#### **Bull Trout Spawning Ground Survey Data Form**

Stream:	Indian Creek	
Date:	9/18/06	eran i stranji su vili vili vili vili vili vili vili vil
Location:	Rimrock Lake Tributary	altiko ya Kongo
Water Temp.:	6 degrees C (upper reach), 8 degrees C (lower reach)	esk ether over a .
Investigators:	Jeff Thomas (USFWS) on lower reach, Scott Willey	(USBR) on upper reach
Start Time:	0930 hours	and Areas and Areas and Areas are
End Time:	1445 hours	
Redds:	New	Dld
Definite:	the 61 months are as well as it is one with the	5
Probable:		
Possible:	2 (see comments)	
Bull Trout Obs	oserved:	
Adults:	22 attending redds, 9 others	
Sub-adults:		
Juveniles:		· · · · · · · · · · · · · · · · · · ·

<u>Comments</u>: The weather was cloudy and mild with light to medium intensity rain throughout the day. Water clarity was excellent. Willey covered the reach from the North Spring confluence to the falls (upper reach) and Thomas covered from the U.S. 12 Bridge to the North Spring confluence (lower reach). Both surveyors covered the North Spring complex.

Lower Reach-- Prior to beginning the redd survey Thomas reconnoitered the reach from the bridge downstream to the lake and found no man-made obstructions. The Indian Creek campground was closed. The reach was loaded with kokanee which persisted in large numbers for a significant distance upstream (further it seemed then in past years). The three redds flagged on 9/6 were located and 15 new redds were found and flagged. One redd was flagged as a possible. It was found in a gravel deposit just below a plunge pool. It was a decent location for a redd but the excavation had a poorly defined pit,

0 0 6 Stream: Deep Creek
Date: 9/5/06
Investigate Jim Cummins

Old Redds Totals

Location Copper Cr to falls

Water Ten 44.1 F

Start Time 1055

End Time 1415

New Redds

Definite 20 Probable 1

Possible 3 Def + Prob 21

Adult BLC 1

Sub-adult Juveniles

Comments (mortalities, water flows, visibility, etc)

Flows low, dry area above Copper Creek, but redds above Rd 1808 culvert.

Eric has downstream data; did not survey from Rd 1800 to reservoir.

possibly due to the depth of the gravel. In retrospect, I believe it was probably a redd. The flag on the second "possible" redd reads "test dig or small redd". After observing several redds of this size later in the survey I believe that this excavation was a redd. The third pass surveyor can make the call. Only one adult bull trout was observed in the reach. It was on a redd.

Upper Reach—Willey started at the trail crossing and worked upstream. He climbed out at the falls and came back via the trail then surveyed down to the North Spring confluence. He located the one previously flagged redd from 9/6 and flagged 30 new ones. Five adult bull trout were observed tending redds in the reach along with seven others.

North Spring Complex—Willey and Thomas arrived at the North Spring confluence within five minutes of each other and commenced to surveying the complex. The two previously flagged redds were found along with 16 new redds. There were 16 adult bull trout observed tending redds and two others running loose. The large beaver dam located up the major channel (right) may be impassable. Thomas attempted to survey above the dam but the going was very difficult until the spring runs adjacent to the road. No redds were found above the dam but some of the stream was skipped over because of this difficulty.

Stream:

## **Bull Trout Spawning Ground Survey Data Form**

Box Canyon Creek - 1st Pass

		A CONTRACT C
Date:	9/22/06	
Location:	Box Canyon Creek - campground to Peek	-a-Boo falls barrier
Water Temp.:	not taken, but cold, est. 7-8°C	
Weather: _S	Sunny, Warm (60°F), calm, clear	ing and the state of the state
Investigator:	William Meyer (WDFW), Hank Fraser (Y	IN), Allen Sullivan (CWU)
Start Time:	12:00 pm	
End Time:	2:15 pm	
Redds:	New	Old
Definite:	0	
Probable:	0	
	2 Test pits	
Bull Trout Or	bserved: 6 adults observed (5 otter caused mort.s an	d 1 live adult)
Adults: _	6	
Sub-adults:	0	
Juveniles: _	0	
Comments (m	mortalities, tagged fish, H20 visibility, etc): Flow	was ok, visibility was clear and
	the creek was connected to the reservoir. The rese	rvoir was still pretty high
	compared to last year (Creek end/Reservoir beginn	ung was N 47.35723
	W121.23635. I walked from the stairs at the parki	
	Observed several sets of otter tracks and on otter	
	Observed several sets of otter tracks and an otter wastream in the sandy reservoir bed.	valiow along the banks of the
Began the sur	rvey at ~12pm on lower creek. Observed 1 test pit or	the lower end of the creek
	200m above the trail bridge. 1 live adult fish was	observed ~50m above this

location. Found 5 mort. Adult Bull Trout in the stream spread throughout the middle section. The first mort. was a male est. 16-18" (gonads present) and kill

appeared to be 1-2 weeks old. Observed otterlike teeth marks on kill. Genetics taken (vial label #O6BK-1). The second mort. Was a jaw and mid-section and was fresher – less than 1 week old. Genetics sample taken (vial label #O6BK-2). Couldn't determine sex or length, but an adult fish. The third mort. Was a midsection of a fish and we took a genetics sample (vial label #O6BK-3) Length estimated at 22-24" and no sex determined. The fourth mort. Was a female with eggs (pre-spawn mortality) and was a big fish estimated at 26-30" Genetics sample taken (vial label #O6BK-4). The fifth mort. Was estimated to be 16-18" long and was another mid-section of fish turned inside out, plus a jawbone.

- Two of the five fish had been turned inside out by the otters and the fins were generally missing because of it. We also observed several bits of skin and pieces up on rocks or logs as otters usually do... and we observed the bite marks on the carcasses, plus the otter tracks in the reservoir bed and along the lower portions of the stream.
- We finished the redd survey ~2:15pm and then Hank and Allen snorkeled the Peek-a-Boo falls site but didn't see any bulls. They did see a few CT in the pool. Streamtemps were cold.

File name: G:\bull trout\ bull trout spawning ground survey.wpd Revision date: September 16, 1999

# **Bull Trout Spawning Ground Survey Data Form**

Stream: North Fork Teanaway & Deroux Creek					
Date: September 26, 2006 (Tuesday)					
Location: From Camp Wahoo upstream to NFT barrier and Deroux Barrier					
Water Temp.: @confluence Deroux = 6°C and NFT = 7°C at 10am					
Weather.: Clear, calm, sunny and warm by afternoon (~70-75°F)					
Investigator: William Meyer WDFW (upper section); Yuki Reiss (USFS) and David Morgan (USFWS) from Johnson – camp Wahooo (see their notes separate from this)					
Start Time:10 a.m.					
End Time: 14:15					
Redds: New Old					
Definite: 1					
Probable:					
Possible: 2					
Bull Trout Observed:					
Adults: 0					
Sub-adults:0					
Juveniles:0					
Comments (mortalities, tagged fish, H20 visibility, etc): Started at the confluence of Deroux and					
NFT at 10am. Walked up Deroux first, and noticed an old yellow flag (47.41936 W120.94251)					
Found David's previous possible flag (9/13) and it now looks like a definite with 0 fish.					
(N47.41971 W120.94359). Around 150-200m upstream of this location the stream flows under					
a bank completely, and then tunnels its way back into the channel. I flagged another 1 poss.					

With pink flagging (N47.42005 W120.94634). 11:15 stop at trail crossing barrier. Bridge at N47.42330 W120.95002). 11:38 back at NFT/Deroux confluence. Head up NFT. Someone had stacked rocks along the route. Found David's 9/13 possible #2 (N47.42199 W120.94113). I couldn't clearly see where this redd was... the site was sunny and water clear. Continued upstream (this was ~30 ft upstream of the 8/21/06 end of snorkel flag). Located a new possible redd below a large log jam (N47.42242 W120.94010). Found David's possible from 9/13 (N47.42280 W120.94019) and it looked like either a test dig or small redd. I observed 3 cutthroat on a patch of gravel and they had dark cheek patches and there was a very small disturbed patch of gravel. I did not observe any spawning behavior as the fish darted upon my arrival. NFT falls est. ~16-18 ft high and arrived at 13:00 and took pictures. (N47.42921 W120.93876). The falls is directly downhill from a milepost #9 marker on the NFT road and had a small pullout. This is approximately ~1mile above Deroux Camp. Back at truck (@Deroux camp) by 13:25 and headed downstream to Camp Wahoo to start surveying up to confluence. Marked a small possible adjacent to middle of Deroux campground. Back at truck 14:15.

### **Bull Trout Spawning Ground Survey Data Form**

Stream: Gold Creek	
Date: September 28, 2006	TREATH TO THE STATE OF THE STAT
Location: <u>I-90 Bridge to upper end</u>	d of Index Reach (2 <sup>nd</sup> barrier falls)
Water Temp.: 8°C at middle of trail wh	nere it tangents stream. Lower Gold temp was 12.5°C.
Investigator: <u>Scott Willey (USBOR)</u>	, William Meyer (WDFW)
Start Time: 12:00	The state of the s
End Time: 15:18 (survey) At truck	17:25
Redds: New	Old
Definite: 4	
Probable: 2	and the state of t
Possible: 0	
Bull Trout Observed:	
Adults: 0	
Sub-adults: 0	
Juveniles: 0	
Comments (mortalities, tagged fish, H20	visibility, etc): Scott Willey did the lower section from
The I-90 bridges up to the trail crossing	and William did the trail tangent up to the falls. Scott
observed two definite redds and one prob	pable redd all below the ponds. William observed two
<u>definite redds and one probable redd, plu</u> <u>Scott's Notes:</u>	s some old redds in side-channel area.  See wors - flag from last year?
	contage road. Water Temp at Frontage Road = 12.5C (55)
F) coming from Gold Creek Pond. The 1	15+ adult bull trout that I observed holding in the pool
under the Eastbound lanes of I-90 on 9/20	0 and 9/23 were all gone today (hopefully they are
upstream).	
No Kokanee observed during the surve	<b>→</b>
Kalli Showers on 9/19 and 9/20 have al	most reconnected (i.e. surface flows) the previously dry

Gold Creek channel. It is still impassable, but water is ponding up and flowing in several areas.

One more decent rain event should open up the channel and make it passable for bull trout.

-- Water temperature where the stream permanently rewaters up was 11C (52 F).

#### William's Notes:

Start at trailhead at 11:55am and began the survey where the trail comes down close to the stream (stream tangent) at 12:20am. Stream temperature here was 8°C. Stream flow was low and lower Gold was still disconnected.

12:43 Navy A-6 flyover.

12:47 at "house rocks" for lunch.

13:27 1st probable redd 0 fish and left bank. No gps signal here, but 200m upstream I got this

location N47.43039 W121.35119.

13:40 1 definite redd with 2 fish on – 1 very large female and a smaller 10-12" male. Location under large log crossing stream channel. N47.43039 W121.35119

√14:01 Right bank tributary with old flag and 2 – 3 old probable/definite redds. N47.43480
W121.35038. walked up side channel ~100m. It looks like this section has not experienced any high flows since last season.

14:07 Upper Gold Trail crossing N47.43929 W121.34998. Flow at upper Gold trail crossing is very skinny, and in places it would be difficult or impossible for a large fish to pass.

-14:22 1 definite redd, 0 fish; N47.44085 W121.34912 above trail crossing.

14:41 Gold Creek goes totally dry N47.44561 W121.34881 (~2896 ft elev.) for ~150 m then rewaters the rest of the way to barrier falls.

15:00 1<sup>ST</sup> falls (barrier at these flows) N47.45105 W121.34116

15:11 Dead tailed frog (adult male) in stream channel N47.45301 W121.33947

Hiked up to 2<sup>nd</sup> barrier falls and observed several fry in different locations – between the two sets of barrier falls. Also saw a new small slide of soils and trees into the creek on the right bank.

96 andrewskie on aller

oned in a common years. ?

engles in overald comit of the

15:18 Arrive at 2<sup>nd</sup> barrier falls N47.45358 W121.33686 (~3060 ft).

17:25 Back at trailhead. Survey complete

1 prob

1 det

in contra

#### **Bull Trout Spawning Ground Survey Data Form**

Stream:	Upper Cle Elum River			 
Date:	10/6/06			
Location:	Reach directly below Hyas I	ake (length 1.	3 km)	
Water Temp.:	10 degrees C at 1135 hours			
Investigators:	Jeff Thomas (USFWS)			
Start Time:	1135 hours			
End Time:	1217 hours			
Redds:	New		Old	
Definite:	0	-	0	-
Probable:	0			
Possible:	0	· · · · · · · · · · · · · · · · · · ·		 _
Bull Trout Obs	erved:			
Adults:	None		;÷	
Sub-adults:	None			
Juveniles:	None			

Comments: The weather was partly cloudy and cool. Water clarity was excellent and flows were low. Although I did not observe any active redds there was evidence of past spawning activity in the reach. However, none of the excavations (there were four) was anywhere near recent. After these observations and those I have made in past years I offer this hypothesis—some fairly large salmonids, most likely rainbows and/or cutthroats, drop down into the reach out of the lake in the spring/early summer and spawn. Just a thought.

Stream: Indian Creek
Date: 9/6/06
Investigator Jim Cummins

Location Trail 1147 to falls
Water Tem; 45.1
Start Time 1005
End Time 1145

New Redds

Definite 1
Probable 0
Possible 0
Def + Prob 1

Adult BLC 7
Sub-adult 0
Juveniles 0

Comments (mortalities, water flows, visibility, etc)
Flows low but not passage issues to falls.
No redds or fish in the 2 south springs.
Did not survey from Trail 1147 (Approximate south spring) to north spring Eric has downstream data

Stream: South Fork Tieton

Date: 9/7/06 Investigatc Jim Cummins

Bear Creek to 14.6 F	1050 Road	1050 Rd to Corr	al Ck CG
<b>9</b> 940		1100	
1100		1145	
New Redds			
7		13	
0	,	0	
0		0	
7	• 1	13	
11		10	
	14.6 F •940 1100 New Redds 7 0 0 7	0940 1100 New Redds 7 0 0	14.6 F

Comments (mortalities, water flows, visibility, etc)
Anderson has data from falls to Bear Cr
Torretta has data from Corral Cr CG downstream.
Flows low, excellent visibility, fish on redds and actively spawing

Stream: American River Date: 9/8/20006

Investigate Jim Cummins and Gary Torretta

Location Lodgepole to Mesatchee Cr Trail crossing

Water Ten 44 F

Start Time 1000 End Time 1200

New Redd Old Redds Totals

Definite 15
Probable 1
Possible 0
Def + Prob 16

Adult BLC 2 Sub-adult 0 Juveniles 0

Comments (mortalities, water flows, visibility, etc)

Mike Nelson located 5 adult BLC above Mesatchee Cr Trail Crossing 9/6/06

Walked above trail crossing about 300 feet but saw no BLC

Flows low but no passage problems.

Torretta has data for Union Creek and American R downriver from Union Also, see Kettle Creek report.

Stream: Kettle Creek
Date: 9/8/06
Investigate Jim Cummins

Location Mouth to cascades

Water Ten 47.3 F Start Time 1345 End Time 1615

New Redds
Definite 7
Probable 0
Possible 0
Def + Prob 7

Adult BLC 6
Sub-adult 0
Juveniles 0

Comments (mortalities, water flows, visibility, etc)

Went upstream all the way to uppermost past survey markers.

Fish actively spawning to well above where we ended survey last year.

Water flows higher this year so fish moved upstream further.

Took photos of spawning fish.

Also see American River data and Torretta's Union Creek data for this date.

Stream: NF Ahtanum
Date: 9/12/06
Investigatc Jim Cummins

Location Bridge below Snow cabin CG to Shellneck and Shellneck Cr

Water Temp 45.1 Start Time 955 End Time 1055

	New Redds
Definite	0
Probable	0
Possible	0
Def + Prob	0
Adult BLC	. 0
Sub-adult	0
Juveniles	0

Comments (mortalities, water flows, visibility, etc)

Flows low, visibility good, no redds in Shellneck Creek.

Possible log jam barrier short distance up Shellneck, same as last year.

This !

Stream: Rattl

Rattlesnake Creek

Date:

9/13/06

Investigator Jim Cummins & Eric Anderson

Location Trail 1114 trail crossing above Wildcat Cr upstream near McNeil Cr

Water Tem<sub>l</sub> 41.5 Start Time 1100 End Time 1155

	New Redds
Definite	4
Probable	0
Possible	0
Def + Prob	4
Adult BLC	. 0
Sub-adult	0
Juveniles	0

Comments (mortalities, water flows, visibility, etc)

Eric Anderson and I both surveyed most of the area from Strawberry Meadow upstream. Eric has most of the data. Torretta surveyed downstream area. Total redds about 38.

Stream: South Fork Tieton River

Date: 9/14/06 Investigatc Jim Cummins

Location Fa		reek		Bea	Creek	)
Start Time	940				1205	
End Time	1200			?		
· Ne	w Redd Old	Redds Tota	als New	Old	Tot	als
Definite	22	3	25	6	7	13
Probable	0	0	0	0	0	0
Possible ·	0	0	0	0	0	0
Def + Prob	22	3	25	6	7	13
Adult BLC	20			10		
Sub-adult	0			0		
Juveniles	0			0		

Comments (mortalities, water flows, visibility, etc)
Eric and Torretta have data for remaining index areas.
Excellent survey conditions, flows low, water clear.

Stream: Middle Fork Ahtanum

Date: 9/20/06 Investigatc Jim Cummins

Location Bridge to Tree Phones CG

Water Ten 39 F

Start Time 1015 End Time 1145

New Redds

Definite 2

Probable Possible Def + Prob

Adult BLC

Sub-adult Juveniles

Comments (mortalities, water flows, visibility, etc) flows low, visibility good. Eric has data for downstream part of index.

Stream: Deep Cr.
Date: 9/21/06
Investigate Jim Cummins

Location Rd 1800 Culvert to Copper Cr.

Water Ten 43.5 F

Start Time 955 End Time 1255

New Redd Old Redds Totals

		Old I toddo	lotaio
Definite	12	39	51
Probable	. 0	0	0
Possible	0	1	51
Def + Prob	12	39	51 🗸
Adult BLC	. 0		
Sub-adult	0		
Juveniles	0		

Comments (mortalities, water flows, visibility, etc)

Flows low, no passage at lower rockslide, as is often the case past years.

Eric has data for upstream part of index and from 1800 Rd culvert to reservoir.

Road Turnent about Land Bepole Britan. Stream: American River Date: 9/22/06 Investigate Jim Cummins

Location Lodgepole to Mesatchee Cr Trail

Water Ten 40.8 F

Start Time 955

**End Time** 

New Redd Old Redds Totals

Definite 0 15 15 Probable 0 1 1 Possible 0 0 0 Def + Prob 0 16 16

Adult BLC 0 Sub-adult 0 Juveniles 0

Comments (mortalities, water flows, visibility, etc)

Eric Anderson and Gary Torretta have additional data for American and Kettle.

Stream: NF Ahtanum Creek

Date: 9/27/06 Investigate Jim Cummins

Location Grayrock to bridge below Snow Cabin Cr CG

Water Ten 42.8 Start Time 1040 End Time 1230

#### New Redd Old Redds Totals

Definite	0	0	0
Probable	0	0	0
Possible	0	0	0
Def + Prob	0	0	0
Adult BLC	0		
Sub-adult	0		
Juveniles	0		

Comments (mortalities, water flows, visibility, etc)

Missed 1 "old" redd.

Eric has data for upstream part of index area.

Stream: Crow Creek Date: 9/28/06

Investigate Jim Cummins & John Easterbrooks

Location Index Area - trail to passage block

Water Ten 43.3 F Start Time 820 End Time 1310

# New Redds Definite 7 Probable 1 Possible 0 Def + Prob 8 Adult BLC 0 Sub-adult 0

Juveniles

Comments (mortalities, water flows, visibility, etc)
First redd at upper end of "beaver pond area."
Saw several cutthroat.
Only survey on Crow Creek this year.
Flows low, visibility good.

0

Stream: Indian Creek
Date: 10/2/06
Investigator: Jim Cummins

Location Trail at end of road (lower south spring) to falls

Water Temp 38.5 F

Start Time 1030

End Time	1215						
			Sc	outh Spring do	wn to n	neet E	ric
	New Redds Old F	Redds Totals	Ne	ew Old			
Definite	14	15	29	3	8	11	
Probable	0	0	0	0	0	d	
Possible	0	0	0	0	0	0	
Def + Prob	14	15	29 Er	ic has more da	ata	11	= 40
Adult BLC Sub-adult Juveniles							

Comments (mortalities, water flows, visibility, etc)
Eric Anderson surveyed downstream and has additional data.
Lower south spring temp. - 41.5 F

Stream: SF Tieton River
Date: 10/4/06
Investigatc Jim Cummins

Location	Bear Cr to 1050 Rd	1050 Rd to Corral Cr CG
Water Ter	140.6 F	
Start Time	950	1050
<b>End Time</b>	1050	?

N	ew Redd Old	Redds	New Redd Old R	edds
Definite	3	19	12	28
Probable		1	0	0
Possible		0	0	0
Def + Prob	3	20	12	28
Adult BLC	0		0	
Sub-adult	0		0	
Juveniles	0		0	

Comments (mortalities, water flows, visibility, etc) Good visibility, low flow. Eric has data for downstream index. 48 01 d 15 Now 15 Now 15 Now 100 to 10 d to 3

Stream: Gold Creek Date: 10/9/06 Investigate Jim Cummins

Location	Gold Lake Trail crossing to lower	falls
141 · -		

Water Temp

Start Time 1200 **End Time** 1255

New Redd	Old	Redds	<b>Totals</b>
----------	-----	-------	---------------

Definite	0	1	
Probable	0	0	
Possible	0	0	
Def + Prob	0	0	
Adult BLC	0		
Sub-adult	. 0		
Juveniles	0		

Comments (mortalities, water flows, visibility, etc)

Eric has data for lower part of index area.

Extreme low flow, Eric reported no passage to upper reaches.

Extensive dry area above trail crossing in upper reach.

Wissed class the too wants and thought had a want to see when the too wants.

See I did not wish to see when the too wants.

The see I did not wish to see when the see when t

# Sep. 1 2006 1000 Hrs. - 1050 Hrs Union Creak Bull Tr. Spanner Su Rodd Count - E. Anderson + J. Cumu Union or month to Falls, Hab Temp 4 8 Det. Def. NIII 8031 11 (Fino Bulls on Redd) 1 Chlook Carenss below Hmy 410 Bridg Posted 1 Closed the sign American River Union Cr. month downstream as & m to large pool/camp fire ring (comp area by River) No bulls observed in any pools of America R. in this sect End this section 1115 Hus.

FHHH			1
Sept. 6, 20 Indian Creek	05 09	150 Hrs.	
Indian Creek	& Bull Tr	out Spawner	
		Survey	_
The set of the man			
Hmy 12 Brid	Luc to N.	Spring	_
Hmy 12 Brid	7	1 0	_
Redds			
Redds Det III	3 redds	1	
Pro. d			
Fish - No	bull tra	out observed.	_
HI I LA L AL			_
Worth Sprin	5 45	°F 2	_
North Sprin	3 45 Exedds	°F 2	_
Dot 11 Pro. 0	g 45 zredds	°F 2	
North Sprin	g 45 zvedds	°F 2	
Dat 11 Pro 0 Pos 0 Fish - N	3 45 Excelds	of 2	
Fish - N	o bull tre	ent observed	
Fish - N	o bull tre	ent observed	
Fish - N	o bull tre	ent observed	

.............

Union Cresk - Tory Ha \$18/06 490 F - American K VUIDA 11 (Eleven) ti 9 BLC - Some on reads below American FISH New Somo BLC on redds Phone discussion w/ Gay Torethe A. 5.4 Sale Ma

# 

N. F. Altonum Cr. Bull Trout Spawner Survey Eric Anderson Road Bridge below Snow Cabin C.G. to Shellneck Cr. 430F 1043 Hrs New Dat, Rodds HHI! Fish - One adult sized bull trent. No old Redds end 1205Hrs. Shellnerk Creek 430F 1206Hrs away from Road that pairelle(s No now or old Redds. Several 106 jam barriers to upstream passage. end 1235/ms N.F. Antanumatshollrak or to up stream - + mile (up stream No Reads or to Lobser est. Jim Cummans whos additional data.

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Sea	t. 12	2006		0950	nderson We	:
Ahta	num (	zoo6	North	Fork	Bull	
<u>: : : : : : : : : : : : : : : : : : : </u>	rowt	SAUNN	er Su	V.VRU		
Grey	1. Kecl	Irai	1 Xina	to 1	upstream	Ü
~	reea	Driva	O XM	· helo	w	
	on Ca	6in	C.G.	: :		
Redd	<u>چ</u>			4601		-
Det			ne re	dd		
Pro,			No	adul	+ bull	:
Enc	A' ' '/	5 Hrs		tro	nt obser	red
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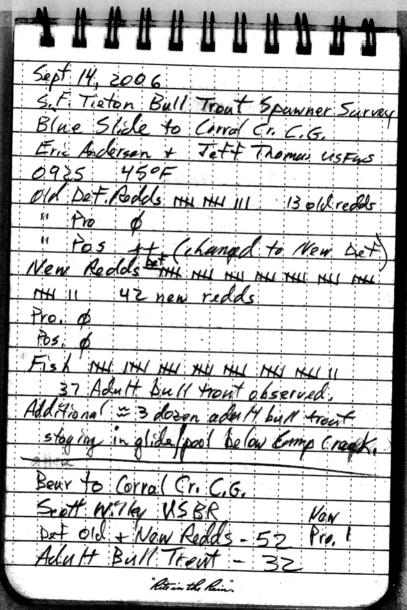
Sept. 13, 2006 Rutlesnake Creek drainage - Bull Exic Angerson & Jim Cummins
Exic Angerson & Jim Cummins
Shell Creek Trail xing down to month at Ruttosnerke Creak, No Rolds or bull trout observed Ruthernake creek mainstern From shell Cr - Upstreum to Little Wildcat Creek 0934 Hrs, 450F Redds gredds HT 1111 Pro. Pos, Fish 2 adult bull trout observed. Enic Aderson + Jim Commins " Pite in the Rain".

9-13-06 Ruthernake drainage - continued Shell Creek to MTB Trail xing 1250 Hrs - 1355 Hrs, Entroperson To Commits Redds 6. Torretta 16 redds Aet. HU HU HU! Z Pos, 3 adult bull tront Fish III observed. Lower Trail xing at bottom of index up to MIB trail xing. Gary Torretta (USFS) No Bun Trent observed. " Rite in the Rain".

# # # # # # # # # # # # # Ruttlesnake Druinage - continued Little Wildcat Creek to McNeil 1035 Hrs. Wart end 1200 Hrs. Redds THE 1111 9 redds Pro. P05. No bull trout observed Fish Little Wildiat From mouth to Rock Slide is about 45 min up for Trail xing start IIII has to and 1151 Hrs. No Redds or adult bull trout observed,

# Ruthesnake Creek Drainage - cent. Little Wildent Creek. Start 1112 Hrs End 1150 Hrs. No Redds No adutt pull trout observed. 420F Troitxing shell on to MIB Redds old Det. 16 Rodds J. Cumming New Det 1 Rodd old tos 2 end and work down stranger and at andown and work down stranger Noel Fergeson Trail xim below MJB Trail to MJB 6. Torrettad M. Tergeson Old Dot, 4 No New Redds + No Hout bull trout observed End 1417 old fos. (

THE SHARL SHARL Sept. 26 2006 Rattlesnake Cr. Drainage - Bull Trout Spanner Survey E. Anderson + I. Cumming Shell Cr. Krail xing to Rutthe snake Cr. 0925 Hrs. 436F No Fish , Na Redds Rattlesnake creek 410F 0935Hrs. Shell Cr. to Little Wildest Cr. New Dot. 1 one redd No adaH Bull Tr. observed Ruthesnote Crack Little Wildest to Mc No. 7 exect 1036 Hours Redds old Fet. HIIII No Now Rodds end 1200 Hrs. No adult bull trout observed, " Pits in the Rain"



S.F. Tieton - continued Jum Cummins with S.F. Tieton fulls to Bear Cr. Old Dat 3 - Total 25 New Det 22 Adult BUH Trout - 15 Bear Creek Jim Cammins Rodds old hot Fold\_ adjusted with previous 6 new Adult Bull Troot - 8

Sopt 20, 2006 m.F. Ahtanım Ball Treat Spanner. Survey Enc Anderson Start 2 miles below Treephones Co. to Tree phones C.G. shot 1022 pot. 111 3 Rodds No Adult Bull Trout Observed End 1220 Jim Cumm. hs has more data for this upper section " Pete in the Rain"

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Sept. 22, 2006	rage - Bun Trout
Spawner Survey.	Fri Anderson
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Sept 28, 2006 M. F. Altanum Bull Trout Spanner Sunay Eric Anderson 1330 Hrs. Index aren - start 2 miles below Traephones 6. G. by parking pullout next so ereck to Rood Bridge Xing at upper end of comp ground. old Redds 5 Old Redds DOT, HL New Redls 1 New Redd. No adult bull trout observed. end: 1540 Hrs. "Air the Pi"

mf Antanum Bull Trout Spawner Survey for to mile above Treephone Sept 29, 2006 Camp Grand start From Rd Bridge at upper end of Treephones. No Redds or Adult bull trout observed, This was a elect out of the normal index area.

Sept. 7 2006 0930 Hrs. S.F. Tieton River Bull Trout Spawner Survey: Falls to Bear Creek F. Anderson Redds 3 redds 11:1 ф: Pos - HU HH III 13 about ball Fish trout observed End 1055 Hrs, 1100 Hrs. Bear Creek 490F to 1150 Hrs. & Redds H4 111 4 adaH bull trent 1161 3 Adult Curcosses in stream 5. F. Tieton River (continued) Gury Forrette + Linda Blue Slide to Corral Cr. Camp ground Relds 32 adult bull trout Jim Cummins has additional Oct. 4,2006. S.F. Tieton River Bull Trout Spawner SURVEY Blue Slide to Gerral er. C.G. 440F Eric Anderson Start \$925 Hrs. Hzo Temp Redds OID DET HIS HIS HIS HIS HIS HIS HIS HIS New Det. THE HU HU IS NOW Redds No adult bull tront poserved in theores Walls to Bear Cruk Gary Torretta (USFS Redes 010 2 150 Temp 390F 0945 Hrs, New 9 Gary Jorrella (usts Bear Creek redds the Temp 41°F old 1= 1145 Hrs, New 3 Carcasses (morts) n BOUN Crook Jim Commine has additional data for section Bouthern to Corral Cr. C.G.

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Oct. 2,2006 Indian Creek Bull Trout Spawner Survey E. Anderson Huy 12 Bridge to 12. Spring 450F Redds old Det my my (15 old Bolds) old Pro old Pas + changed to new Det New Def HH HH 1411 111 (18 New Rodge No adult bull trout observed of spanning Kokanee, Hundreds 90 1215 Hrs. Trail xing 2 N. Spring to Redds 8 old Redds 111 (3 New Redds New Det Jim Cumm is has additional Redds for this section, end 1248 Hrs. continued "Pete in the Rain".

Indian Creek Drainage Bull 1256 Rg No Spring Eric Anderson + Tim Cumage Old Det Redds, HI HH HU 111 18:01d New Dot Rod's 1111 4 new Adult Bull Trout observed. 2 end 1400 Hrs.

Stream: Deep Creek
Date: 9/5/06
Investigate Jim Cummins

Old Redds Totals

Location Copper Cr to falls

Water Ten 44.1 F

Start Time 1055

End Time 1415

New Redds

Definite 20 Probable 1

Possible 3 Def + Prob 21

Adult BLC 1

Sub-adult Juveniles

Comments (mortalities, water flows, visibility, etc)

Flows low, dry area above Copper Creek, but redds above Rd 1808 culvert.

Eric has downstream data; did not survey from Rd 1800 to reservoir.

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7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Sept. 5, 2006 1037 Hrs.
Deen Cr R. II T. S.
Redd Count lower Rolen wert to Copper Cr.
E. Anderson H.O Temp. 46°F
Redds
N.E. Aug.
Mer. 144 HATHAMAN HOLL 4 I rely ?
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Fish HUMUMHHHHHMIN 38Fish
End 1418 Hrs.
No Tish or realls in mel An
apove broids too Copper Crank
(burrier prevents upstrem Aussoul) -
burrier prevents restran passage -
bunk man near vock stide.
Jim Cummins has additional
data
"Att in the Rim".

4-21-06 Deep Creek Bull Trout Spanner Survey Eric Anderson Copper Creek to Burlier talks Stat 1020 410F Dati(OIU) 20 (5 of these were above the Pro (old) 1 upper Rd calvert Pos (old) 3 which is above the New Def. 2 dry aren) No adult buil trout observed. Below lower Rd culvert to the lake. 1330-1441 Hrs. Eric Anderson & Jim Cummins Reclas No adult bull trent observed, Vin Cummins has additional " Ato in the Rain"

00+3,2006 Box Canyon Cr. Bull Trout Spawner E. Anderson + Y Reiss Survey 4 From a rea s/1911thy below toot bridge to barrier talls. New Det. HU 11 7 Redds ( | below bridge + 1 above New Aro. ( Adal+ Bull Trout Observed -Old Test Dig Noted, Also walked section down to the lake - low flow but there was connection to the reservoir for passage, End 1349 Hrs. @ Peeka boo Falls "Pete in the Pain"

BEBERRERE Oct 12, 2006 Box Conyon Creek Bull Trout Spanner Survey En Anderson + T. Cummits From Footbridge to Barrier Fulls old Dof Adds HILL TRedds 01d Pro 1 1 Rodd 1013 Hrs. end 1150 Hrs. 42.10F No about bull treat observed, Flows 5/71 low. No chame from Oct, 3 survey.

Oct. 18, 2006 Spot cherked Box Campun Crock on these dates no rain, low flows no change in fish (redds Oct 18+23 2006 spot check Gold Creek during Kokanee sumples. No rain, no increased Hows, Does not uppear that there have been any changes in redds/spanning Gold Creek Averlously was red An Jan Commis on Oct 18 From Frontage Road to Lake bed, more tokance present + Kok redds on loke Sed, but still low numbers of that. No bull trant observed no additional bull trout redds in area. "Att in the Pain"

Oct 9, 2006 . Gold Creek Ball Trout Spanner Survey Frontage Rd Bridge to Trail xing, Ern Anderson 1038 Hrs. 5000 old bet. THE 11 (7 old Det. Redds Redds old fro. +++ 3 changed to old No Adult Bull Trout observed , Det. Only about a dozen koku nee spanning in Gold Creek Outset Channel. Gold Creek channel was dry From Fond Outlet area to up streum about a mile. & potis below dry area e fond to Frantage Road + 4 Det's above dry area @ pond to Trail xing, stream gres subsurtace again below Trail xing, end 1339 Hrs. Tim Cummins has more data too

<Judy\_Delavergne@fws.gov>

To:

<Herger.Lillian@epamail.epa.gov>

Date:

11/06/2006 11:37:02 AM

Subject: R

Re: Fw: BT Redd in the upper Yak-cabin creek

#### Hi Lil.

As previously discussed, we conducted surveys in the upper Yakima but primarily focused on the lowest area of this reach between Easton Lake and the Powerline crossings (about 4 miles upstream of Cabin Creek and near the private land and fish ponds). We focused here because we have more information about spawning in the upper portion of this reach and we wanted to have more data from this lower portion of the reach. We did not get into the middle part of this reach but maybe next year. I think I talked to you after our first survey but not since the second and third surveys...

We surveyed this lower area of the Easton reach three times, according to our protocol, and so that we could determine old and new redds and try to distinguish the redds from chinook redds

We surveyed on 9/19 and 20; 10/5 and 6; and 10/19. Water temperatures ranged from 10 to 12.5 deg C depending on where and when. Temperatures were 10.5 degrees C on the 1st survey in September, near the site just above the Cabin Creek wetlands, where Tina Mayo observed a redd previously.

Out of 25 or more redds, of which most were determined to be chinook redds, we found three redds that we feel are good bull trout redds. They were smaller in size, used smaller substrate, and were more oblong in shape. We also snorkeled and found 5 adult migratory bull trout under a log jam just above two of the three redds. They were in a very large full channel spanning historic log jam sitting down on the bottom in the current (very typical bull trout style). There were also smaller brook trout nearby, swiming in the upper part of the water column and in the pool at the log jam. After talking to Eric Anderson and Yuki Reiss about our observations we feel pretty strongly that these are bull trout redds. I will be submitting the documentation to Eric for his records on this. I am out of town tomarrow until Friday. I will get the notes further written up when I return next week.

FYI...We did flag multiple redds near the area where Tina and you observed redds, but I did not feel any we saw there were bull trout redds, but felt they were mostly chinook redds. The redds in which we saw bull trout redds were further upstream about a mile from where you were at the end of road #4823 in Sec 5...

We did also get one brook trout genetic sample from a brook trout below Cabin Creek.

Talk to you soon.

Herger.Lillian@ep amail.epa.gov

09/18/2006 01:14 PM To Judy\_Delavergne@fws.gov -3 redds

Keechelus to Easton Reach

2[ 0[ 0[ 6

Subject Re: Fw: BT Redd in the upper Yak-cabin creek

Hi Judy,

Actually, I was down there yesterday just to satisfy my own curiousity. The habitat really impressive (tons of wood, sorted gravel, pools, etc.). I saw lots of juvenile fish of at least 3 general age classes (steelhead). Did not see any adults of any species but the area described to me by Tina (and reiterated by you below) did appear to have a new redd. Anyway, I am confident that I have what I need as far as personal communications/data from that area below the Keechelus Res.

Lil

Judy\_Delavergne@ fws.gov

09/18/2006 01:00

To Lillian Herger/R10/USEPA/US@EPA CC

> widefalt was dive ods The redd s more many a

PM

Subject

Fw: BT Redd in the upper Yak-cabin creek

Here is an email Tina sent to me a while back...Both of these folks know what a bull trout looks like and have years of experience. ----- Forwarded by Judy Delavergne/WNES/R1/FWS/DOI on 09/18/2006 12:59 PM

Tina M Mayo

<tmayo@fs.fed.us>

Judy\_Delavergne@f ws.gov

То

CC

03/30/2006 12:45

tmayo@fs.fed.us

PM

Subject

BT Redd in the upper Yak-cabin creek

Hi Tina,

As we discussed on the phone. Just to be sure of the information you provided to me and for our record. Can you email me the information about that bull trout redd and the sizes of the bull trout you located in the upper Yakima near Cabin Creek. Do you remember the date you were there? It sounded like it coincided with pulling a thermograph.

Thanks.

Judy De La Vergne, Fish and Wildlife Biologist US Fish and Wildlife Service Central Washington Field Office 215 Melody Lane, Wenatchee, WA 98801 509-665-3508 ext. 21(office); 509-665-3509 (fax)

"What was big was not the trout, but the chance."
"What was full was not my creel, but my memory."
Aldo Lepold

To

04/05/2006 12:43

Judy\_Delavergne@fws.gov

PM

CC

Karin Y Reiss <a href="mailto:kreiss@fs.fed.us">kreiss@fs.fed.us</a>

Subject

Re: BT Redd in the upper

Yak-cabin

creek

Judy,

After much review through my and Bill Ehinger's field journals and the thermograph field notebooks I didn't find anything that noted the specific

date we saw the bull trout. Bill however does recall seeing the fish and

redd at the same location and time period that I remember. Here's the facts as Bill and I remember them. We didn't wad into the water to get a

real close look because we did not want to disturb the fish.

We were removing thermographs from our long-term monitoring site on the

Yakima River at SW1/4, SW1/4, Section 4, T20N, R13E on a spur off of the

4823 road.

It was early to mid-October 2003

A bull trout was on a redd located just off the left bank next to a rootwad, the other fish was just upstream about 5 feet off the bank Size of redd estimated as 3 feet long x 2 feet wide, fish were about 22-24 inches in size.

Pictures were also taken but I can't locate them either. But I'll keep looking. Let me know if you need anything else.

Tina M. Mayo Fisheries Biologist Cle Elum R.D., Wenatchee N.F. Phone #: 509-852-1068 e-mail: tmayo@fs.fed.us

### Eric Anderson - RE: Bull Trout Redd Counts in the S.F. Ahtanum

From: "Brandon Rogers" <brandonr@yakama.com>

To: "'Eric Anderson'" <ANDEREA@DFW.WA.GOV>

Date: 09/27/2006 3:13 PM

Subject: RE: Bull Trout Redd Counts in the S.F. Ahtanum

After 3 passes, we have only seen 1 redd. I'm not sure what's going on. How have things been in the middle and north forks?

From: Eric Anderson [mailto:ANDEREA@DFW.WA.GOV]

Sent: Wednesday, September 27, 2006 9:12 AM

To: brandonr@yakama.com

Subject: RE: Bull Trout Redd Counts in the S.F. Ahtanum

How are the bull trout redd counts going?

Yes, but we haven t found a redd to date. Hopefully things will pick up on our pass this week.

Brandon

From: Eric Anderson [mailto:ANDEREA@DFW.WA.GOV]

Sent: Monday, September 18, 2006 8:36 AM

To: brandonr@yakama.com

Subject: Bull Trout Redd Counts in the S.F. Ahtanum

Hi Brandon, Are you doing bull trout redd counts in the S.F. Ahatanum this year? Eric

Eric Anderson WDFW District Fish Biologist Yakima & Kittitas Counties 509-457-9301 anderea@dfw.wa.gov

#### Eric Anderson - RE: S.F. Ahtanum Bull Trout Redd Count

From: "Brandon Rogers" <br/> brandonr@yakama.com>

"'Eric Anderson'" <ANDEREA@DFW.WA.GOV> To:

10/10/2006 9:35 AM Date:

Subject: RE: S.F. Ahtanum Bull Trout Redd Count

4 definite redds

From: Eric Anderson [mailto:ANDEREA@DFW.WA.GOV]

Sent: Tuesday, October 10, 2006 9:31 AM

To: brandonr@yakama.com

Subject: S.F. Ahtanum Bull Trout Redd Count

Hi Brandon, Do you have a final on the redd count? Eric

"Jeff Thomas" < jthomas@pn.usbr.gov>

To:

<ANDEREA@DFW.WA.GOV>, <CUMMIJLC@DFW.WA.GOV>,

<meyerwrm@DFW.WA.GOV>, <kreiss@fs.fed.us>, "Scott Willey" <swilley@pn.usbr.gov>

Date:

10/04/2006 9:46:40 AM

Subject:

NF Tieton Redd Survey

#### Greetings

Yesterday (10/3) I conducted a bull trout redd survey on the NF Tieton River above Clear Lake. The weather conditions were cloudy and cool with intermittent light rain. The water temperature was 6 degrees Celsius. Flows were low and water clarity was good. I began the survey at the lower boundary of our eleventh 2004 study site, the last one we snorkeled. (To reach this location take Trail 1118 from the end of the road and bear left onto the Tieton Meadows trail [1128]. In five minutes or less you will reach the river where I hung a flag). There were by my calculations about 2.9 miles of river from the start to the barrier falls upstream.

I embarked at 1000 hours expecting to reach the falls by 1300 hours at the latest. I never made it. I believe the river's course has changed since Yuki and I conducted the '04 redd survey. What I encountered was totally unfamiliar. In '04 we had started upstream of where I did yesterday after bushwacking in off of Trail 1118. My guess is that it may have been about a half a mile above where I started. We did not have much difficulty moving upstream and in a little more than an hour reached an area where the river opened up, the gravels were clean, and the water clarity improved markedly. It was in this area that we found the redd and observed the two bull trout. The falls were about 30 minutes upstream of this area. In all the survey took one hour and 40 minutes.

Yesterday, after moving upstream for about two hours and 15 minutes I encountered a split channel. I took the one on the right and soon found myself in a total maze of channels and deadfall. Alone and not wanting to get lost, I went back and tried to go up the left side. I did not go far (a beaver dam) before it was obvious that this channel was also ill-defined. I absolutely do not remember this being the case on '04. We had no such confusion following the channel. Somewhere above this maze the stream must open up again but by the time I was through beating through these channels it was 2:00 PM and I gave it up. Sorry to say it was not a complete survey and the best spawning habitat was likely upstream. If anybody else wants to give it a shot go for it. I suggest you not go alone.

Oh yeah- I found what appeared to be a bull trout redd about one hour and 40 minutes into the survey. Marked it as probable and did not observe any fish.

Cheers,

Jeff

Redd

William Meyer

To:

Anderson, Eric; Reiss, Yuki

Date: Subject: 08/29/2006 3:01:21 PM Re: NF Teanaway & Tribs

Eric, We found tons of cutthroat trout up high... snorkeled up both Deroux Cr. and NFT above their confluence, a reach below Eldorado Cr., and then two reaches up Stafford at the confluence with Bear Cr. and ~1/2 mile below on Stafford. Also snorkeled near the Jack Cr. Acclimation facility, and then again upstream on two other reaches in the NFT below Beverly Camp, but above the NFT road jct.

Results: No bulls (although I haven't heard back from Judy on their last section on the last night).... lots of CT, lots of long-nosed dace, RBT lower in the NFT. And happily we didn't see any Brookies up high on the NFT, but we did see some at Jack Cr. at the barrier culvert (County Rd). No Brookies up Stafford either, which is good. Found a bar of soap in the NFT, but didn't use it... tossed it up on the bank. Not much else for river-booty that I am aware of... but Yuki may have found something.

Also, checked Box Canyon again, and the reservoir is still high - backwatering the lower stretches of the creek. Did find another 3 lures, bringing the total to 13 in that back-watered stretch of creek. No bulls in the Peek-a-boo falls area yet, but they'll be in there by this weekend (at least they usually are by the 31st), and I have notified the USFWS agent, plus Steve Rogers and will try calling the USFS today. I did not see any fishing gear in the pools of the area, which is a first. I may be checking on Box Canyon myself sometime this weekend. I'll send along my notes for the file when I get a break in the action.

I'm going to be heading out next week on Tues/Wed. with the EIT guys for their annual index work - if they see something, I'll try and catch it and get some genetic data. Also, Yuki and I discussed heading back up in mid Sept. to the areas where we got some of her genetic samples for the grad. work. Its not promising though, as Todd says they've seen 3 BT in the last two years of index work. Talk to you soon. William

William Meyer, Area Habitat Biologist Washington Department of Fish and Wildlife 201 North Pearl St. Ellensburg, WA 98926 509-933-2491

Fax: 509-925-4702

>>> Eric Anderson 08/29/06 2:32 PM >>>

Did you see anything interesting in the N.F. Teanaway/trib snorkel surveys? Any new info? Eric

CC:

Morgan, David

William Meyer

To:

Anderson, Eric; Fraser, Hank; Reiss, Yuki; Thomas, Jeff; Torretta, Gary

Date:

09/29/2006 11:07:51 AM

Subject:

Re: Box Canyon BT Redd Survey #1

Eric, Sorry about the confusion. The USFS/USFWS/WDFW survey was on the N.F. Teanaway and Deroux Creek. We'll complete another survey next week.

We finished the first Gold Creek Survey yesterday, and observed 4 redds and a couple fish. Gold Creek is still disconnected from the pond area upstream, and more interestingly, the upper spawning reach near the trail crossing is barely connected to downstream areas, and completely disconnected with the upper reaches towards the falls. I also observed several fry in between the two sets of falls - I suspect they were CT - perhaps they dropped down from one of the lakes above, or .....

Snorkelled Cold Creek last night as part of pre-project monitoring for the Cold Creek Passage project by USBOR at Keechelus. We found lots of CT, a few sculpin, tailed frog tadpoles and 3 Pacific Giant Salamanders. I'll forward the notes soon.

I'll be up at Rimrock this Sunday to observe the Motocross race. Karl Halupka and I worked together with the USFS and the moto-club to find the best locations for bridge crossings. They will be bridging <u>all</u> locations for dry crossings, and there will be plywood on the approaches and bridge observers to ensure people follow the designated route. Generally, we chose riffle stretches that were away from spawning kokanee and in areas that bull trout are unlikely to hold. The far more serious problem is managing traffic on the reservoir bed earlier in the fall when the general public seems to be running all through the creek and river. As you mentioned, we observed both motorcycle and truck tracks crossing those waters - right through kokanee spawning areas. I plan on engaging the USFS on finding a solution to this problem.

Talk soon. William

William Meyer, Area Habitat Biologist Washington Department of Fish and Wildlife 201 North Pearl St. Ellensburg, WA 98926 509-933-2491 Fax: 509-925-4702

#### >>> Eric Anderson 09/27/06 3:12 PM >>>

Thanks for the report William & thanks to everyone for helping. Was that work you did with the USFS & USFWS where you saw a definite and a few possibles in The N.F. Teanaway? We are staying busy. We wrapped up the American system, Deep Creek, & Rattlesnake. Still have to put a wrap on Crow, S.F. Tieton, Indian & the Ahtanum system. Later....Eric

#### >>> William Meyer 09/27/2006 2:08 PM >>>

Eric, Attached is the BT redd survey #1 form. Nasty otters up that way... 5 big dead BT massacred by them. I got out a trap, but we'll see.

On other fronts, did a BT survey with USFS and USFWS yesterday and we did see one definite redd plus some possibles. Another project, Keechelus/Crystal Springs snorkel below the dam last Monday night - we saw 3 large BT and some large hybrids, as well as some BIG brookies - 15 or 17" I believe. Ugh. Anyway, the Chinook are spawning up there now, and we saw a burbot, plus hundreds of juv. Chinook rearing... interesting. Will start the 1st Gold survey tomorrow with Scott W. and possibly Yuki, and then another planned with Paul James on the following Friday Oct. 6th. Willey was just up at Gold, and no Kokanee spawning yet... I'm thinking the 1st week in October will get you some samples - checked my field notes and that looks like the mark, but I'll keep you updated if I see any action before then. I'll try and get up to Box again next week for survey #2. I'll get you notes on all this action, but it might take a few

"Scott Willey" <swilley@pn.usbr.gov>

To:

<jamesp@cwu.edu>, <anderea@dfw.wa.gov>, <meyerwrm@dfw.wa.gov>,

<kreiss@fs.fed.us>, <rwassell@fs.fed.us>, <David\_T\_Morgan@fws.gov>, <jeff\_krupka@fws.gov>,
<Judy\_Delavergne@fws.gov>, "Jeff Thomas" <ithomas@pn.usbr.gov>, "Lance Clarke"

<a href="mailto:square;"></a>. "Scott Kline" <skline@pn.usbr.gov>

Date:

10/02/2006 8:19:59 AM

Subject:

Re: Redd surveys and snorkeling

Yuki,

I will gladly volunteer for redd surveys on Box Canyon, Kachess, Gold and Upper Bumping. Sorry, but I can't commit to a survey on Tuesday or Wednesday of this week (October 2-6). Sounds like you and William are organizing the redd surveys on several of the index streams this year.

Let me know when the surveys need to be done for the above referenced.

streams and I'll pencil them into my calendar. Note: William and I did Pass #1 on Gold Creek on Sept. 28th and found a few redds. Gold Creek

was still disconnected due to low flows upstream of Gold Pond, but rain showers on Sept 19th and 20th had increased the flow through the dewatered reach to the point that surface water was ponding up and even flowing in several places. One more decent rain shower should make it passable for bull trout.

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

>>> Karin Y Reiss <kreiss@fs.fed.us> 9/28/2006 1:48:12 PM >>>

Just wanted to send out a quick FYI on some plans for next week, with hopes of rounding up some willing vounteers.

William and I are planning on finishing up the NF Teanaway snorkel project

by snorkeling the rest of DeRoux Creek on Wed night (Oct 4). We will not be

sampling, to avoid handling fish during spawning season, but we thought it

would be good to have as complete a picture as possible of where BT

(and aren't) this season). We will go up early and do a 2nd pass of redd

surveys on DeRoux and NFT above the confluence that afternoon. If there is

anyone itching to get out for one more night, we were thinking it might be

interesting to snorkel above the NFT falls as well. And we could use more

people to cover the lower section of NFT (redd surveys). William, David and

I did Pass #1 this week and found one redd in DeRoux, and several

possibles.

I am planning on doing Pass #2 on Box Canyon Tues, and am looking for a survey partner. William did Pass #1 last week and found a sad scene of otter predation - 5 adults dead, and they only saw 1 live fish, and some test digs.

I also wanted to solicite any offers of help to cover other Upper Yakima streams - Gold, Kachess, Box, Cle Elum. How about Upper Bumping? NF Tieton?
I know we are all busy, and supposed to be doing other things, but the nice part of the cooperative effort is not as much burden on any one agency.

I'll be back in the office on Monday, and between William and I we are trying to organize the effort. Hope to see some of you soon! Yuki

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

<Judy Delavergne@fws.gov>

To: Date: <kreiss@fs.fed.us>
10/02/2006 6:16:19 PM

Subject:

Yakima/Teanaway, Easton pool

It sounds like Jeff K and I will do as much of the Yakima as possible on Thursday and Friday.

Jeff T I understand you can't make it Thursday. William I understand you cant make it either day. But those are the only two day we can help out there.

So, unless I hear from William or Jeff that they were able to go out on Tuesday or Wed. to do a part of the upper portion of the reach or have made other plans to to part of the Yakima, I am prepared to try to get as much of the Yakima done as possible on those two days.

Yuki, if you and William could let me know if you did get done the stretch on the Teanaway from the confluence of Deroux upstream in the N. Fork and Deroux creek, that would be great. For now as we discussed, I will assume you are only doing those areas and we will get the lower portion of the N. Fork on either Thursday or Friday. We will start at Johnson Creek and go to the confluence of Deroux.

If you have more folks show up feel free to go down to Yahoo if you want to...just let me know where we will need to end our portion of that survey then....THANKS.

All, We are planning on night snorkeling below Easton Dam on Thursday Night, If you are interested and able...you can meet us at the BOR gate inside the Easton State Park entrance around 7:00pm. We will just walk up from the state park to the pool.

Judy De La Vergne, Fish and Wildlife Biologist US Fish and Wildlife Service Central Washington Field Office 215 Melody Lane, Wenatchee, WA 98801 509-665-3508 ext. 21(office); 509-665-3509 (fax)

"What was big was not the trout, but the chance."
"What was full was not my creel, but my memory."
Aldo Lepold

**CC:** <meyerwrm@dfw.wa.gov>, <jthomas@pn.usbr.gov>, <swilley@pn.usbr.gov>, <skline@pn.usbr.gov>, <anderea@dfw.wa.gov>, <David\_T\_Morgan@fws.gov>

William Meyer Anderson, Eric

To: Date:

10/02/2006 9:24:26 AM

Subject:

Re: Box Canyon BT Redd Survey #1

Hi Eric, Scott Willey saw one redd below the ponds, just above the frontage bridge 100m or so, and then another after the main channel watered up again - towards the wilderness boundary. I observed two redds - one was below the trail crossing and one was above the trail crossing, and the upper stream dewaters above that... with no redds as of then above it. I have found carcasses up that way (above the upper dewatered reach) before and assumed they spawn up high. Hope this answers your questions, and maybe one of these days we'll catch up on the phone or in person. William

#### >>> Eric Anderson 09/29/06 2:16 PM >>>

Thanks William,

Where did you see the redds & couple of fish; below the pond area?

Were the fish on the redds? In the past I have seen redds above the dry area since there are a few fish that move up before it goes subsurface.

Eric

>>> William Meyer 09/29/2006 11:07 AM >>>

Eric, Sorry about the confusion. The USFS/USFWS/WDFW survey was on the N.F. Teanaway and Deroux Creek. We'll complete another survey next week.

We finished the first Gold Creek Survey yesterday, and observed 4 redds and a couple fish. Gold Creek is still disconnected from the pond area upstream, and more interestingly, the upper spawning reach near the trail crossing is barely connected to downstream areas, and completely disconnected with the upper reaches towards the falls. I also observed several fry in between the two sets of falls - I suspect they were CT - perhaps they dropped down from one of the lakes above, or .....

Snorkelled Cold Creek last night as part of pre-project monitoring for the Cold Creek Passage project by USBOR at Keechelus. We found lots of CT, a few sculpin, tailed frog tadpoles and 3 Pacific Giant Salamanders. I'll forward the notes soon.

I'll be up at Rimrock this Sunday to observe the Motocross race. Karl Halupka and I worked together with the USFS and the moto-club to find the best locations for bridge crossings. They will be bridging all locations for dry crossings, and there will be plywood on the approaches and bridge observers to ensure people follow the designated route. Generally, we chose riffle stretches that were away from spawning kokanee and in areas that bull trout are unlikely to hold. The far more serious problem is managing traffic on the reservoir bed earlier in the fall when the general public seems to be running all through the creek and river. As you mentioned, we observed both motorcycle and truck tracks crossing those waters - right through kokanee spawning areas. I plan on engaging the USFS on finding a solution to this problem.

Talk soon. William

William Meyer, Area Habitat Biologist Washington Department of Fish and Wildlife 201 North Pearl St. Ellensburg, WA 98926 509-933-2491

Fax: 509-925-4702

>>> Eric Anderson 09/27/06 3:12 PM >>>

Thanks for the report William & thanks to everyone for helping. Was that work you did with the USFS & USFWS where you saw a definite and a few possibles in The N.F. Teanaway? We are staying busy. We wrapped up the American system, Deep Creek, & Rattlesnake. Still have to put

a wrap on Crow, S.F. Tieton, Indian & the Ahtanum system.

Later....Eric

>>> William Meyer 09/27/2006 2:08 PM >>>

Eric, Attached is the BT redd survey #1 form. Nasty otters up that way... 5 big dead BT massacred by them. I got out a trap, but we'll see.

On other fronts, did a BT survey with USFS and USFWS yesterday and we did see one definite redd plus some possibles. Another project, Keechelus/Crystal Springs snorkel below the dam last Monday night - we saw 3 large BT and some large hybrids, as well as some BIG brookies - 15 or 17" I believe. Ugh. Anyway, the Chinook are spawning up there now, and we saw a burbot, plus hundreds of juv. Chinook rearing... interesting. Will start the 1st Gold survey tomorrow with Scott W. and possibly Yuki, and then another planned with Paul James on the following Friday Oct. 6th. Willey was just up at Gold, and no Kokanee spawning yet... I'm thinking the 1st week in October will get you some samples - checked my field notes and that looks like the mark, but I'll keep you updated if I see any action before then. I'll try and get up to Box again next week for survey #2. I'll get you notes on all this action, but it might take a few days.

Hope you and Jim are doing well, and I know you guys are staying more than busy. Talk soon. William

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William Meyer, Area Habitat Biologist Washington Department of Fish and Wildlife 201 North Pearl St. Ellensburg, WA 98926 509-933-2491

Fax: 509-925-4702

William Meyer

To:

Anderson, Eric; Fraser, Hank; Reiss, Yuki; Thomas, Jeff

Date:

09/27/2006 2;08:23 PM

Subject:

Box Canyon BT Redd Survey #1

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Fax: 509-925-4702

Access 15 Road 4823. Road is washed out at River.

Surveyed 9/20/66; 4 possible redds

10/544/06; 22 possible, 2 probable, 3 definite

10/19/04; 13 possible, 2 probable, 3 definite

Adults observed - 5 Bull Trout 20-25."

Temperatures - 9/20 - 10.5°C

10/516 - 10.8-12.5°C (11.5 Avg)

10/19 - 10-10.5°C (10.1 Avg)

Reach: Cabin CR wellands up to Powerlines Surveyor: Judy Dela Vergne Phone- 509-665-3508 ext 21

## **Bull Trout Spawning Ground Survey Data Form**

Stream:	Upper Bumping River					
Date:	10-6-06					
Location:	The survey reach starts where the Upper Bumping River flows into Bumping Reservoir. The surveyed reach covers both the north channel and the south channel and ends at the barrier falls about 0.75 miles upstream.					
Water Temp.:	mp.: 8°C (47°F) at 10:30					
Investigator:	Scott Willey and Scott Kline (Reclamation)					
Start Time:	e:10:30					
End Time:	12:00					
Redds:	New	Old				
Definite: 0 New Definites (see comments) 0 Old Definites						
Probable: 0 New Probables 0 Old Probable						
Possible: 0 New Possibles 0 Old Possibles						
Bull Trout Observed:						
Adults: No adult or subadult bull trout seen during the survey						
Comments (mortalities, tagged fish, H20 visibility, etc):						
- Scott Kline did the south channel (left branch) and I did the north channel (right branch). We						
met up where these channels converge and then walked up to the barrier falls together.  - The north channel was completely dry for its entire length. This is unusual since this channel						
is usually full and includes many overbank pools and wetlands. Either the big log jam at the						
channel entrance has diverted water away from this channel or coarse sediment loads have						
changed causing water to stay out of this channel. Water flows in the Bumping River were not						
significantly reduced from those present in past years.						