u>1</u>	

Bull Trout Observed:

Adults: None

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): _____

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 8-31-04

Location: Copper Cr. to Falls (barrier) above Rd. x-ing

Water Temp.: Copper cr. 47.7°F (1050 Hrs) Deep Cr. 45.1°F (1050 Hrs)

Investigator: Eric Anderson WDFW

Start Time: 1050 Hrs.

End Time: 1415 Hrs.

Redds:	New Total (57)	Old
Definite:	<u>56 Deep 1 Copper</u>	<u>-</u>
Probable:	<u>0</u>	<u>-</u>
Possible:	<u>2</u>	<u>-</u>

Bull Trout Observed:

Adults: 6

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): _____

- 2 of the Deep Cr. Redds were between upper falls + Rd. culvert.
- fish appear to be nearly done spawning.
- did not do section "from culvert to lake on this 1st pass. will do later this week.

2
0
0
4

Deep Creek Bull Trout Spawning Survey
Redd Count. E. Anderson

8-31-04 Copper Creek to upstream
falls.

Copper Creek 47.70°F 1050 Hr
(Def. 1 Fish 11
✓ below Bridge

Deep Creek 45.1°F 1050 Hr
Def. ~~1111~~ Fish ~~1111~~

(57) ~~1111~~
~~1111~~
~~1111~~

Pos. 11

- 2 of above def. redds were
between upper falls + Rd culvert
- Fish appear to be nearly done spawning.
 - Did not do from culvert to lake on this 1st pass. - will do later this week. End 1415 Hrs.

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: ~~8/31/04~~ 9-2-04

Location: 1800 Rd Culvert to Bumbing Res

Water Temp.: 48°F @ 10:15

Investigator: Jim Cummins

Start Time: 10:15

End Time: 12 Noon

<u>Redds:</u>	New	Old
Definite:	<u>2</u>	<u> </u>
Probable:	<u>0</u>	<u> </u>
Possible:	<u>0</u>	<u> </u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles:

Comments (mortalities, tagged fish, H2O visibility, etc): water only in
one channel (right channel looking
downstream) - a little water in left
channel for 200-300', but no fish/redds.

2004

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 9/13/04

Location: Rd 1800 Culvert. to Canyon Cr / ~~Rd 1800 Rd~~
Culvert to ~~road~~ Bumpin Res.

Water Temp.: 47.5 F, 8.6 C just above culvert. @ 1015

Investigator: Jim Cummins

Start Time: 1015 1410

End Time: 1320 above culvert 1515 below culvert

Redds:	above New	below	above Old	Below
Definite:	<u>5</u>	<u>2</u>	<u>5</u>	<u>4</u>
Probable:	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): _____

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 9-13-04

Location: Copper Cr. to Falls above Rd x-ing

Water Temp.: 44.8°F (1030 Hrs) Deep 43.7°F (1030 Hrs)

Investigator: Eric Anderson WDFW

Start Time: 1030 Hrs.

End Time: 1320 Hrs.

Redds: New Old

Definite: 16 Deep 1 Copper 56 Deep 1 Copper

Probable: ∅ ∅

Possible: ∅ 2 (1 of these changed to new-def.)

Bull Trout Observed:

Adults: 4

Sub-adults: —

Juveniles: —

Comments (mortalities, tagged fish, H2O visibility, etc):

6 Redds (total) counted between barrier falls
+ Rd crossing, — included in above total

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 9-24-04

Location: Culvert to Copper Creek

Water Temp.: 43.5°F

Investigator: Eric Anderson WDFW

Start Time: 1035 Hrs

End Time: 1315 Hrs.

Redds: New Deep creek Old

Definite: 6 (missed last time?) 10 plus 6

Probable: ∅ ∅

Possible: ∅ ∅

Bull Trout Observed:

Adults: ∅

Sub-adults: ∅

Juveniles: ∅

Comments (mortalities, tagged fish, H2O visibility, etc): _____

16 old
Deep creek
From culvert
to Reservoir
carried over
from 9-13
survey
7 eliminated
(changed to new det.)

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek (includes Copper Cr)

Date: WED 9/24/04

Location: Copper Cr + ~~Copper~~ ^{Deep} Creek to upper Culvert

Water Temp.: Copper - 47.1 (8.3C) Deep 47.8 (8.4C)

Investigator: Jim Cummins

Start Time: 1045

End Time: ?

Redds: New

Definite: ~~None~~ 1

Probable: 0

Possible: 0

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Handwritten notes:
 75 reds old + new
 74 Total (reds) old
 66 plus 2 from previous
 6 old reds from culvert to barrier falls

2	0
7	0
4	0

Comments (mortalities, tagged fish, H2O visibility, etc): OK see above
Eric walked from upper culvert to falls & was that area - also Eric covered culvert to Copper (Lower Section) did not survey lower culvert to reservoir.

Stream: S.Fork Ahtanum Species: B.T. Date:9-22-04 Page 1 of 1 Reach:SE1/4,SW14 Sec5 T12 R1-Samplers:FF BP H2o conditions: Clear H2o temp:
At Time:9:30 Flag Color:White

Redd #	Time	# Fish Pres	Length	Width	Depth	Flow (ft/sec)	LB	RB	Thalweg	Direct Cover	Comments
1	10:04	0	1.0	0.8	0.50	2sec	8.00	N/A		y	Definate
2	10:40	0	1.3	0.9	0.20	3sec		0.3	6	y	Definate
3	1:40	0	1.1	0.5	0.30	5sec		0.3	4	y	Possible
4	2:30	0	1.0	1.0	0.15	3sec		7	3.5	y	Definate
5	2:50	0.00								n	Probable

2004

Stream: S.Fork Ahtanum Species: B.T. Date:9-30-04 Page 1 of 1 Reach:SE1/4,SW14 Sec5 T12 R1- Samplers:FF BP H2o conditions: Clear H2o temp:
At Time:8:55 Flag Color:White

Redd #	Time	# Fish Pres	Length	Width	Depth	Flow (ft/sec)	LB	RB	Thalweg	Direct Cover	Comments
1	12:20	0	0.7	0.7	0.50	2sec		7.00	2.00	y	Definate

2004

Eric Anderson - Re: Upper Yakima Basin Bull Trout redd survey schedule

From: "Scott Willey" <swilley@pn.usbr.gov>
To: <kelly_ykfp@charter.net>, <henry.fraser@cwu.edu>, <ANDEREA@dfw.wa.gov>, <BEVISKRB@dfw.wa.gov>, <cummijlc@dfw.wa.gov>, <meyerwrm@dfw.wa.gov>, <rogersdr@dfw.wa.gov>, <Teskemst@dfw.wa.gov>, <ykfp habitat@elltel.net>, <kreiss@fs.fed.us>, <RWassell@fs.fed.us>, <TMayo@fs.fed.us>, "Jeff Thomas" <jthomas@pn.usbr.gov>, "Scott Kline" <skline@pn.usbr.gov>, "Walter Larrick" <wlarrick@pn.usbr.gov>
Date: 9/24/04 1:31 PM
Subject: Re: Upper Yakima Basin Bull Trout redd survey schedule

William,

Wanted to fill you in on the results of the Kachess R. bull trout redd survey that I conducted on Thursday (9/23/04).

I met John Easterbrooks the day before the survey and he said that the survey typically started at the reservoir and went upstream to the falls. I wanted to see this reach anyway so I decided to start at the mouth, just to see what was going on down there.

Kachess Reservoir Surface Temperature = 13C (55F)
 Kachess River @ mouth = 9C (49F) at 11:00

The river is flowing well and the water is very clear. There is definitely no problem with access at this time. In fact, the flow may actually be a bit much to allow for proper sighting of adults in some sections of the river (there are lots of plunge pools and deep spots with turbulence cover for fish to hide in at this flow level).

No fish or redds were seen in the lower section (below Mineral Creek). 1 bull trout was observed in Mineral Creek (about 40-50 feet upstream from the split with the Kachess R.) but no redds were seen. No redds or live fish were seen in the Kachess R. However, I found 1 dead adult bull trout (female, approx. 28 inches long) in the Kachess River. This fish was found about a 1/4 mile upstream of the channel split with Mineral Creek. I decided to cart this specimen home with me in case genetic samples or any other information could be gained from it. It will be kept in our freezer. The carcass is in pretty good shape as the fish was only dead for a day or two or three, but it did have some of the stomach and organs eaten out. Let me know if you want anything from the specimen.

Both Mineral Creek and Kachess R. had temperatures of 9 C above the channel split.

Scott Willey
 Fisheries Biologist
 Bureau of Reclamation
 Upper Columbia Area Office
 1917 Marsh Road
 Yakima, Washington 98901
 (509) 575-5848 ext. 243

file://C:\WINDOWS\TEMP\GW}00001.HTM

2004

Bull Trout Spawning Ground Survey Data Form

Stream: Kachess/Mineral – 2nd Pass

Date: 10/06/04

Location: Kachess River/Mineral Creek – reservoir to barrier falls

Water Temp.: Kachess River at start of flow - 10° C (12:25), at barrier falls – 8° C (14:10)

Investigator: Yuki Reiss (USFS), Kelly Clark (WKFP)

Start Time: 12:25

End Time: 15:10

<u>Redds:</u>	<u>New</u>	<u>Old</u>
Definite:	<u>0</u>	<u>0</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 0

Sub-adults:

Juveniles: 1

Comments (mortalities, tagged fish, H2O visibility, etc): Kachess River was no longer connected to the reservoir. Flow went subsurface where the channel necks back down above the reservoir bed (at wood accumulation), and from here upstream, flow was high and clear.

We walked up from the reservoir to the barrier falls on Kachess River, and then up Mineral Creek to the large log jam and series of falls. No redds were seen, and no adult bull trout. No carcasses were found either. One juvenile that appeared to be a bull trout was seen in Mineral Creek.

Weather was cloudy, with a light drizzle, ~60° F.

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4

Bull Trout Spawning Ground Survey Data Form

Stream: Kachess River , First Pass

Date: October 18, 2004

Location: Lake to Falls

Water Temp.: 5.5°C @ 10:30 trail crossing; Upper Kachess River @ ~12pm = 6°C

Investigator: William Meyer (WDFW) , Jim Cummins (WDFW)

Start Time: 10:30

End Time: 13:15

Redds: New Old

Definite: 0 0

Probable: _____

Possible: _____

Bull Trout Observed:

Adults: 1 and possibly 2

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: 45°F , cloudy, light rain, recent substantial rain. Water visibility was excellent. 10:30 Walked to the lake to check flows and look for kokanee or BT redds (none), flow was well connected to the lake. We observed 1 kokanee on a redd and obs. 3 kokanee redds total in the spring channel out of the lakebed – flow was good in this channel and temp = 8°C. Walked upstream and noted another cedar tree has fallen in the group of cedars scour hole. Also noted the trail crossing log has shifted downstream. Observed one and possibly two adult bull trout holding in a pool ~100m downstream from the confluence of Kachess R./Mineral Cr.. No BT redds were observed and no fish were seen in the upper Kachess River. Finished survey at the falls at ~1:15pm. Snow on 18th only ~3-400 ft above Cooper Pass. Lots more rain/snow on the 19th! Should help system stay connected.

2004

Bull Trout Spawning Ground Survey Data Form

Stream: Kachess River

Date: October 28, 2004

Location: Lake to Falls

Water Temp.: 5°C @ 10:45 lower river above reservoir

Investigator: William Meyer (WDFW), Paul James (CWU)

Start Time: ~10:30

End Time: ~14:50

Redds:	New	Old
Definite:	<u>4</u>	<u>0</u>
Probable:	<u>2</u>	<u>0</u>
Possible:	<u></u>	<u>0</u>

Bull Trout Observed:

Adults: 7 live adults plus one mortality male estimated approx. 26-28" (genetic sample taken) only rear half of fish was present and looked like an otter kill

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: 40°F, sunny to partly cloudy, recent substantial rain. Water Temp/Visibility/flow: 5°C @ 10:45 and clarity excellent. River well connected to the reservoir with rain storms the week prior and more expected. Should help system stay connected.

Walked to the reservoir along the river and observed no BT redds or new Kokanee redds and saw no kokanee this time. Found 1st definite redd well below the trail crossing in an area we haven't seen redds before Lat. N47.41478 Long. W121.23982 and a second probable redd @ Lat. N47.41497 Long. W121.24024 (Map Datum WGS84). Observed 2 adults holding between the trail crossing and the Kach/Mineral confluence, but no redds observed. Walked up the Mineral Creek branch to investigate holding or possible spawning activity, but observed neither. Finished the survey by walking up the Kachess branch to the falls and

2
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4

observed two separate pairs of BT on redds (mid-way to falls), and another fish holding. The mortality fish was found ~1/2 way up Kachess from the fork and looked like a natural mortality via otter. No fish observed near the falls and no redds in that area. Finished survey ~14:50 and walked out to truck via the clear-cut.

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Bull Trout Spawning Ground Survey Data Form

Stream: Kachess River Final Pass

Date: November 11, 2004

Location: Lake to Falls

Water Temp.: 5°C @ 10:45 lower river above reservoir

Investigator: William Meyer (WDFW), Jeff Thomas (USFWS)

Start Time: ~10:15

End Time: ~14:00

Redds:	New	Old
Definite:	<u>3</u>	<u>4</u>
Probable:	<u>0</u>	<u>1</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults 4 live adults with no new mortalities observed

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: 50-55°F, sunny, calm, with recent rain. Water Temp/Visibility/flow: 5°C @ 10:45 and clarity excellent. River well connected to the reservoir with rain/snow storms the week prior and more expected. Should help system stay connected.

Narrative: We walked down the trail to the reservoir, then to the lake along the river, and back up the spring channel before heading upstream on the main river to the barrier falls.

We observed no redds in the lower mainstem Kachess River, but did observe 2 new BT redds (Lat. 47.40031 Long. 121.23754 and Lat. 47.40243 Long. 121.23795) and ~9-10 new Kokanee redds (plus 3 old) in the small spring channel which flows into the mainstem just before the River enters the lake. We observed

2004

6-7 kokanee carcasses in the channel We also found some fishing gear hung up on a stump in the reservoir off the mouth of the river at high pool – it was a multiple flasher with a large treble hook – obviously someone was targeting large fish from a boat, likely bull trout. Observed one fish on the definite redd Paul James and I spotted the last visit. The second nearby possible was downgraded and determined not to be a redd. Observed 1 new redd, 0 fish; 1 old Probable, 0 fish; 1 old definite, 0 fish; 2 old definite, one with one fish; 2 fish holding below the wood log jam.

We found some old skin from a large bull trout in the same area as the previous visits mortality, so we did not take genetics. No new mortality BT observed.

No fish observed near the falls and no redds in that area. Finished survey ~14:00 at the falls and walked out to the truck via the clear-cut.

The following is a list of GPS points from historic redds – the list is not a complete inventory of all historic bull trout redds in the system, but does include the range of spawning locations. All locations were recorded in the WGS84 map datum and are displayed as decimal degrees. The year dates listed are from the flags remaining in the field, and all flags (except 2004) have now been removed.

Latitude Longitude Year

47.40031 121.23754 2004
47.40243 121.23795 2004
47.41478 121.23982 2004
47.41829 121.24033 2000
47.41954 121.24084 2003
47.41968 121.24108 Confluence location – no redd
47.42005 121.24116 ? date
47.42053 121.24067 ? date
47.42058 121.24040 2001
47.42074 121.34032 2001
47.42077 121.24018 2000
47.42089 121.24017 2000
47.42105 121.24018 2004
47.42104 121.24016 2004
47.42135 121.24008 2003/04
47.42158 121.23962 2003
47.42167 121.23965 2004
47.42172 121.23954 2001/04
47.42232 121.23686 2001
47.42307 121.23600 2003
47.42318 121.23560 2003
47.42330 121.23486 2003 2 redds
47.42412 121.23542 2003 3 redds

2
0
0
4

47.424400 121.23488 2003

47.42424 121.23506 Just below falls - no redd

2004

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek (1st Pass)

Date: 9-30-04

Location: I-90 Bridge to upper end of Index Reach

Water Temp.: 10.5 - 11°C under I-90 Bridge and 9.5°C at Gold Creek Trail crossing

Investigator: Scott Willey and Walt Larrick (BOR)

Start Time: 10:30

End Time: 16:45

Redds:	New	Old
Definite:	<u>6</u>	<u></u>
Probable:	<u>0</u>	<u></u>
Possible:	<u>1</u>	<u></u>

Bull Trout Observed:

Adults: 1 adult observed

Sub-adults:

Juveniles:

Comments (mortalities, tagged fish, H2O visibility, etc):

* Good water visibility

* 4 schools of 10+ to 30+ kokanee in lower Gold Creek below Gold Creek Pond

* As of this survey date, connectivity to the reservoir has been lost due to a 200 yard long stretch where flows have gone subsurface just upstream of the left bank residences

* Flows increase upstream of the subsurface flow reach. All redds observed above this point.

2
0
0
4

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek 2nd Pass

Date: October 7, 2004

Location: From I-90 bridges upstream to barrier falls

Water Temp.: Lower Gold (near pond) 9°C (10°C in spawn channel) @ 9:30; Mid Gold 7°C @ 12pm; Upper Gold 6°C @ 3pm

Investigator: William Meyer (WDFW); Hank Fraser (YIN)

Start Time: 0930 @ I-90

End Time: 1615 @ upper Trail Crossing; 1510 @ barrier falls; 1710 @ Trailhead

Redds:	New	Old
Definite:	<u>6</u>	<u>6</u>
Probable:	<u>3</u>	<u></u>
Possible:	<u>1</u>	<u></u>

2
0
0
4

Bull Trout Observed:

Adults: 0 live fish; but found entrails of 1 large adult (no genetics sample taken)

Sub-adults:

Juveniles:

Comments (mortalities, tagged fish, H2O visibility, etc):

Mortalities: Found one piece of entrails from a large fish – almost certainly a bull trout on the middle-upper reach. Could not tell if it was a natural mortality or poached fish.

Weather: Sunny, high overcast, cooler 50-60°F

Water Clarity: Excellent Flow: Low - but system minimally passable to reservoir.

Kokanee (a few hundred total) were beginning to spawn (~30 redds) in lower Gold but not much red color yet. One redd was between the semi-barrier falls and the true barrier falls, both above Silver Creek.

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek (3rd Pass)

Date: 10-13-04

Location: I-90 Bridge to upper end of Index Reach

Water Temp.: 7°C at Gold Creek Trail crossing

Investigator: Scott Willey, Scott Kline and Al Scherzinger (BOR), Lance Clarke (USFWS)

Start Time: 09:00

End Time: 14:00

Redds:	New	Old
Definite:	<u>3</u>	<u>12</u>
Probable:	<u>2</u>	<u>3</u>
Possible:	<u>0</u>	<u>1</u>

Bull Trout Observed:

Adults: _____

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): _____

* Good water visibility.

* 1000's of kokanee spawning in lower Gold Creek below Gold Creek Pond. More than 200 individual redds (or mass spawning areas) observed between the frontage road and the pond.

* Due to rains on 10-8-04 the creek has reestablished connectivity to the reservoir.

* 1 new "Probable" redd was found in a left bank tributary (unknown name) to Gold Creek which is located about 3/4 mile downstream from the Gold Creek Trail crossing.

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Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek, Fourth Pass

Date: October 26, 2004

Location: Gold Creek Pond-to-second falls (impassable)

Water Temp.: 5-6 degrees C

Investigator: W. Larrick & S. Willey (GCP-to-trail crossing), J. Thomas (trail crossing to falls)

Start Time: Larrick and Willey (0945 hours); Thomas (1130 hours)

End Time: Larrick and Willey (1400 hours); Thomas (1330 hours)

Redds:	New	Old
Definite:	<u>None</u>	<u>15</u>
Probable:	<u>None</u>	<u>5</u>
Possible:	<u>None</u>	<u>1</u>

Bull Trout Observed:

Adults: None

Sub-adults: None

Juveniles: None

Comments (mortalities, tagged fish, H2O visibility, etc):

Water was clear and visibility was excellent. Weather was cool (~ 45 degrees F) and cloudy to partly cloudy.

It should be noted that there was some disagreement with the observations made by earlier surveyors. Thomas did not agree with the identification (as "Definite") of a redd located in a plunge-pool above the first falls (cascade) and about 100 yards below the second (barrier) falls. This depression and gravel deposit were the result of hydraulic conditions in the plunge-pool. In the lower reach, Larrick and Willey could not find a redd anywhere in the vicinity of a flag identifying a "Probable" redd. Finally, the one redd which was previously identified as a "Possible" was not judged to be a redd by Thomas.

2
0
0
4

Eric Anderson - Box Canyon Bull Trout Snorkel

From: "William Meyer" <meyerwrm@dfw.wa.gov>
To: "Eric Anderson" <ANDEREA@dfw.wa.gov>, <Judy_Delavergne@r1.fws.gov>, "Steve Rogers" <rogersdr@dfw.wa.gov>, "Tina Mayo" <TMayo@fs.fed.us>, "Steve Roberson" <SRoberson@fs.fed.us>
Date: 9/1/04 10:23 AM
Subject: Box Canyon Bull Trout Snorkel
CC: "Jonathan Kohr" <kohrjhk@dfw.wa.gov>, "Rebecca Wassell" <RWassell@fs.fed.us>

Hey Eric, I made a trip up to Box Canyon Yesterday with Jonathan Kohr to check on stream conditions to the reservoir, the closed campsite and the bull trout at Peek-a-boo falls. In short, last weeks rains have watered the system up well for now, the fish have moved in en mass (19) to the pool, and no new evidence of camping at the site was observed. Below are my detailed notes from the trip for your files. William

Weather: Sunny, warm (75°F), calm

Water Temperature: 12°C @ 1:55pm

Observers: William Meyer, Jonathan Kohr (WDFW)

Narrative: Snorkeled Peek-a-boo falls pool and the section of pocket pools in the stream down to the flat bedrock glide. Observed 16 large adult fish holding in the pool just below the falls. Three additional adults and a subadult were observed in pools below the falls to the long rock glide (for a total of 19 adults; 1 sub-adult). No hooks or lures/fishing tackle were observed in the falls pool or in fish. There were only two sm cutthroat in the big pool and many more below in the pocket pools.

There was no evidence of recently camping at the campsite near the falls, although there were some new bottlecaps and broken glass in and around the pool. Traffic in the area was minimal with no one camping the nearby campsite.

Jonathan and I checked the stream connectivity in the reservoir bed and with the recent rains the stream is well watered up and connected all the way to the reservoir. The reservoir portion of the stream has switched channels from last year and is now running in the channel against the rock bluff on the side of the reservoir. The reservoir is still relatively high and I will keep tabs on connectivity as the season progresses in case we need to construct the flume with BOR funding.

I happened to meet Steve Rogers (WDFW Enforcement) in Cle Elum on our return trip and mentioned the latest info. to him. He will make a check this weekend (Labor Day wkend), but will obviously be busy with the recreationists in the area. I will give a call to the USFS (enforcement and recreation patrols) and see if they can make some emphasis patrols this weekend as well, and I will probably get up to make a visit this weekend. As you know the next few weeks is probably the most vulnerable time for these fish and when we've observed poaching in the past, so perhaps USFWS can follow up with some enforcement patrols - Judy, can you check on this? As a reminder, the last poaching occurred deep in the canyon portion of the stream, best accessed from the campground trail using waders.

Hope we can prevent any poaching this season as it appears a good number of adults have moved into the system. Talk to you soon. William

William Meyer
WDFW, Habitat Biologist
(509) 933-2491

Eric Anderson - Box Canyon Snorkel

From: "William Meyer" <meyerwrm@dfw.wa.gov>
To: "Yuki Reiss" <kreiss@fs.fed.us>, "Walt Larrick" <WLarrick@pn.usbr.gov>, "Tina Mayo" <TMayo@fs.fed.us>, "Steve Rogers" <rogersdr@dfw.wa.gov>, "Scott Willey" <Swilley@pn.usbr.gov>, "Scott Nicolai" <ykfphabitat@elltel.net>, "Scott Kline" <SKline@pn.usbr.gov>, "Rebecca Wassell" <RWassell@fs.fed.us>, "Paul W. James" <JamesP@cwu.edu>, "Kelly Clark" <kelly_ykfp@charter.net>, "Jeff Thomas" <JThomas@pn.usbr.gov>, "Hank Fraser" <henry.fraser@cwu.edu>, "Eric Anderson" <ANDEREA@dfw.wa.gov>, "Jim Cummins" <cummijlc@dfw.wa.gov>
Date: 10/5/04 1:21 PM
Subject: Box Canyon Snorkel

Hey Eric, Here are some notes from an early Sept. day snorkel at Box Canyon.

Date: Sept. 9, 2004
Site: Box Canyon day snorkel
Weather: Sunny, warm (70°F), calm
Water Temperature: 12°C @ 3:50pm
Flow: Good flow, stream connected to reservoir and passable.
Observers: William Meyer (WDFW), Hank Fraser (YIN), Susan Lilliquist (Volunteer)

Narrative: Arrived ~1:30pm and counted 21 large adult BT in Peek-a-Boo falls with another 4 adults in the first pool below the falls. Snorkeled down to the bedrock glide and observed one juvenile BT (~130mm) in the pocket water above the glide.

Of the fish in the pool, 18 appeared to be males and 3 females. The second pool had 2-3 females and 1-2 males. The males were starting to get deformed snouts with some having kipes. We observed the fish for ~2 hours and only saw one fish with what appeared to be a hook scar. No fish were observed with fishing tackle in their mouths. We did find some old fishing tackle stuck in the rocks in the outflow - although this could have washed down from above. We observed 4 very large fish (est. 32-36") some with distinguishing features: 1 w/ deformed dorsal, 1 w/large round knob on its right lower jaw, 1 w/ with split caudal.

No one was camped at the closed site, although we collected ~25-30 cans and 6-7 bottles. We piled the trash because we didn't have a bag and USFS cleaned it up later. No evidence of recent camping. Lots of traffic up and down the road. We met the USFS fire crew (engine A312340) stopping to check the site as we left. Good light for filming ~2pm-3:30pm this time of year.

William

William Meyer
 WDFW, Habitat Biologist
 (509) 933-2491

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0
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Eric Anderson - Box Canyon day snorkel

From: "William Meyer" <meyerwrm@dfw.wa.gov>
To: "Yuki Reiss" <kreiss@fs.fed.us>, "Walt Larrick" <WLarrick@pn.usbr.gov>, "Tina Mayo" <TMayo@fs.fed.us>, "Steve Rogers" <rogersdr@dfw.wa.gov>, "Scott Willey" <Swilley@pn.usbr.gov>, "Scott Nicolai" <ykfp@habitat@elltel.net>, "Scott Kline" <SKline@pn.usbr.gov>, "Rebecca Wassell" <RWassell@fs.fed.us>, "Paul W. James" <JamesP@cwu.edu>, "Kelly Clark" <kelly_ykfp@charter.net>, "Jeff Thomas" <JThomas@pn.usbr.gov>, "Hank Fraser" <henry.fraser@cwu.edu>, "Eric Anderson" <ANDEREA@dfw.wa.gov>, "Jim Cummins" <cummijlc@dfw.wa.gov>
Date: 10/5/04 1:21 PM
Subject: Box Canyon day snorkel

Hey Eric, Some more notes for your files from an early Sept. day snorkel at Box Canyon.

Date: 9/8/04

Site/Survey: Box Canyon day snorkel/filming for adult BT/early redd check

Weather: Sunny with patchy clouds, warm (65°F), calm

Water Temperature: No temps taken.

Flow/Visibility: Good flow, stream connected to reservoir and passable. Visibility good.

Observers: William Meyer (WDFW), Yuki Reiss (USFS), Scott Nicolai (YIN), Kelly Clark (YIN)

Narrative: Checked Peek-a-Boo Falls and filmed fish (WDFW still and video). 9 adults were present in the barrier pool with another 8 in first pool below falls. Snorkelled down to the bedrock glide and observed one adult male resting on the bottom of the glide and another female hidden under a rock in the pocket water towards the falls. Yuki dropped down to the upper spawning reach and observed 2 fish associating (paired up) on the spawning beds below. Total adults observed = 21. Very few cutthroat observed - like 1. Arrived ~1:30pm and departed ~3pm. No signs of camping at the closed site.

William Meyer
 WDFW, Habitat Biologist
 (509) 933-2491

2004

We did see 2 fish in the next pool upstream, but these were likely the same fish that had moved upstream.

2004

Eric Anderson - Box Canyon BT redd survey 3rd pass

From: "William Meyer" <meyerwrm@dfw.wa.gov>
To: "Yuki Reiss" <kreiss@fs.fed.us>, "Walt Larrick" <WLarrick@pn.usbr.gov>, "Tina Mayo" <TMayo@fs.fed.us>, "Steve Rogers" <rogersdr@dfw.wa.gov>, "Scott Willey" <Swilley@pn.usbr.gov>, "Scott Nicolai" <ykfp@habitat@elltel.net>, "Scott Kline" <SKline@pn.usbr.gov>, "Rebecca Wassell" <RWassell@fs.fed.us>, "Paul W. James" <JamesP@cwu.edu>, "Kelly Clark" <kelly_ykfp@charter.net>, "Jeff Thomas" <JThomas@pn.usbr.gov>, "Hank Fraser" <henry.fraser@cwu.edu>, "Eric Anderson" <ANDEREA@dfw.wa.gov>, "Jim Cummins" <cummijlc@dfw.wa.gov>
Date: 10/12/04 4:51 PM
Subject: Box Canyon BT redd survey 3rd pass

Hey Eric, Attached is the spawning form from Box Canyon today. Observed a few more redds, but saw no fish this time... seems like things are slowing down and we'll probably do one more pass to finalize and remove flags etc. I did some GPS work on the redd locations and will send you the data at another time. Met USFWS special agent Tony Wagner while walking the road out and showed her the barrier, access, poaching locations etc. She is working undercover and had visited the site on Labor Day and will hopefully have time for Gold and Kachess River, which I filled her in on as well. Talk to you soon. William

William Meyer
WDFW, Habitat Biologist
(509) 933-2491

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Bull Trout Spawning Ground Survey Data Form

Stream: Box Canyon Creek

Date: October 12, 2004

Location: From mouth of Canyon to barrier falls

Water Temp.: 6°C @ 9am

Investigator: William Meyer (WDFW), Hank Fraser (YIN)

Start Time: 0845 from mouth of Canyon

End Time: 11:40am at barrier falls

Redds: New

Old

Definite: 1

13

Probable: 2

0

Possible: 0

1

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Bull Trout Observed:

Adults: 0 Live fish; One mortality - Natural

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): GPS of 10 redd locations.

Mortality: 1 est. 20-24" fish, only observed tail end of fish – took genetic sample.

Weather: Partly cloudy, mostly sunny, cool 50°F, calm

Flow/Visibility: good flow, well connected to reservoir and clear water . Higher water than 2 Weeks ago, probably due to last weekends rains.

Saw no live adults. Met USFWS undercover agent Tony Wagner on the road and showed her the site and discussed Gold Creek and Kachess River BT spawning and poaching etc.

Bull Trout Spawning Ground Survey Data Form

Stream: Box Canyon Cr

Date: 10/19/04

Location: CG to falls

Water Temp.: _____

Investigator: Jim Cummins

Start Time: _____

End Time: _____

Redds:	New	Old
Definite:	<u>0</u>	<u>17</u>
Probable:	<u>0</u>	<u>2</u>
Possible:	<u>0</u>	<u>1</u>

2004

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Flows very high but clear. A number of flagged redds were no visible in part due to high flows & in part due to steady rain. Last survey - pulled flags.

Bull Trout Spawning Ground Survey

Stream: N. F. Ahntann
 Date: 9/1/04
 Location: Grey Rock to Shelneck (including Shelneck?)
 Water Temp.: _____
 Investigator: M Mizell, R McGinnis, J Fladgard
 Start Time: 1046
 End Time: 1300

Redds:	New	Old
Definite:	<u>1</u>	<u>0</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>2</u>	<u>0</u>
Bull Trout Observed:	<u>2 small, 1 20-24" large, 18 @ 10'-12"</u>	
Tagged:	_____	
Untagged:	<u>0</u>	_____
Sub-adults:	<u>0</u>	_____
Juvenile:	<u>0</u>	_____

Comments: Very large bull trout @ 20-24" in Shelneck
150-200 m above confluence

lower end N 46° 31.718 (±42)
W 121° 07.386

upper end N 46° 31.742 (±31) → Shelneck
W 121° 09.976

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Bull Trout Spawning Ground Survey

Stream: North Fork Ahtanum

Date: 9/9/04

Location: DF Ahtanum "Grey Rock" → Bridge crossing (downstream of S cal)

Water Temp.: 8°C

Investigator: McGinnis, Mizell

Start Time: 10:45

End Time: 12:20

Redds:	New	Old
Definite:	<u>∅</u>	<u>∅</u>
Probable:	<u>∅</u>	<u>∅</u>
Possible:	<u>∅</u>	<u>∅</u>

Bull Trout Observed:
Tagged: ∅ (1 fish code 206 pinpointed to a logjam, no visual ID)

Untagged: 1 (12"-14" seen) 11:15 (30 min. into survey)

Sub-adults: ∅

Juvenile: ∅

Comments: 11:00 → large Man-made impass across river. Fish passage barrier. Destroyed barrier.

Code 206 was pinpointed to log jam approx. 300 meters downstream of Bridge.

2004

Bull Trout Spawning Ground Survey Data Form

Stream: N.F. Ahtanum & Shellneck cr.

Date: 9-9-04

Location: Bridge below Snowcabin C.G. to Shellneck
plus shellneck.

Water Temp.: 44.1° F (1055 Hrs)

Investigator: Eric Anderson & John Fludgard (WDFW)

Start Time: 1055 Hrs.

End Time: 1255 Hrs.

Redds:	N.F. Ahtanum New	Shellneck	N.F. Ahtanum Old	Shellneck
Definite:	<u>1</u>	<u>4</u>		<u>1</u>
Probable:		<u>1</u>		
Possible:			<u>2</u>	

Bull Trout Observed:

Adults: 1

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): No cows observed
in creek bottom. - No sign of cows in
creek bottom observed. Logging trucks
working in area.

2004

Bull Trout Spawning Ground Survey Data Form

Stream: N. F. AHTANUM

Date: 9-11-04

Location: GREY RX TRAILHEAD → SNOW CABIN CAMP

Water Temp.: 4°C

Investigator: JOHN FLADGARD

Start Time: 1200

End Time: 1400

<u>Redds:</u>	<u>New</u>	<u>Old</u>
Definite:	<u>0</u>	<u>0</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

2004

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): _____

Bull Trout Spawning Ground Survey

Stream: North Fork Ahlarum
 Date: 9/16/04
 Location: Upper Index 50 N 16° 30' 900 Snow Cabin 170 N 60 50.10? Upper Shellack
 Water Temp.: NA.
 Investigator: M. McGinnis, J.F.
 Start Time: 13:25
 End Time: 14:00

Redds:	New	Old
Definite:	<u>1</u>	<u>6</u>
Probable:	<u>0</u>	<u>1</u>
Possible:	<u>2</u>	

Bull Trout Observed:

Tagged:	<u>0</u>
Untagged:	<u>1</u>
Sub-adults:	<u>0</u>
Juvenile:	<u>0</u>

Comments: 10" BT seen

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Bull Trout Spawning Ground Survey Data Form

Stream: N.F. Ahtanum

Date: 10-4-04

Location: Lower Grey Rock - Snow Cabin

Water Temp.: /

Investigator: M. Mizell

Start Time: 1215

End Time: 1325

<u>Redds:</u>	New	Old
Definite:	<u>∅</u>	<u>∅</u>
Probable:	<u>∅</u>	<u>∅</u>
Possible:	<u>∅</u>	<u>∅</u>

Bull Trout Observed:

Adults: _____

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): _____

No new redds, no bull trout

2004

Bull Trout Spawning Ground Survey Data Form

Stream: Upper Index NF. Ahtorum

Date: 10/4/04

Location: Snow Cabin → Shellaeck Crk.

Water Temp.: NA

Investigator: McGinnis

Start Time: 12:10

End Time: 13:20

Redds:	New	Old
Definite:	<u>0</u>	<u>7</u>
Probable:	<u>0</u>	<u>1</u>
Possible:	<u>0</u>	<u>4</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Good Visibility,
No fish seen. Some leaves in the water. 3 of the
possibles are definitely not redds.

2004

Bull Trout Spawning Ground Survey Data Form

Stream: M. F. Ahtanum

Date: 9-10-04

Location: Index \approx 2 miles Below Treephones @
pull out by stream - dip down park by stream

Water Temp.: 41.5°F (1015 Hrs)

Investigator: Eric Anderson WDFW

Start Time: 1015 Hrs.

End Time: 1400 Hrs.

<u>Redds:</u>	<u>New</u>	<u>Old</u>
Definite:	<u>7</u>	<u>—</u>
Probable:	<u>0</u>	<u>—</u>
Possible:	<u>3</u>	<u>—</u>

Bull Trout Observed:

Adults: 3 observed
(2 fish on redd \approx slightly less than 8")
active spawning

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): Several ^{very} small (coffee
cup/plate) size redds (approx 5-6" pit) 12-14"
pit + tailent.

2004

Bull Trout Spawning Ground Survey Data Form

Stream: MIDDLE FORK AHTANUM

Date: 9-20-04

Location: LOWER 1/2 OF INDEX

Water Temp.: 4°C

Investigator: JOHN FLADGARD

Start Time: 1000

End Time: 1200

<u>Redds:</u>	<u>New</u>	<u>Old</u>
Definite:	<u>0</u>	<u>4</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>1</u>	<u>0</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 1

Juveniles: 1

Comments (mortalities, tagged fish, H2O visibility, etc): _____

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Bull Trout Spawning Ground Survey

Stream: Middle Fork Abitama
Date: 9/20/04
Location: Upper section of index
Water Temp.: 4°C
Investigator: McGinnis
Start Time: 11:30
End Time: 1:45

Redds:	New	Old
Definite:	<u>3</u> 4	<u>3</u> 4
Probable:	<u>1</u>	<u>0</u>
Possible:	<u>2</u> 4 No (cancelled)	<u>0</u>

Bull Trout Observed:
Tagged: _____
Untagged: 10" BT, 6" BT, 10" BT
Sub-adults: _____
Juvenile: _____

Comments: River was turbid half way thru survey,
vis: less than 1 foot. cleared up toward
the end of survey.

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Bull Trout Spawning Ground Survey

Stream: M. F. AHTANUM

Date: 10/5/04

Location: LOWER HALF OF INDEX

Water Temp.: 43.5° F

Investigator: JOHN FLADGARD

Start Time: _____

End Time: _____

Redds:	New	Old
Definite:	<u>∅</u>	<u>//// (4)</u>
Probable:	<u>∅</u>	_____
Possible:	<u>∅</u>	_____

Bull Trout Observed:

Tagged:	<u>∅</u>
Untagged:	<u>∅</u>
Sub-adults:	_____
Juvenile:	_____

Comments: _____

2004

Bull Trout Spawning Ground Survey

Stream: M. F. ANTANUM

Date: 10/5/04

Location: UPPER HALF OF INDEK

Water Temp.: 43.5°F

Investigator: MIKE MIZELL

Start Time: _____

End Time: _____

Redds:	New	Old
Definite:	<u>Ø</u>	<u> </u>
Probable:	_____	_____
Possible:	_____	_____

7 Total
2 Carried Forward from 9/20 E.D.

Bull Trout Observed:

Tagged: _____

Untagged: _____

Sub-adults: _____

Juvenile: _____

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Comments: 7 Total Redds in this section.

Bull Trout Spawning Ground Survey Data Form

Stream: Rattlesnake Cr / Shell Cr / Little Wildcat Cr

Date: 9/8/04

Location: Shell Cr from Burnt Wby Trail down, Rattlesnake - Shell to McNeal Cr; Wildcat north upstream .6 miles

Water Temp.: Shell 47.3 F @ 8:42 Rattlesnake 44.6 @ 11:21, L. Wildcat 46.6 @ 12:10

Investigator: Cummins & Mizell

Start Time: Shell 08:42 | Rattlesnake 0900 | L. Wildcat 1210

End Time: 0906 | 1121 | 1320

Redds:	Shell to L. Wildcat			Little Wildcat	Old
	Shell	New Rattlesnake	Rattlesnake		
Definite:	0	8	4	0	
Probable:	0	0	1	1	
Possible:	1	0	1	0	

Bull Trout Observed:

Adults: 3 - Shell Cr to L. Wildcat; 1 above Wildcat - Tagged

Sub-adults: 1 - 12"

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): 1 skin - about 12" fish - not sure it was a bull trout. Only 1 radio tagged fish found in this section - should see more?

2004

Bull Trout Spawning Ground Survey

Stream: Cattlesnake Crk
 Date: 9/8/04
 Location: lower BT spawner index 1.5 miles downstream MJB trail
 Water Temp.: 47° F @ start 46° @ Finish crossing upto ~~Will~~ crk. strawberry meadows.
 Investigator: McGinnis, Gary Toretta USFS
 Start Time: 9:00
 End Time: 14:00

Redds:	New	Old
Definite:	<u>1 N46° 44.614'</u> <u>W121° 12.367'</u>	
Probable:	<u>∅</u>	
Possible:	<u>∅</u>	

Bull Trout Observed:
 Tagged: ∅ (Receiver located 1 Fish, No usual I
 Untagged: 3 Receiver wait code out fish
 Sub-adults: —
 Juvenile: —

• Beginning Index: N46° 46.350' W 121° 10.153'

Comments: - 20"-22" BT was seen @ 10:10, probably
1 mile into survey.

- 2 fish (20"-1) (22"-1) in process of
spawning. Sitting on fresh digging.

- Thermograph deployed 10' upstream from trail crossing
at the beginning of the survey BB under an Alder
Pink Flaggig in the river, thermograph is located under
pink flagging

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Bull Trout Spawning Ground Survey

Stream: Upper Rattlesnake / Little Wildcat
 Date: 9/15/04

Location: Upper Index - Shell cr. to McNeil, plus
Burnt MTN Trail Xing at Shell to
mouth of shell, plus Little Wildcat
mouth to upstream .75 miles

Water Temp.: NA

Investigator: Anderson, McGinnis

Start Time: 7:00 on trail, survey start 8:40

End Time: 13:25

Redds:	New	Old
Definite:	<u>12 ± 1 lil' wildcat</u>	<u>10</u> (12) ⁴⁰ → plus 2 from previous survey
Probable:	<u>1</u>	<u>7</u> (redd in lil' wildcat, upgraded New)
Possible:	<u>shell cr. 1 - ell.</u>	<u>2</u>

Bull Trout Observed:
 Tagged: 0
 Untagged: 0
 Sub-adults: 0
 Juvenile: 0

Comments: - Code 119 pinpointed log pile 1/2 mile upstream
of shell cr. 30' downstream of redd (Def. 9/15/04)
The 1 prob on lil' wildcat was upgraded to a Def.
- Long Survey!

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Bull Trout Spawning Ground Survey Data Form

Stream: Rattlesnake Creek

Date: 9/15/04

Location: Trail 1114 crossing up to WTB & MTB to Shell Cr.

Water Temp.: 1114 Trail Crossy @ 100 - 48.2 F 91C

Investigator: Jim Cummins & Mike Mizell

Start Time: 1000 - 1200 + 1200 - 1450

End Time: 1114 Trail to WTB WTB - Shell Cr

Redds:	1114 to WTB	New	WTB to Shell Cr	1114 Trail to WTB	Old	WTB to Shell Cr
Definite:	4 4		1 1	0		1
Probable:	0		0	0		0
Possible:	0		0	0		0

Bull Trout Observed:

Adults: 0

Sub-adults: 1 Mike reported 1 - 8" Bull trout

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): No radio tagged fish, but antennae cable not working. 1 adult wout (skin) 20-25" & 1 8" wout - both below MTB trail.

Lower redd N46° 45.847 by W121 10.224 (±19')

Mike said he saw 1 8.9" bull trout. We saw several small ct. weather: Rain

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Bull Trout Spawning Ground Survey Data Form

Stream: Rattlesnake Creek

Date: 10/15/04

Location: Trail 1114 crossing upstream to WTB Trail

Water Temp.: _____

Investigator: Jim Cummins

Start Time: 1913

End Time: 1056

Redds:	New	Old
Definite:	<u>0</u>	<u>4</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Group of 5 10-11"
ct in one pool. weather great, flows low
& clear. Elk bawling. Chantrells present.
4 of 5 redds were visible. Left office
6:15 & return by 3pm. Last Survey

2004

Bull Trout Spawning Ground Survey

Stream: Crow Creek
 Date: 9/2/04
 Location: Survey area
 Water Temp.: _____
 Investigator: M Mizell, R McGinnis, J Fladgard
 Start Time: 0630
 End Time: 1800

Redds:	New	Old
Definite:	<u>4</u>	<u>0</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed: 4 TL
 Tagged: (1)
 Untagged: (3)
 Sub-adults: _____
 Juvenile: _____

Comments: Lower End of Survey Area N 47° 00.916
W 121° 14.114
2 small 10"-12" bucks on 3 redd cluster with 20"
female at N 47 01.087 W 121 16.485 actively spawning
Tagged Fish at N 47° 01.170 Dark unit would not code!
W 121° 16.983 ←

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Bull Trout Spawning Ground Survey

Stream: Crow Crk
 Date: 9/21/04
 Location: Crow Crk
 Water Temp.: NA
 Investigator: McGrinnis, Flodgard
 Start Time: 8:00
 End Time: 1315

Redds:	New	Old
Definite:	<u>1</u>	<u>4</u>
Probable:	<u>0</u>	
Possible:	<u>0</u>	
Bull Trout Observed:		
Tagged:	<u>0</u>	
Untagged:	<u>0</u>	
Sub-adults:	<u>0</u>	
Juvenile:	<u>0</u>	

2004

Comments:
 Survey Starting -
 coordinates
 N47° 00.904'
 W121° 14.106'
 - Survey Ending
 coordinates
 N47° 01.272'
 W 121° 18.486'

2 Thermographs deployed.
 - 570064 @ N47° 01.010'
 * Deployed midchannel pink flag (1/3 mile in from start) it is buried. W 121° 14.535'
 - 570066 is at the end of the survey on the RB behind boulder buried under pile of rocks. coordinates same as survey ending coordinates
 +/- 27'

Eric Anderson - Re: Upper Bumping River Spawning Survey

From: Karin Y Reiss <kreiss@fs.fed.us>
To: "Eric Anderson" <ANDEREA@dfw.wa.gov>
Date: 9/3/04 5:07 PM
Subject: Re: Upper Bumping River Spawning Survey
CC: "James L. Cummins" <CUMMIJLC@dfw.wa.gov>, "John Easterbrooks" <EASTEJAE@dfw.wa.gov>, <gtorretta@fs.fed.us>, <jthomas@pn.usbr.gov>, <Judy_Delavergne@r1.fws.gov>, <kohrjkh@dfw.wa.gov>, <meyerwrm@dfw.wa.gov>, "Michael Mizell" <mizelmcm@dfw.wa.gov>, <renfrbr@dfw.wa.gov>, <rogersdr@dfw.wa.gov>, <RWassell@fs.fed.us>, <skline@pn.usbr.gov>, <SRoberson@fs.fed.us>, <TMayo@fs.fed.us>, <wlarrick@pn.usbr.gov>, <swilley@pn.usbr.gov>

Eric -

Today (09/03) Scott Willey and I walked the Upper Bumping River below the falls to see if any adult bull trout or redds were present. The one past sighting of bull trout on a redd in this system was from late September, but with early rains I wanted to check it out. We did not find any adults or redds. I plan to return for another pass in a few weeks, possibly with drysuits so we can check some deep holes for holding fish.

Following William's fine example, below are the details of the day for your files.

Hope all is going well chasing those trout!

Yuki

Date: Sept 3, 2004

Weather: 60 F, cool and cloudy

Stream temps: Cedar Creek - 9 C (1100), Upper Bumping - 10 C (1130).

Surveyors: Yuki Reiss (USFS) and Scott Willey (BOR)

We walked from the Swamp Lake trailhead to where Cedar Creek crosses the trail, and followed this stream down to the lake bed. Fish and fry were observed in the stream, but the water mostly goes sub-surface before reaching the reservoir and there is no access for adult bull trout.

The Bumping River was flowing clear and was no longer elevated from last week's rain. We walked the main channel to the first major split, and then Scott walked the main channel and I walked the series of side channels, meeting back together at the large log jam. There are many areas with nice spawning gravel in the main channel and side channels, and deep holes for holding fish. We walked the main channel to the first barrier falls, and in this stretch there is less suitable substrate. There is 0.8 miles of main channel habitat in this reach, and 2.0 miles of side channels. All side channels with flowing water were surveyed.

No adult bull trout or redds were seen in the survey. The next pass on the Upper Bumping is scheduled for Sept. 21.

K. Yuki Reiss

Fisheries Biologist
Okanogan-Wenatchee National Forest
kreiss@fs.fed.us
new phone: (509) 653-1443

2004

**UPPER BUMPING BULL TROUT REDD SURVEY
PASS #2**

Date: Sept 22, 2004

Weather: Clear, 55-60° F

Water temp: 8° C at 12:30

Surveyors: Yuki Reiss and Scott Willey

We left the trailhead parking lot at 11:40, and began surveying at the lake bed at 12:30. We walked the same route as the last survey (9-3-04), from the lake to the first falls, including all side channels. There is plenty of suitable spawning gravel available, as well as large pools for holding.

No adult bull trout or redds were observed during the survey.

Survey ended at the falls at 14:30.

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Eric Anderson - More BT field notes

From: Karin Y Reiss <kreiss@fs.fed.us>
To: "William Meyer" <meyerwrm@dfw.wa.gov>
Date: 10/7/04 1:20 PM
Subject: More BT field notes
CC: "Eric Anderson" <ANDEREA@dfw.wa.gov>, "Jim Cummins" <cummijlc@dfw.wa.gov>, "Hank Fraser" <henry.fraser@cwu.edu>, "Paul W. James" <JamesP@cwu.edu>, "Jeff Thomas" <JThomas@pn.usbr.gov>, "Kelly Clark" <kelly_ykfp@charter.net>, "Steve Rogers" <rogersdr@dfw.wa.gov>, "Rebecca Wassell" <RWassell@fs.fed.us>, "Scott Kline" <SKline@pn.usbr.gov>, "Scott Willey" <Swilley@pn.usbr.gov>, "Tina Mayo" <TMayo@fs.fed.us>, "Walt Larrick" <WLarrick@pn.usbr.gov>, "Scott Nicolai" <ykfp@habitat@elltel.net>

Eric -

Here are some more field notes for your files. Have a good Oct! See you in Nov in Skamania!

Yuki

FYI - Jeff and I did find one redd in the North Fork Tieton, but that was it. Pretty disappointing considering the habitat, which was amazing. I am assuming that Jeff will include the notes from that day into the write-up for all the NFT work.

(See attached file: Bullspawnform Box 2nd pass 2004.doc)(See attached file: Bullspawnform Kachess 2nd pass 2004.doc)(See attached file: LOWER COOPER RIVER NIGHT SNORKEL.doc)(See attached file: UPPER BUMPING BULL TROUT REDD SURVEY.doc)

K. Yuki Reiss
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Bull Trout Spawning Ground Survey

Stream: Union Creek

Date: 9/3/04

Location: From below American Confluence to Falls

Water Temp.: _____

Investigator: M Mizell, J Fladgard

Start Time: 1700

End Time: 1830

Redds:	New	Old
Definite:	<u>9</u>	<u>0</u>
Probable:	<u>8</u>	<u>0</u>
Possible:	<u>2</u>	<u>0</u>

Bull Trout Observed:
Tagged: 1 deceased

Untagged: 2

Sub-adults: _____

Juvenile: _____

Comments: Tag code 161 was found near dead carcass from our fish. Wound was healed beautifully and fish was a buck, fully spawned.

American Start N 46° 55.928
W 121° 21.380

2004

Bull Trout Spawning Ground Survey Data Form

Stream: American R.

Date: 9-8-04

Location: Above Lodgepole C.G. Bridge X-ing - 1st turn
to left after x-ing bridge, westbound - to upstream

Water Temp.: 47.5° F (1215 Hrs.) 45 min.

Investigator: Eric Anderson (WDFW)

Start Time: 1215 Hrs.

End Time: 1300 Hrs.

<u>Redds:</u>	<u>New</u>	<u>Old</u>
Definite:	<u>0</u>	<u>1</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 1

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): 2 large redds
in this section - possible Sp. Chinook -
both were flagged.

2004

American R. Bull Trout Spawning
Survey - Redd Count

E. Anderson

9-8-04

American above Lodge pole C.R.
Bridge Crossing - 1st turn
to left after crossing
bridge, westbound.

Up stream 45 min.

1215-1300 hrs, 47.5° F

old Def 1

Fish 1

2 large redds possibly sp. Chi.
Both were plugged.

Bull Trout Spawning Ground Survey Data Form

Stream: American R. / Union Cr.

Date: 9-8-04

Location: American R. 1/4 mile below Union plus Union Creek to barrier Falls

Water Temp.: American R. 46°F (1015 Hrs) Union Cr. 44.6°F (1030 Hrs)

Investigator: Eric Anderson WDFW

Start Time: 1015 Hrs.

End Time: 1145 Hrs.

Redds: New Union Cr. American R. Old Union Cr.

Definite: 20 0 9

Probable: _____

Possible: 1 _____

to New Def.
upgraded
most changed to new Def.
Eliminated { 8 }
 { 2 }

Bull Trout Observed:

Adults: 8 in Union creek

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): _____

1 redd flagged short distance below union.

2
0
0
4

American R. / Union Cr. Bull Ter
Spawning Survey - Redd Count
E. Anderson

9-8-04 1015 Hrs.

American R. 1/4 mile below Union 46°
New Def. IIII (3 of these at pool be
cabin in American - possibly
counted as chinook Redd day
1 Redd Flagged short distance
below Union)

Union Cr. 44.6° 1030 Hrs.

New Def. ~~IIIIIIII~~ Fish ~~II~~

old Def. ~~IIII~~ 29

old Pos. ++

old Prob. ~~+++++~~

New Pos 1

- Most changes
to New Def
or eliminat.
i.e.,
+ = No longer co
as pos or prob.

End 1145 Hrs

Bull Trout Spawning Ground Survey Data Form

Stream: Kettle Creek (American R. drainage)

Date: 9-8-04

Location: Mouth to Flag ~ 1 mile.

Water Temp.: 45.90 F (1340 Hrs)

Investigator: Eric Anderson (WDFW)

Start Time: 1340 Hrs.

End Time: 1435 Hrs.

Redds:	New	Old
Definite:	<u>3</u>	<u>1</u>
Probable:	<u></u>	<u>1</u>
Possible:	<u></u>	<u></u>

Bull Trout Observed:

Adults: 3

Sub-adults:

Juveniles:

Comments (mortalities, tagged fish, H2O visibility, etc): Took 3 pictures
of redds + fish

20
00
00
4

Kettle Creek Bull Trout Spawning
Survey - Redd Count

E. Anderson

9-8-04 1340 hrs, 45,90 F

Mouth to Flays upstream
≈ 1 mile

New Def III

Fish III

old Def I

old Pro I!

end 1435

3 pictures
of Redds/F
in Kettle

- last 3 pics
on this
date

Bull Trout Spawning Ground Survey

Stream: American at lodgepole

Date: 9-17-04

Location: American and 1 mile up

Water Temp.: _____

Investigator: MM EA - Kettle Creek added

Start Time: 1000

End Time: 1130

Redds:	New	Old
Definite:	<u>2 new</u>	<u>1 plus 5 old in Kettle Cr</u>
Probable:	_____	_____
Possible:	_____	_____

Bull Trout Observed:	
Tagged:	<u>0</u>
Untagged:	<u>0</u>
Sub-adults:	<u>0</u>
Juvenile:	<u>0</u>

2
0
0
4

Comments: "2 new" are most likely bt. redds with some hydraulic scour help. Very large redds.

Bull Trout Spawning Ground Survey

Stream: Union Creek
Date: 9-17-04

Location: From American Pool to Union Falls

Water Temp.: _____

Investigator: MM

Start Time: 0820

End Time: 0945

Redds:

	New		Old
Definite:	(3)	+	(2.9)
Probable:	_____		_____
Possible:	_____		_____

Bull Trout Observed:

Tagged:	<u>0</u>
Untagged:	<u>0</u>
Sub-adults:	<u>0</u>
Juvenile:	<u>0</u>

2
0
0
4

Comments: Changed 1 poss from EA to Def + 2 new
Final survey count is 32 definite
MM

Bull Trout Spawning Ground Survey

Stream: Union Creek
Date: 8/25/04
Location: American Confluence to Falls
Water Temp.: Union Creek
Investigator: Mike Mizell, Ryan McGinnis, John Fladgard
Start Time: 1700
End Time: 1830

Redds:	New	Old
Definite:	<u>①</u>	<u>①</u>
Probable:	<u> </u>	<u> </u>
Possible:	<u> </u>	<u> </u>
Bull Trout Observed:		
Tagged:	<u>①</u>	<u> </u>
Untagged:	<u>①</u>	<u> </u>
Sub-adults:	<u>①</u>	<u> </u>
Juvenile:	<u>①</u>	<u> </u>

Comments: Lower end of survey N 46° 55.909
W 121° 21.502
Top of Survey N 46° 56.158
W 121° 21.575

2
0
0
4

Bull Trout Spawning Ground Survey

Stream: American

Date: 9/3/04

Location: From Lodge Pole

Water Temp.: _____

Investigator: M. Mizell, J Fladgard

Start Time: 1845

End Time: 1930

Redds:	New	Old
Definite:	<u>1</u>	<u>0</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed: 1 on redd

Tagged: _____

Untagged: _____

Sub-adults: _____

Juvenile: _____

Comments: Fish Redd at N 46 54.724
W 121 23.647

2
0
0
4

Bull Trout Spawning Ground Survey

Stream: Kettle Crk.
 Date: 9/3/04
 Location: American confluence through BT spawner index
 Water Temp.: NA
 Investigator: McGinnis
 Start Time: 10:00
 End Time: 11:45

Redds:	New	Old
Definite:	1 N 46° 56.545' W 121° 19.776'	/
Probable:	1 N 46° 56.511' W 121° 19.869'	/
Possible:		/

Bull Trout Observed:
 Tagged: φ
 Untagged: 2 (20"-22" observed fish jump 2 1/2' Falls) (18"-20" observed make a couple of digs on probabal
 Sub-adults: φ
 Juvenile: φ

Comments: Probabal Redd: witnessed fish making diggs watched for a while fish looked exhausted and current swept it off the redd and downstream 5' waited for a while 15-20 min fish never reappeared. Called digging probabal because digging was witnessed however the redd didn't look finished. And I don't know if it ever got finished. (That's why it was it labeled definite.

21
01
01
4

Oct 1 '04

E Anderson

Shellneck 11:30 - 3:30

+ N.F. Antonum

Old Def 8

Old Prob 4

New Def 3

Fish - 0

changed to new

Shellneck

No New
Redds in
mainstem

A lot more recent
evidence of cows
in Shellneck area
& below confluence

N.F. Antonum

Old Redds 6

New Redds 0

Fish 0