

additional photos in electronic file

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek

Date: September 26, 2008

Location: I-90 Bridge to upper end of Index Reach (2nd barrier falls)

Water Temp.: 7°C just below new avalanche log jam. 8.5°C on upper side trib. with redd

Investigator: Paul James – Lower, William Meyer (WDFW) – Upper with CWU's Jamie Lamperth; Brooklyn Hudson; Jordon Tsubota

Start Time: 0915 upper; 0815 lower

End Time: 12:15 upper (survey done) ; At truck ~14:20

Redds:	New	Old
Definite:	<u>22</u>	<u></u>
Probable:	<u>0</u>	<u></u>
Possible:	<u>7</u>	<u></u>

Bull Trout Observed:

Adults: 8

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Paul Started down at the I-90 bridges and surveyed up to the bottom of the new avalanche; William and the CWU crew started at the bottom of the Avalanche logjam and walked up to the second falls. The bottom of the new avalanche is 47.43188 121.35145 and the upper coordinate of the main avalanche is 47.45116 121.34158. Paul observed 1 fish and 6 definite redds below the avalanche logjam. William and crew observed 16 definite redds and 7 possible redds from the bottom of the logjam upstream to the lower barrier falls. The peak of spawning appeared to have passed, given the limited amount of spawning observed (fish on redds) and the lower numbers of fish observed.

The avalanche slide brought down so much organic/rock debris (limbs, dirt, needles, dirt etc) that these materials covered the existing snow and kept it insulated from melting. We observed a

From: Paul James
To: Anderson, Eric [DFW], Cummins, James [DFW], Meyer, William [DFW], Jeff Thomas
Date: 09/30/2008 4:01:07 PM
Subject: Re: Gold Creek BT redd survey 1st pass

Redd Surveyers:

FYI, I had a graduate student and tech up at Gold Creek starting about mid-July to take flows at various points and doing some daytime snorkel surveys. I'll send all of you the data when the season ends, but this year's snowpack definitely helped several adults get up to holding pools early in the summer. For example, they counted 9 adults in pools during a snorkel survey in a middle section on July 28th. Let's hope the total count is up in the 20's this year!

Later,

Paul

CC: Paul James

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek

Date: 10/9/2008

Location: Slide to Falls

Water Temp.: 5° C

Investigator: Jeff Thomas and David Child

Start Time: 1050

End Time: 1430

<u>Redds:</u>	New	Old
Definite:	<u>11</u>	<u>16</u>
Probable:	<u></u>	<u></u>
Possible:	<u>4</u>	<u>4</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

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

pink flagging was used on the first pass, we used orange flagging and some CWU researchers are using yellow flagging to mark redds and fish encountered possibly by snorkeling

4 of the first pass possible redds were changed to definite

there are 4 possible redds remaining

GPS coordinates were taken and William Meyer has the waypoints

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek

Date: October 9, 2008

Location: I-90 Bridge to lower end of 2007/08 Avalanche

Water Temp.: 7°C on Gold Creek near the pond area at 10am

Investigator: William Meyer – Lower (I-90 to Avalanche), Jeff Thomas and David Child – Upper (Avalanche to falls) See Jeff's notes for upper reach.

Start Time: 0945 Lower;

End Time: 1:15 (lower)

<u>Redds:</u>	<u>New</u>	<u>Old</u>
<u>Definite:</u>	<u>6</u>	<u>7</u>
<u>Probable:</u>	<u> </u>	<u> </u>
<u>Possible:</u>	<u> </u>	<u> </u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Started the survey at the I-90 bridges and walked to the bottom end of the new avalanche from winter 2007/2008. Observed two kokanee redds in the spawning channel coming out of the pond, in the vicinity of the trail culvert. One kokanee male observed, no carcasses or other kokanee seen – bad year for kokanee? Also observed two bald eagles sitting in the trees above Gold Creek near the pond, and a third a mile or so upstream – looking for downmigrating bulls, or kokanee? Stream flow was good on the entire lower reach, with all sections connected and temperatures low at 7°C. No mortality bull trout observed. No live fish observed. Fresh snow on the peaks above Gold Creek from last night. Fresh beaver cuttings on the upper sections of the survey reach. Took gps readings of all redds on lower half, and gave a gps to the upper crew, who took readings on the upper redds. Gps data will be on Willam's computer and put into GIS for spatial distribution.

Bull Trout Spawning Ground Survey Data Form

Stream: Gold Creek

Date: 10-22-08

Location: I-90 Bridge to lower end of 07-08 Avalanche,

Water Temp.: 43°F

Investigator: Eric Anderson

Start Time: 1015 Hrs

End Time: 1353 Hrs.

Redds:	New	Old
Definite:	<u>0</u>	<u>13</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 0

Sub-adults: 0

Juveniles: a few observed

Comments (mortalities, tagged fish, H2O visibility, etc): 3 of the redds
were below the Gold Creek Pond outlet confluence
+ 10 were above. No bull trout redds
in the pond outlet stream but did observe
~ 2 dozen Kokanee redds in the pond outlet
+ down into the mainstem Gold Cr.

Box Canyon

From: Patrick Monk
To: Anderson, Eric [DFW], Cummins, James [DFW], Meyer, William [DFW]
Date: 09/25/2008 6:25:37 PM
Subject: box cyn first pass

I did get up to Box Canyon Creek this week, fish passage from the reservoir looked fine, but I didn't see any bull trout or any redds in the creek. Small juvenile fish and a merganser were about it. Unfortunately I didn't have a thermometer so I missed the water temperature.

1st survey
No Redds

I had some extra time so I checked out Gale Creek too, I figured no one has looked there in a while, and flows this year are quite good. No bull trout or obvious activity, but a lot of juvenile fish of various size classes. An odd thing I found there while climbing up a rock ledge was a fresh salmonid egg laying in the moss on the ledge. I squeezed it and smelled it, was certainly an egg. No signs of human activity I don't think it was a Pautzke's "Ball o Fire". I was running out of time so I didn't go looking for a carcass, but it was intriguing.

Exploratory survey
Gale

Pat

CC: Karin Y Reiss, tmayo@fs.fed.us, Jeff Thomas

From: Patrick Monk
To: Anderson, Eric [DFW]
Date: 09/29/2008 8:11:48 AM
Subject: Re: box cyn first pass

Eric I did the survey Sept. 24.

>>> "Anderson, Eric (DFW)" <ANDEREA@dfw.wa.gov> 9/26/2008 8:33 AM >>>

Ok Pat thanks. What date did you survey?

I'm glad you checked out Gale Creek too ...that is on our list for this year

as

Jim & I believe there is bull trout spawning there. Jim found what he thought

were a couple redds last year, but it was real late & hard to see the redds

(Nov). So lets hit Gale this year when we do the passes at Box.

William....got your voice mail. Can you do a second pass on Box & Gale Creek

next week (Sept 29-October3)? Mid to late in the week might be best!

I believe Paul James did a pass on Gold this week, but I have not heard

results from him yet. Anybody up for doing Gold next week (Sept29-Oct 3)?

I'm still busy in the Naches drainage & shifting to the Ahtanum (final passes)

next week & some other stuff. Jim is taking a week off next week & so if

folks can cover Box & Gold that would be great.

Gotta Run!

Eric

>>> Patrick Monk 09/25/2008 3:29 PM >>>

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I had some extra time so I checked out Gale Creek too, I figured no one

has looked there in a while, and flows this year are quite good. No bull trout or obvious activity, but a lot of juvenile fish of various size classes. An odd thing I found there while climbing up a rock ledge

was a fresh salmonid egg laying in the moss on the ledge. I squeezed it

and smelled it, was certainly an egg. No signs of human activity I don't think it was a Pautzke's "Ball o Fire". I was running out of time

so I didn't go looking for a carcass, but it was intriguing.

Pat

From: Patrick Monk
To: Anderson. Eric [DFW], Cummins. James [DFW], Meyer. William [DFW], Karin Y Reiss, Jeff Thomas, Walter Larrick
Date: 10/02/2008 8:33:15 AM
Subject: Box Canyon 2nd pass

We did redd surveys for bull trout on Box Canyon Creek and a portion of Gale Creek yesterday, 10-1-08. I was accompanied by DJ Shook from the Kittitas County Conservation District.

2nd Survey
←

Box Canyon summary: 1 definite redd, two possible redds, no bull trout were seen.

Lake Kachess to slot canyon: Water temperature was 45 F at 9:15 a.m. Passage from the reservoir was good. We flagged 1 definite redd and one possible redd. No fish were seen.

In the slot canyon: We flagged one possible redd. No fish.

Up stream of canyon to water falls: no redds, no bull trout, three cutthroat trout were seen.

Gale Creek summary: We did the lower 1 mile from the lake up to dispersed campsite. Water temperature at 12:45 p.m. was 47 F. No fish, no redds, but also not much spawning habitat.

Patrick A. Monk
Fish Biologist, USFWS
1917 Marsh Rd
Yakima, WA 98901
509.575.5848 xt 325
509.421.1096 cell
509.454.5612 fax

CC: DJ Shook

Stream:	Box Canyon Creek				
Date:	10/10/2008				
Location:	Foot bridge to falls (index reach)				
Water Temp:	40F				
Investigator:	Jim Cummins				
Start time:	945				
End Time:	1215				
	New Redds	Old Redds	Total		
Definite	7	1	8		
Probable	0	0	0		
Possible	0	2	2		
Def + Prob	7	1	8		
Fish	Observations				
Adult BLC	Sub-adult	Juvenile	Other		
0	0	0	2 Ct		
Comments (mortalities, water flows, visibility, etc)					
Cold, calm, sunny day.					
Flows low to moderate, clear, water mostly in the shade, but excellent visibility.					

3rd Survey

Kachess to
Foot bridge
etc.

See previous surveys

Stream:	Box Canyon Creek				
Date:	10/21/2008				
Location:	Foot bridge to falls (index reach)				
Water Temp:	39F				
Investigator:	Jim Cummins				
Start time:	945				
End Time:	1215				
	Old Redds	New			
Definite	8	0			
Probable	0	0			
Possible	2	0			
Def + Prob	8	0			
Fish	Observations				
Adult BLC	Sub-adult	Juvenile	Other		
0	0	0	0		
Comments (mortalities, water flows, visibility, etc)					
Cold, calm, sunny day.					
Flows low to moderate, clear, water mostly in the shade, but excellent visibility.					
Eric surveyed Gale Creek.					

4th Survey

Bull Trout Spawning Ground Survey Data Form

Stream: Gale Creek (Kachess Lake system)

Date: 10-21-08

Location: mouth to upstream ~ 1 hr. walk

Water Temp.: 39°F
15 min

Investigator: Eric Anderson

Start Time: 1100 Hrs.

End Time: 1215 Hrs.

<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: ∅

Exploratory Survey
Comments (mortalities, tagged fish, H2O visibility, etc): No fish or redds observed. Ended survey in area of steep right bank. - good gravel in this upper area but very little spawning gravel below except near lake bed.

Stream:	Kachess River				
Date:	10/24/2008				
Location:	Mineral Creek Trail to falls				
Water Temp:	37F				
Investigator:	Jim Cummins				
Start time:	1025				
End Time:	1120				
	New Redds				
Definite	0				
Probable	0				
Possible	1				
Def + Prob	0				
Fish	Observations				
Adult BLC	Sub-adult	Juvenile	Other		
0	0	0			
Comments (mortalities, water flows, visibility, etc)					
Cold, clear, sunny day.					
Water flow very low above Mineral Cr confluence					
Eric Anderson surveyed below the trail and found dry reaches.					
More rain is needed before fish can enter the river and spawn.					

Bull Trout Spawning Ground Survey Data Form

Stream: Kachess River

Date: November 4, 2008

Location: Lake to Barrier Falls

Water Temp.: 4.0°C (WM's old school thermo) @ 10:35 a.m. at the confluence (both streams – Mineral and Kachess).

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

Start Time: ~10:25 at parking area

End Time: ~11:20 at falls for upper survey (trail cross to falls)

<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: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: ~35°F, Fresh snow at Cooper Pass and snow by the time I reached the falls. Water Visibility/flow: Clarity excellent. Flow at trailhead would normally be enough to reach the reservoir bed, but this year it is drying up once the stream reaches the reservoir bed – Jim said it was dry for ~1000 ft before entering the reservoir. The lake was much higher this fall. The river is impassable in the lake bed at this time. I believe this is due to the huge bedload that must have been carried down into the reservoir by the November 2006 flood.

Jim surveyed the lower reach and I surveyed the upper reach. Flows were clear, but not very high. Temp was 4°C on both Mineral and Kachess River at the confluence time: 10:35. I saw Jim's possible redd from last visit, but nothing had changed status wise. I observed 2 more possible redds upstream from Jim's flag and marked

Bull Trout Spawning Ground Survey Data Form

Stream: Kachess River

Date: November 13, 2008

Location: Incomplete survey – peeked at the trail crossing and up at the confluence.

Water Temp.: No temp. taken

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

Start Time: ~10:25 at parking area

End Time: ~N/A

<u>Redds:</u>	New	Old
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: 0

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: ~45°F , Fresh snow above on the peaks, but none on Cooper Pass. Water Visibility/flow: Clarity ok, but a bit turbid due to the 2-3 day rain storm event. Lots of water at the trail crossing site – impassable to wade. So, we bushwacked upstream on the trailhead side and made it to the confluence by climbing the ridge and dropping back into the creek. Walked ~200 meters up Kachess River from the confluence before deciding that visibility was too low and too much water to see anything, plus safety hazard in navigating the big Kachess River. Climbed out to the old log landing and walked back to the truck. All the small streams and ditches and draws were running with lots of water on the way to the survey. No fish or redds observed. Come back later if possible.

From: Meyer, William R (DFW)
To: Anderson, Eric [DFW]
Date: 12/01/2008 10:10:52 AM
Subject: RE: Kachess R.

Eric, Call Kachess River complete with two definite redds, but perhaps put a short note on the count, indicating that high flow conditions between redd surveys may have smoothed out additional redds - something like that. I don't think there will be any additional spawning going on up there, and soon it will be too difficult to get there anyway... if it gets cold anyway. Attached is the form for the survey. How are those bull trout radio-T reports coming along? Talk soon. William

William Meyer, WDFW
Area Habitat Biologist
Ellensburg, WA

Meyerwrm@dfw.wa.gov
509-933-2491

From: Anderson, Eric (DFW)
Sent: Mon 12/1/2008 8:57 AM
To: Meyer, William R (DFW)
Subject: Kachess R.

Hi William,
Got your phone message. Thanks for doing the survey.
Should I call it complete & 2 redds?
Send data when you get a chance.
Eric

Bull Trout Spawning Ground Survey Data Form

Stream: Kachess River

Date: November 21, 2008

Location: Lake to falls.

Water Temp.: 3.5°C

Investigator: William Meyer (WDFW), Henry Fraser (Yakama Nation)

Start Time: ~10:35 at parking area (at falls 11:35)

End Time: ~12:45

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

Juveniles: 0

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: 3-4 inches of fresh snow on Cooper Pass, but no snow at the parking area near Kachess. Water Visibility/flow: Temperature = 3.5°C, water clear and flow excellent. Kachess River well connected to the reservoir. Reservoir relatively high for this time of year. Hank walked the trail to the reservoir, then surveyed the reservoir bed sections of the creek and the lower portions of the spring channel in the reservoir bed, before proceeding upstream to the trail crossing. No redds observed in that lower section. Although Henry reported that most of the gravel seemed turned and fresh due to the last high water event, and noted that it would be difficult to observe redds if they had been present. I surveyed from the trail crossing up to the barrier falls. I observed two definite new redds approximately midway from the confluence with Mineral Creek to the falls. Neither redd looked like it had been active in the past several days. One redd was just above a large logjam where

Stream:	American River					
Date:	09/03/2008	1st survey				
Location:	Lodgepole to Mesatchee Cr. Trail Crossing					
Water Temp						
Investigator:	Jim Cummins					
Start time:	1010					
End Time	1310					
	New Redds					
Definite	4					
Probable	0					
Possible	1					
Def + Prob	4					
Fish	Observations					
Adult BLC	Sub-adult					
	1	0				
Comments (mortalities, water flows, visibility, etc)						
Clear, sunny, low flow, excellent visibility						
Started at Mesatchee Trail crossing and worked downstream						
Checked for fish in long pool above the trail, but found none.						
One 6 inch bull trout mortality just above 2nd redd.						
Eric Anderson and John Easterbrooks have data for Union, Kettle & American below Union.						
GPS readings starting at upstream end.						
Redd #1	N46.90194	W121.41026				
Redd #2	N46.91223	W121.40051				
Redd #3	N46.91234	W121.39886				
Redd #4	N46.91317	W121.39600				

This is the only pass for this section

UNION CR. / AMERICAN R. 9/3/08

Bull Trout Survey

SUNNY,
WARM,
EXCELL. VIS

(MOUTH → falls)

Redds

Fish = 1 = 5

DEF = \square = 8

PROB = \bullet = 1

POS = \bullet = 1

START UNION CR. @ 1005

STOP " @ 1120

All Redds + fish u/s of Hwy 410 Bridge

1 pair of fish on redd JUST 100' ↓ lower falls

Q in Union Cr. ~ 15 CFS @
John Easterbrooks Mouth

AMERICAN R. BIC

9/3/08

SURVEY

(UNION CR. \rightarrow SPLIT CHANNEL)

Redds

Fish = \emptyset

DEF = " " = 2

PRO = " " = 1

POS = \emptyset

START MOUTH UNION CR. @

1125 ; STOP @ 1205

John Easterbrooks

Stream:	Kettle Creek - American River Trib.				
Date:	09/15/2008				
Location:	mouth upriver approx. 1/2 mile.				
Water Temp:	40F				
Investigator:	Jim Cummins				
Start time:	1013				
End Time:	1117				
	New Redds	Old Redds			
Definite	0	0			
Probable	0	0			
Possible	0	0			
Def + Prob	0	0			
Fish	Observations				
Adult BLC	Sub-adult	Juvenile	Other		
0	0		0		
Comments (mortalities, water flows, visibility, etc)					
Weather clear, sunny. Creek flow low and clear.					
The end of this survey reach is flagged, and has been for several years.					
End @ N46.93303 W121.32723					
See separate data sheet for Union and American below Union.					

Stream:	American				Union			
Date:	09/15/2008				09/15/2008			
Location:	Below Union				American R. confluence to falls.			
Water Temp								
Investigator	Jim Cummins							
Start time:	1300				1201			
End Time					1300			
	New Redds	Old Redds	Totals		New Redds	Old Redds	Totals	
Definite	1	2	3		6	8	14	
Probable	0	1	1		0	1*	0	
Possible	0		0		0	0	1	
Def + Prob	1	3	4		6	8	14	
Fish	Observations				Fish	Observations		
Adult BLC	Sub-adult				Adult BLC	Sub-adult		
0	0				0	0		
Comments (mortalities, water flows, visibility, etc)								
Kettle Creek on separate data sheet					* 1 old probable changed to new definite.			

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Bull Trout Spawning Ground Survey Data Form

Stream: Crow Creek

Date: 9-18-08 (mid point coord.)

Location: Beaver Ponds to upstream coor. N47.03231 W121.26698
(coor. were halfway up to Boulder area where stream goes subterranean)

Water Temp.: 46° F

Investigator: Eric Anderson

Start Time: 1134 Hrs.

End Time: 1307 Hrs.

Redds: New only pass - considered incomplete, but ^{Old} unlikely additional redds were produced.

Definite: ∅

Probable: ∅

Possible: ∅

Bull Trout Observed:

Adults: ∅

Sub-adults: 6-8" CT were observed in beaver pond/area

Juveniles: none observed

Comments (mortalities, tagged fish, H2O visibility, etc): Jim did upper half (above mid point coordinates above).

This section from beaver ponds to Boulder area was modified (shortened) because very few redds are ever found below beaver pond.

Stream:	Crow Creek						
Date:	09/18/2008						
Location:	We divided the area from beaver ponds upstream to rock cliffs (See GPS location below)						
Water Temp	46.6F @0825						
Investigator	Jim Cummins & Eric Anderson (Eric did lower part of index)						
Start time:	1140						
End Time	1325						
	New Redds						
Definite	2						
Probable	0						
Possible	0						
Def + Prob	2						
Fish	Observations						
Adult BLC	Sub-adult						
0	0						
Comments (mortalities, water flows, visibility, etc)							
We modified the index area because we have not found redds in the lower part of the index area.							
Eric started at the meadow/old beaver pond area and I started in the middle of the reach.							
Meadow/old beaver pond location:N47.01783 W121.26633							
Upper end index area: N47.02169 W121.30694 (2007 GPS on hill above end)							
We hiked down from the road. Started hike at 0945 near creek crossing @ N47.03231, W121.26698.							

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: September 10, 2008

Location: Lower reach, Hwy 12 bridge to North Spring (First Pass)

Water Temp.: 7 degrees C

Investigator: Jeff A. Thomas, USFWS

Start Time: 1000 hours

End Time: 1345 hours

Redds: New Old

Definite: 18 _____

Probable: _____

Possible: _____

Bull Trout Observed:

Adults: 8 on redds, 8 holding

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: Sunny and warm

Water Clarity: Crystal Clear

I also walked from the lake upstream to the bridge. Passage at the mouth was fine and no

recreational barrier dams were encountered. Also, no kokanee were observed during the survey.

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: 9-19-08

Location: N. Spring

Water Temp.: 43°F

Investigator: Eric Anderson

Start Time: 1000 Hrs.

End Time: 1123 Hrs.

Redds:

	New	Old
Definite:	<u>29</u>	<u>14</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 18

Sub-adults: 1

Juveniles: Several observed.

Comments (mortalities, tagged fish, H2O visibility, etc): Survey was ended

@ the impassable beaver dam. There was good

H₂O flow from springs above the beaver

dam but no fish or redds were observed

above this point to the spring source near

the USFS Rd.

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: 9-19-08

Location: Mainstem between N. + S. springs (S. Spring by Trail 1147)

Water Temp.: 45°F

Investigator: Eric Anderson

Start Time: 1140 Hrs.

End Time: 1226 Hrs.

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

Bull Trout Observed:

Adults: 7

Sub-adults: 0

Juveniles: Several observed.

Comments (mortalities, tagged fish, H2O visibility, etc): 2 Probable Old

Redds above S. Springs (above Tr. 1147)

The stream was impassable (barriers) due to low H₂O / subterranean flow in the section between Trail 1147 crossing + N. Springs.

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: 9-26-08

Location: N. Spring

Water Temp.: 43°F

Investigator: Eric Anderson

Start Time: 1030 Hrs.

End Time: 1150 Hrs.

Redds:	New	Old
Definite:	<u>8</u>	<u>43</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 6 most were not on redds - moving down?

Sub-adults: 0

Juveniles: a few were observed

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

Bull Trout Spawning Ground Survey Data Form

Stream: Indian Creek

Date: 9-26-08

Location: Mainstem between N. + S. Spring (near Tr. 1147)

Water Temp.: —

Investigator: Eric Anderson

Start Time: 1200 Hrs.

End Time: 1230 Hrs.

Redds:	New	Old
Definite:	<u>3</u>	<u>16</u>
Probable:	<u>0</u>	<u>0</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:

Adults: 3

Sub-adults: 0

Juveniles: 0

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

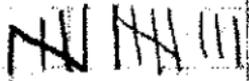
Bull Trout Spawner 5/10/88 YR. DL 27

Rattlesnake Creek

Start: 10:40 7°C Finish: 1:30

Lower Trail Crossing to MJB Trail

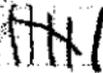
Redds: New

Definite: 

Probable: |

Possible: ||

Bull Trout Observed:

Adults: 

Sub-adults: |

Juveniles:

Comments: in one of the possible may be SPL
• that hike in and out is a doozy!

Bull Trout Spawning Ground Survey Data Form

Stream: Rattlesnake Creek

Date: 9-22-08

Location: MJB Trail crossing ^{down} to the trail xing below MJB

Water Temp.: —

Investigator: Eric Anderson

Start Time: 0940 Hrs.

End Time: 1140 Hrs.

Redds: New Old

Definite: 2 14

Probable: φ 1 — changed to New Def.

Possible: φ 2 (1 changed to New Def. + 1 was a spring chinook redd)

Bull Trout Observed:

Adults: φ

Sub-adults: Several 6-8" Trout observed in pools. Probably cutthroat.

Juveniles: Observed but not counted.

Comments (mortalities, tagged fish, H2O visibility, etc): See comments above.

Bull Trout Spawning Ground Survey Data Form

Stream: Rattlesnake Creek

Date: 9-22-08

Location: MJB Trail crossing upstream to trail crossing above Shell Creek

Water Temp.: —

Investigator: Eric Anderson

Start Time: 1140 Hrs.

End Time: 1400 Hrs.

Redds:	New	Old
Definite:	<u>9</u>	<u>—</u> No previous surveys
Probable:	<u>0</u>	<u>—</u> conducted
Possible:	<u>0</u>	<u>—</u> in this section

Bull Trout Observed:

Adults: 0

Sub-adults: some 7-8" CT observed,

Juveniles: a few observed but not counted,

Comments (mortalities, tagged fish, H2O visibility, etc): Only survey for this section

Stream:	Rattlesnake Creek, Shell, Little Wildcat		
Date:	09/22/2008 1st survey		
Location:	Rattlesnake - Shell Creek to McNe (See GPS locations)		
Location:	Little Wildcat - Confluence with Rattlesnake upriver about 1/2 mile; see GPS below		
Water Temp	39F Rattlesnake just above Shell Creek @ 1000		
Investigator	Jim Cummins		
Start time:	1000		
End Time	1335		
	Rattlesnake	L. Wildcat	
	New Redds	New Redds	
Definite	9	3	
Probably	0	0	
Possible	1	0	
Def + Prob	9	3	
Fish	Observations		
Adult BLC	Sub-adult	Adult BLC	Adult BLC
0	0	0	0
Comments (mortalities, water flows, visibility, etc)			
Weather partly cloudy, cold in morning, but nice day, creek low and clear			
Saw a couple of small cutthroat in Rattlesnake Creek.			
Shell/Rattlesnake Confluence GPS: N46.73643 W121.21821			
Little Wildcat/Rattlesnake Confluence GPS: N46.73190 W121.23158			
End Rattlesnake Index @ N46.72993 W121.24962. Creek almost dry at this point.			
End Little Wildcat Index GPS: N46.72505 W121.23849			
Eric Anderson has data for lower index, which was surveyed earlier by Yuki and David Child.			
Each of 2 surveyors must cover, including trail hiking distance, about 14 miles.			
Gary Torretta could not find the Burnt Mountain Trail during an earlier attempt, so this is the only survey.			

only survey for this section

Bull Trout Spawning Ground Survey Data Form

Stream: N.F. Tieton River (upper) + Unnamed tributary

Date: 9-15-08

Location: unnamed tributary to barrier falls

Water Temp.: 47° F

Investigator: Eric Anderson, Yuki Reiss (USFS), Jeff Krupka (USFWS)

Start Time: 1627 Hrs.

End Time: 1745 Hrs.

Redds:	<u>N.F. Tieton</u>	<u>Unnamed Trib.</u>	<u>Nite snorkel</u>	<u>Old</u>
Definite:	<u>6</u>	<u>5</u>		
Probable:	<u>φ</u>	<u>φ</u>		
Possible:	<u>φ</u>	<u>φ</u>		

Bull Trout Observed:

Adults: 3 | 6

Sub-adults: φ

Juveniles: φ | 8 juvenile brookies
3 potential hybrids

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

Glacial melt created turbid conditions, difficult to observe redds. Incomplete count. may have been more adults + redds not observed due to turbidity. Unnamed Trib. coord. ^{c. north} 46.55025, 121.38211
nite snorkel this unnamed trib. - H₂O clear. Redds + adult bull trout present.

From: Karin Y Reiss
To: Anderson. Eric [DFW], Meyer. William R [DFW], Judy_Delavergne@fws.gov, swilley@pn.usbr.gov
Date: 10/30/2008 1:16:14 PM
Subject: Re: Yakima Basin Redd Counts

Eric -

Here is a spawning survey form for the reach I surveyed on Rattlesnake, and notes from NF Teanaway and Upper Bumping. Let me know if it is preferable to transfer the notes to the "official" spawning survey form. Scott Wiley has the water temp, and exact time on the river for Upper Bump. I contacted him to send those details, but here is the gist of it.

I am still working on compiling the data and a short report on the snorkel surveys efforts from this summer, I will send it to you soon. But the bottom line is that the only place we found bull trout was on that trib to NF Tieton. There we saw 6 adult bull trout, and sampled one. Also saw 8 juvenile brookies, and we sampled 3 more juvenile suspect hybrids.

Talk to you soon,
 Yuki

(See attached file: 2008 Bullspawnform Rattle 9-10-08.doc)(See attached file: Exploratory redd surveys 2008_YR.doc)

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

*- N.F. Tieton R.
 (Upper)
 9-15-08
 Yuki Reiss, Jeff Krupka
 + Eric Anderson
 This info on
 survey spawning data
 form.*

Stream:	North Fork Tieton River				
Date:	09/23/2008				
Location:	N46.56034	W121.36673			
Water Temp:	38F @1040				
Investigator:	Jim Cummins & Eric Anderson				
Start time:	1040				
End Time:	1351	Done at trib. 1500			
	New Redds	Old Redds	Redds in Trib	Totals	
Definite	18	5	5	28	
Probably	0	0		0	
Possible	0	0		0	
Def + Prob	18	5	5	28	
Fish	Observations				
Adult BLC	Sub-adult				
	1	0			
Comments (mortalities, water flows, visibility, etc)					
Weather cold, but mostly sunny. River low and clear, very good visibility, slight turbidity in upper reaches.					
Generally good visibility.					
Started near where Yuki and I did last year on 2nd survey.					
End survey at falls: N46.53522 W121.39123					
The unnamed tributary flows into the NF Tieton R @ N46.55025 W121.38211. Did not survey last year.					
Redds in tributary were all above old pack trail (abandoned at this time).					
Redd Locations					
N46.55182	W121.37740				
46.55143	121.37782				
46.55027	121.38084				
46.54866	121.38599				
#5 4654	121.38728				
46.54759	121.38739	Old Redd			
46.54741	121.38755	Old Redd			
46.54727	121.38755				
46.54696	121.38807	Old Redd			
46.54557	121.38843				
46.54099	121.39014				
46.54051	121.39040				
46.53959	121.39062				
46.53949	121.39066				
46.53846	121.39055				
46.53846	121.39055				
46.53831	121.39054				
46.53696	121.39076	Old Redd			
46.53696	121.39076	Old Redd			
46.53689	121.39076				
46.53628	121.39156				
46.53615	121.38995				
#23 Lost Satellite. Not far above last redd 200 feet below falls.					
Tributary Redds					
46.55025	121.38211				
Lost Satellite. Surveyed less than 1/2 mile. Becomes very steep gradient.					

adjusted from previous survey = 6 old 17 New 5 Trib

old

28

28

Stream:	North Fork Ahtanum					
Date:	09/11/2008	1st survey				
Location:	Bridge crossing to Shellneck, and Shellneck Cr					
Water Ten	42F @1006 (NF at bridge)					
Water Ten	40F @1115 (Shellneck at confluence with NF)					
Investigato	Jim Cummins					
Start time:	1006 NF Ahtanum, 1115 Shellneck Creek					
End Time	1110 NF Ahtanum, 1146 Shellneck Creek					
	NF Ahtanum		Shellneck			
	New Redds					
Definite	0		0			
Probable	0		0			
Possible	0		0			
Def + Prob	0		0			
Fish	Observations					
Adult BLC	Sub-adult					
	0		0			
Comments (mortalities, water flows, visibility, etc)						
Eric Anderson has data for lower index reach.						
Weather partly cloudy, water flow low and clear, good visibility, but dark in shaded area.						
GPS at lower end of index (bridge): N46.53052 W121.14613 (2007 GPS)						
NF Ahtanum/Shellneck Creek Confluence:N46.53052 W121.15952						
Shellneck Creek upper end index on this date:N46.52842 W121.16567						
At one time fish passed upstream above the location ended on this date.						
There are 4 2-3 foot barriers on Shellneck in the reach that I walked that may impede or stop upstream migration for small resident BLC.						

Bull Trout Spawning Ground Survey Data Form

Stream: N. F. Altatum Creek

Date: 9-30-08

Location: Grey Rock Trail Footbridge to Shellneck Cr.

Water Temp.: 42° F (includes area thru Snow Cabin Camp Ground)

also surveyed shellneck creek

Investigator: Eric Anderson

Start Time: 0930 Hrs.

End Time: 1330 Hrs.

Redds: New No Redds or bull trout spawners

Definite: ∅ in mainstem or Shellneck Creek. Old ∅

Probable: ∅ ∅

Possible: ∅ ∅

Bull Trout Observed:

Adults: ∅

Sub-adults: a few 6-8' cutthroat observed in deeper pools

Juveniles: juveniles observed but not ID'ed.

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

or adult bull trout observed.

No domestic cattle noted in the area, some

cattle tracks in area below Shellneck Creek, but

not bad, stream riparian in good condition.

No Redds or adult bull tr. spawners observed in

mainstem or Shellneck Creek.

Need to do survey outside the Index next week.

Bull Trout Spawning Ground Survey Data Form

Stream: N.F. Ahtanum Creek

Date: 10-6-08

Location: From Bridge Crossing ^{Road} 2.5 miles above Ahtanum Meadows
downstream to Ahtanum meadows camp Ground,

Water Temp.: _____

Investigator: Eric Anderson

Start Time: 1128 Hrs.

End Time: 1430 Hrs.

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:

Adults: 0

Sub-adults: a few 4-7" cutthroat observed in a few pools.

Juveniles: some juveniles observed but not I.D'ed.

Comments (mortalities, tagged fish, H2O visibility, etc): This section is
well below the standard index area. This was
surveyed as there were no redds found in the
standard index.

There was one prominent log sill barrier at
Ahtanum Meadows. - Likely passable @ higher flows but
not now.

Stream:	NF Ahatanum							
Date:	10/06/2008							
Location:	Bridge to Grayrock Trail*							
Water Temp:	44F							
Investigator:	Jim Cummins & John Easterbrook							
Start time:	1350							
End Time:	1400							
	New Redds	Old Redds						
Definite	0	0						
Probable	0	0						
Possible	0	0						
Def + Prob	0	0						
Fish	Observations							
Adult BLC	Sub-adult	Juvenile	Other					
0	0	0	4-5 Ct					
Comments (mortalities, water flows, visibility, etc)								
Anderson, Cummins and Easterbrook covered the entire NF Ahatanum from mouth to Grayrock Trail								
* I started at the bridge crossing located @ N46.51493 W121.06145.								
John started upstream about halfway to Gray Rock and Eric worked downstream.								
They both may have a report, but no redds were found by John or I. Eric found 1.								
There are 3 or four logjams that create 1.5-2.5 foot high barriers that may impact upstream migration.								
John walked up to Grayrock, returned to his starting point, and walked down to meet me.								
This report covers the entire area that John and I walked.								

Bull Trout Spawning Ground Survey Data Form

Stream: M.F. Ahtanum Creek

Date: 9-30-08

Location: mainstem 2 miles below Treephones C.G. to

Water Temp.: 42°F Treephones C.G.
Bridge Cross. way.

Investigator: Eric Anderson

Start Time: 1415 Hrs.

End Time: 1700 Hrs.

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

Bull Trout Observed:

Adults: 0

Sub-adults: a few 6-8" CT observed, possibly 1 bull trout @ 10"

Juveniles: juveniles observed but not ID'd. in pool
below redd.

Comments (mortalities, tagged fish, H2O visibility, etc): Only 1 survey
conducted in this index reach. Redd was
still visible even though spawning
likely occurred 2 weeks before this
date.

From: Tim Resseguie
To: Anderson, Eric [DFW]
Date: 10/13/2008 7:16:35 AM
Subject: bull trout redds in the south fork

Hi Eric,

We found 3 bull trout redds in the South Fork Ahtanum this year, which is less than 2006 and 2007.

Tim Resseguie
Fisheries Biologist
Yakama Nation Fisheries
P.O. Box 151
Toppenish, WA 98948
(509) 865-2255 x 6358
(509) 945-7409

CC: Brandon Rogers

Pass #	Red #	Date	old	new	count
1	1	09/15/2008		definite	1
	2	09/15/2008		possible	
	3	09/15/2008		probable	1
2		09/22/2007			* no redds identified on 2nd pass
3	2	10/02/2007	possible	definite	1 *marked possible on the first pass upgraded to a definite on third
total					3

Location: SF Ahtanum Creek RM 7.7 to RM 10.4 campsite to gate above Reservation Creek

	Lat	Lon
start	46.48008	-120.998
end	46.46578	-121.047

Stream:	SF Tieton River			Bear Creek		
Date:	09/09/2008			09/09/2008		
Location:	Blue Slide to 1050 Road			Confluence with SF to Falls		
Water Temp	44 F @ 0910			44F @ 1447		
Water Temp	46F @ 1437					
Investigator	Jim Cummins	David Child (BOR)		Cummins and Child		
Start time:	1019			1447		
End Time	1437			1609		
	New Redds			New Redds		
Definite	85			24		
Probable	0			0		
Possible	3			2		
Def + Prob	85			24		
Fish	Observations			Fish	Observations	
Adult BLC	Sub-adult			Adult BLC		
99	0			26	0	
Comments (mortalities, water flows, visibility, etc)						
Weather clear and sunny, water flows low and clear, excellent visibility.						
The river channels have changed substantial over the years. Different again this year.						
Adult bull trout staging in several pools; 7, 20 and 14 fish each in 3 deep pools.						
Observed several nice cutthroat; 11, 12, 12, 16 inches (estimates).						
Jeff Thomas surveyed from 1050 Road to Falls.						
2 mortalities, possible otter kills on Deep Creek, 1 male; 1 female						

Bull Trout Spawner 9/9/88 56, 06

S.F. Tieton River

Start: 10:19 440 Finish: 237-460

Blue slide to 1050

Redds: None

Definite: ~~|||||~~
~~|||||~~
Possible: ~~|||||~~

Possible: ~~|||||~~

Bull Trout Observed:

Adults: ~~|||||~~
~~|||||~~
Sub-adults: ~~|||||~~

Juveniles: ~~|||||~~

Comments: • 11 inch cutt observed w/ group of 7 bulls; • 20 bulls observed in hole
• 16 + 12 in cutt observed with 14 bulls • 12 in cutt observed being chased off redds • Note birds and one long new channel

Bull Trout Spawning Ground Survey Data Form

Stream: South Fork Tieton River

Date: September 9, 2008

Location: Upper reach, FR 1050 bridge to falls (First Pass)

Water Temp.: 8 degrees C

Investigator: Jeff A. Thomas, USFWS

Start Time: 1025 hours

End Time: 1500 hours

Redds: New Old

Definite: 27 _____

Probable: _____

Possible: _____

Bull Trout Observed:

Adults: 14 on redds, 25 holding

Sub-adults: _____

Juveniles: _____

Comments (mortalities, tagged fish, H2O visibility, etc): Weather: Sunny and warm

Water Clarity: Crystal Clear

Notes: All but four of the redds and seven of the adult bulls (three on redds) were observed

below the Bear Creek confluence. One of the 27 redds I flagged was identified as a "possible"

(it was the 4th or 5th above the 1050 bridge). After further consideration (as I continued
surveying)

I believe that designation should have been "definite".

Bull Trout Spawning Ground Survey Data Form

Stream: S.F. Teton River

Date: 9-16-08

Location: Blue Slide to ^{USFS} 1050 Bridge

Water Temp.: _____

Investigator: Eric Anderson + Dave East (Yakema Nation)

Start Time: 1120 Hrs

End Time: 1539 Hrs.

Redds:

	New	Old
--	-----	-----

Definite: 64 85

Probable: 0 0

Possible: 0 3 - changed to new Definite

Bull Trout Observed:

Adults: 57

Sub-adults: 0

Juveniles: observed but not counted

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

Total Redds this section 85 + 64 = 149

Bull Trout Spawning Ground Survey Data Form

Stream: South Fork Tieton River – 1050 Road to Falls and Bear Creek

Date: 9-16-2008

Location: 1050 Road Bridge up to barrier falls and Bear Creek

Water Temp.: 7°C at ~11:40 near Bridge

Investigator: Yuki Reiss USFS, William Meyer WDFW

Start Time: ~1140

End Time: ~1715

Redds:	New	Old
Definite:	<u>43</u>	<u>41</u>
Probable:	<u>5</u>	<u></u>
Possible:	<u>3</u>	<u></u>

Bull Trout Observed:

Adults: SF 1050 to Bear = 6 ; Bear = 24 live plus 2 dead; SF from Bear to Falls = 5; Total = 35 live fish plus 2 morts.

Sub-adults: None

Juveniles: None

Comments (mortalities, tagged fish, H2O visibility, etc): Yuki and I started from above the 1050 Bridge at ~1140 am (7°C) and walked up to Bear Creek on the SF Tieton. For this reach of SF Tieton we had 8 new def. redds and 19 old def. redds plus an upgrade from a poss. to a probable. We observed 6 live fish in this reach.

Next we entered Bear Creek and found 18 old definite redds; 18 new definite redds (one was an upgrade from prob. to definite) 3 new probable redds and 1 new possible redd. We found a large adult bull trout head (est. 20-22" for total fish length) that appeared to be from a predator leftover and took a genetic clip of skin (sample #06BK10) and then found another whole adult bull trout mortality (~22" long) and took another sample (sample #06BK13). We also found an old poachers

*BRV Cr.
= 36
+ 3
39 redds*

*increase of 24 from previous survey
EA.*

Final pass

Stream:	SF Tieton River					
Date:	09/25/2008			09/25/2008		
Location:	Falls to Bear Creek			Bear Creek		
Water Temp						
Water Temp						
Investigator	Jim Cummins					
Start time:	1010			1225		
End Time	1203			1315		
	New Redds	Old Redds	Totals	New Redds	Old Redds	
Definite	6	21	27	0	38	
Probable	0	1	1	0	4	
Possible	0	1*	1	0	0	
Def + Prob	6	23	29	0	42	
Fish					Fish	
Adult BLC	Sub-adult				Adult BLC	Sub-adult
1	0				0	0
Comments (mortalities, water flows, visibility, etc)						
Weather clear and sunny, water flows low and clear, excellent visibility.						
* 1 Pos to new def.						
Eric Anderson and John Easterbrooks surveyed the rest of the SF Tieton.						

*Bear Cr.
increase of 3 Redds
from previous survey*

Bull Trout Spawning Ground Survey Data Form

Stream: S.F. Teton River

Date: 9-25-08

Location: Blue Slide to Corral Cr. Camp Ground

Water Temp.: 43°F

Investigator: Eric Anderson

Start Time: 0955 Hrs.

End Time: 1139 Hrs.

Redds:	New	Old
Definite:	<u>3</u>	<u>78</u>
Probable:	<u>∅</u>	<u>∅</u>
Possible:	<u>∅</u>	<u>∅</u>

Bull Trout Observed:

Adults: ∅

Sub-adults: ∅

Juveniles: observed but not counted

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

has additional data for the section from Corral Cr.

Camp Ground to Bear Creek.

SF Tieton R. Blc survey

9/25/08

Bear Creek

~~EX. Rd~~

CORRAL CK CG → 1050 BRIDGE

MINUS
def

Old Redds

NEW Redds

Def $\square \square \square \square$

~~Pos~~ $\square \square \square \square$

~~Pos~~ $\square \square \dots$

Live Fish = \dots

Def $\square \dots = 13$

~~Pos~~

~~Pos~~

Dead = \dots (Prob.)?

1050 BRIDGE → Bear Creek

104 old - 3 = 101 def (old)

13 New Def

Total = 114 def (Corral CK CG → Bear cr)

5 Live fish (2 on 2 redds (Leads)

2 MORTS 3 fish in Prols

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 9-2-08

Location: Copper Creek to barrier Falls

Water Temp.: 42°F

Investigator: Eric Anderson

Start Time: 1030 Hrs.

End Time: 1350 Hrs.

Redds:	New	Old
Definite:	<u>23</u>	
Probable:	<u>0</u>	
Possible:	<u>0</u>	

Bull Trout Observed:

Adults: 0

Sub-adults: observed but not counted

Juveniles: observed but not counted

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

17 redds were below USFS Rd 1809 bridge crossing
6 redds were above " " " " "

This reach was passable from Copper Cr to barrier Falls,
but there was one very low water section.

Only 1 pass in this section - impassable
barrier below this section. Eric Anderson

Stream:	Deep Creek								
Date:	09/02/2008	1st survey							
Location:	1800 Road Culvert to Copper Creek								
Water Temp									
Water Temp									
Investigator:	Jim Cummins								
Start time:	1015								
End Time	1415								
	New Redds								
Definite	57								
Probable	1								
Possible	4								
Def + Prob	58								
Fish	Observations								
Adult BLC	Sub-adult	Juvenile	Other						
19	0	0	0						
Comments (mortalities, water flows, visibility, etc)									
Water flow low, visibility excellent, weather warm and partly cloudy.									
No water flowing across 1800 Rd or in old campsite between the road and creek.									
There were about 25 adult trout in the pool below the 1800 Rd culvert. No passage problem.									
All but 2 of the 19 adult bull trout observed during the survey were on redds. Observed active spawning.									
There were no redds between the lower part of the downstream most rock slide and Copper Creek.									
Low water passage barrier about 300 feet below the above mentioned Rock Slide. GPS next survey									
Eric surveyed and found redds upstream from Copper Creek, so fish did migrate upstream prior to low water.									
We did not survey the reach from 1800 Rd down to Bumping Res.									

Stream:	Deep Creek			
Date:	9/4/08			
Location:	1800 Road culvert to Bumping Reservoir			
Water Temp				
Investigator	Jim Cummins			
Start time:	1015			
End Time	1430			
	New Redds			
Definite	47			
Probable	0			
Possible	6			
Def + Prob	47			
Fish	Observations			
Adult BLC	Sub-adult	Juvenile	Other	
18	0			
Comments (mortalities, water flows, visibility, etc)				
Weather warm, clear, sunny. Flow low and clear.				
10 of the 18 adult bull trout were on redds.				
Observed active spawning.				
The approximate high water mark is at: N46.84413 W121.3172.				

Stream:	Deep Creek							
Date:	09/12/2008	1st survey						
Location:	1800 Road Culvert to Copper Creek							
Water Temp	43F @1055 (just above 1800 Road)							
Water Temp								
Investigator	Jim Cummins							
Start time:	1055							
End Time	1425							
	Old Redds	New Redd	Total					
Definite	57	17	74					
Probable	1	0	1					
Possible	4	0	4					
Def + Prob	58	17	75					
Fish	Observations							
Adult BLC	Sub-adult	Juvenile	Other					
1	0	0	0					
Comments (mortalities, water flows, visibility, etc)								
Water flow low, visibility excellent, weather warm and partly cloudy.								
No water flowing across 1800 Rd or in old campsite between the road and creek.								
There were no redds between the lower part of the downstream most rock slide and Copper Creek.								
Low water passage barrier about 300 feet below the above mentioned Rock Slide. GPS next survey								
Low water passage barrier this date and on 1st survey @ N46.82767 W121.31073.								
Fish did move above this point earlier in the summer. See surveys for Copper Cr to Falls.								

Bull Trout Spawning Ground Survey Data Form

Stream: Deep Creek

Date: 9-12-08

Location: USFS Rd 1800 culverts to Bumping Reservoir

Water Temp.: 43°F

Investigator: Eric Anderson

Start Time: 1100 Hrs

End Time: 1240 Hrs.

Redds: New Old

Definite: 0 47

Probable: 0 0

Possible: 0 6

(not redds)
- test dips
- possibles. Not counted.

Bull Trout Observed:

Adults: 0

Sub-adults: none observed

Juveniles: observed but not counted

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

Spawning appears to be complete. No adult bull trout observed, no new redds observed.

Jim Cummins surveyed USFS Rd ¹⁸⁰⁰ culvert to Copper Creek (see his notes). As spawning was complete & a dry creek barrier section existed in the Rd 1800 to Copper Creek section, we did not do another pass in the Copper Creek to barrier falls reach (final count for this section is from 9-2-08).

Bull Trout Redd Surveys (exploratory) 2008

North Fork Teanaway

09-08-08

Sunny, clear, calm

Survey time: ~6:30 PM-8 PM

~.5 miles below El Dorado to confluence with DeRoux

Surveyors: Pat Monk, Ryan Anderson

DeRoux Creek, mouth to trail crossing

Surveyors: William Meyer, Alex Conley

Two "possible" redds were seen in DeRoux Creek, first was approx .5 mile above mouth, and the second was another 250 ft above this. Similar to possible redds seen last year. Gravel was cleared, and visible tail and pit, but small in size. However, no bull trout were seen, adults or juveniles, during night snorkel survey.

DeRoux confluence to barrier falls:

Surveyors: Yuki Reiss, Becca Wassell, Angie Begosh

Water temp: 8 C

→ No redds or bull trout seen on either reach in the mainstem NFT.

Upper Bumping River

09-22-08

Cloudy, cold

Survey time: On the river from ~ 12:00-1:30

Surveyors: Yuki Reiss, Scott Wiley

Water temp:

Temp 8°C Scott Wiley

2007 notes:

No redds or bull trout were seen in the main channel or side channels. This system has also changed since Nov 06 flood events. A very large log jam was washed away, and the channel has lost complexity, wood and much of its available spawning gravels. One main side channel was still flowing, and some suitable gravels were present here. Connectivity to the reservoir was not a problem.

2008 notes:

The notes above still apply. Definitely a notable lack of spawning gravel. There was one area directly below the falls with a possible redd, but with no fish observed, it was difficult to call this a probable or definite. With the road closure on the 1800, we chose to hike in on the trail that follows the northern side of the lake (#971). The hike takes a long time compared to the spawning survey – but we found fresh chanterelles! The survey was on a Monday, immediately following a weekend of steady rain (first of the season).