

Eric's Copy

August 29, 2002

TO: John Easterbrooks, Jim Cummins, William Meyer, Bob Tuck, Jim Matthews, Brandon Rogers, Paul James, Jeff Thomas, Steve Croci, Scott Deeds, Ken MacDonald, Tina Mayo, Walt Larrick, Gary Torretta, Kate Puckett, Pat Monk

FROM: Eric Anderson

SUBJECT: Yakima Basin Bull Trout Redd Counts

The bull trout spawning survey schedule is attached. In most places I did not record individual names but used agency names instead. Most of you have been involved in the past and know which areas you would like to monitor. **I have your agency listed and a question mark.....please contact me ASAP to confirm which areas and dates you can work! Even if there is no question mark please confirm with me if you can help with the monitoring for that day.** If I did not list your agency please let me know where and when you can assist. There is some flexibility in the schedule if we have to adjust.....but please note that it is designed to cover the total spawning period for most populations. True, there are some areas that we are still struggling with, but the schedule is designed to fill in those gaps. I am particularly interested in getting help from those that have done this before and are familiar with the streams and reaches. Of course you are also welcome to accompany surveyors even if you are not familiar with the stream.

Check the instruction sheet on procedure. You will need flagging and a permanent marker. Please use the survey form format for the stream reaches that you do. Please fax (509-575-2474) or mail the data to me within several days of completing the survey. (Mail to 1701 S. 24th Ave, Yakima, WA 98902) (Email at anderea@dfw.wa.gov).

Please confirm by calling and leaving a message on my work phone (do not email). I check phone messages daily.....usually in the evening when I get in from the field (and usually from a remote location). So...leave me a number where I can reach you at. If we are in a time crunch you can call my home number in the evening. My work number is (509-457-9301) or home (509-966-4017).

Thanks in advance to all of you for your help and interest in monitoring bull trout populations in the Yakima basin. Feel free to pass this on to others.....hopefully I did not forget very many folks. See you in the field.

Regards.....Eric



Bull Trout Redd Counts

SEPTEMBER, 2002

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
AUGUST 2002 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	OCTOBER 2002 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31			Aug 29 Deep - WDFW Cummins Easty	Aug 30	Aug 31
1 122	2 121 HOLIDAY LABOR DAY	3 N.F. Ahtanum 120 WDFW WDIR - Wetzel YIV - S.F. Ahtanum 1 Day this week	4 Indian - WDFW 119 Anderson Cummins	5 S.F. Tilton 118 WDFW - Anderson Cummins USFS - Alana High Derek Baldwin	6 N.F. Ahtanum 117 Anderson	7 116
8 Deep - CWU 115	9 N.F. Ahtanum 114 WDFW - Anderson American - WDFW Cummins USFS Croci YIV - S.F. Ahtanum 1-Day this week	10* Rattlesnake - USFS 113 Crow - WDFW Cummins USFS Croci	11 112	12 111 NF, Ahtanum - USFS below Index - Deeds Tom Davidson	13 M.F. Ahtanum 110 most of stream WDFW - Anderson, Cummins USFS - Deeds, Davidson YIV - Brandon Rogers	14 109
15 108	16 YIV - S.F. Ahtanum 107 1-day this week N.F. Ahtanum Index + above. WDFW - Anderson, Cummins Easton - Kothelus - USFS - Thomas	17 Deep - WDFW 106 Anderson Cummins	18 Indian - WDFW 105 USFS	19 S.F. Tilton - WDFW 104 USFS	20 M.F. Ahtanum 103 Trap holes → 2.5 mile below WDFW - Cummins	21 102
22 101	23 YIV - S.F. Ahtanum 100 1-day this week American - WDFW Anderson USFS Rattlesnake - WDFW + USFS (Cummins + Croci)	24 Crow - WDFW 99 USFS Anderson	25* 98	26 97	27 Ahtanum CRM TOAR 96	28 95
29 94	30 see Next Page 93	<p>upper Cle Elum includes Fortune Creek</p> <p>25th Box Canyon Gold - CWU</p> <p>26th</p>				

NOTES

*STATE PAYDAY

SEPTEMBER, 2002

Bull Trout Redd Counts

OCTOBER, 2002

FORM
S.F. 9205
(2/01)



STATE OF WASHINGTON
APPOINTMENT/SCHEDULE CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Sept. 30 Easton - Kachelas N.F. Ahnann WDFW	1 USFWS - Thomas →	2 Indian - WDFW ⁹¹ USFWS - Croci	3 S.F. Tinton - 90 WDFW USFWS - Croci	4 89	5 88
6 87	7 86	8 85	9 Box Canyon WDFW	10* Upper Cla Elum Gold Cr. WDFW	11 82	12 81
13 80	14 79	15 78	16 77	17 76	18 75	19 74
		Easton - Kachelas	USFWS - Thomas		Box Canyon WDFW	
20 73	21 72	22 71	23 Upper Cla Elum (Gold Creek) WDFW postponed - next wk	24 69	25* 68	26 67
				USFWS - Thomas →		
27 66	28 65	29 64	30 63	31 62	Nov. 1 Kachelas, WDFW	Nov 8 Kachelas - WDFW
	Easton - Kachelas	USFWS - Thomas	Gold Cr. WDFW			
SEPTEMBER 2002		NOVEMBER 2002		N O T E S		
1 2 3 4 5 6 7		1 2				
8 9 10 11 12 13 14		3 4 5 6 7 8 9				
15 16 17 18 19 20 21		10 11 12 13 14 15 16				
22 23 24 25 26 27 28		17 18 19 20 21 22 23				
29 30		24 25 26 27 28 29 30				

*STATE PAYDAY

OCTOBER, 2002

Instruction for marking Redds

adfluvial adult populations. However, we must agree on standards and techniques so that surveys conducted by differing agency personnel will be comparable over the long term.

The first task is to set boundaries for each spawning survey site or stream. These boundaries must be utilized for all future work and existing spawning survey data must conform or be removed from the long-range database. I recommend that streams and site boundaries as listed above, for long-term habitat monitoring, be used also for annual spawning surveys. The WDW Area Fish Biologist, Wenatchee, will be responsible for maintaining the long-range bull trout spawning database, regardless of who conducts the surveys on the ground.

Timing and frequency of spawning surveys will adhere to the criteria of Shepard and Graham (1983c), consisting of two or more "preliminary" surveys (starting about 1 Sept.) and a final survey after water temperatures have cooled to below 9C (48F) and adults have mostly left the area (usually early to mid-October). In Appendix F there are selected graphical comparisons of redds and adults counted during 1983 through 1991 surveys. Preliminary surveys offer at least trend information for the cycle which would be useful in case the final survey is cancelled or rendered ineffective due to inclement weather or streamflow. A significant number of WDW and WNF surveys have been conducted too early in the cycle or were "rained out" (Tables 5 and 6).

Spawning surveys will consist of separately enumerating definite, probable, and possible redds (Shepard and Graham 1983c), along with numbers of adult bull trout observed. Some of our (WDW and WNF) redd counts since 1983 have included both completed redds and "false" redds (test digs) and some have not differentiated between them. The following redd identification criteria will be used for every redd survey.

- (1) Definite: No doubt about it. The area is definitely "cleaned" and a pit (pocket) and tailspill are recognizable. Adult bull trout may still be attending the site. Not normally in an area normally cleaned by steam hydraulics.
- (2) Probable: An area cleaned that may possibly be due to stream hydraulics, but a pit and tailspill are recognizable, or an area that does not appear clean, but has a definite pit and tailspill (an "old" redd).
- (3) Possible: A cleaned area of about the right size and appearance from a distance, but that does not have a definite pit or tailspill. This could be caused by stream hydraulics, by the tentative digging of spawners (false or test dig), or by wading anglers, etc.

For final reports and trend analysis, only Class 1 and 2 redd counts should be included. Occasionally large (up to 5m x 10m), multiple redds will be encountered in the field and surveyors will find it difficult to determine the exact number of redds at the site. In such instance, each identifiable pit or pocket will be counted as a separate redd.

Flag all redds w/ date, redd type, #fish, Surveyor initials.
Send data back to Eric Anderson by filling out the data form
for stream/reach.

Summary of bull trout spawning surveys (redd counts) in index areas of the Yakima sub-basin, 1984 - 2002.
(R = Resident, F = Fluvial, F/R = Fluvial/Resident, AD = Adfluvial). WDFW files, Yakima, WA.

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

* Incomplete survey; index area not fully defined or adequately monitored.
Redds in small tribs (parenthesis) included in the total stream count.

Summary of bull trout spawning surveys (redd counts) in index areas of the Ahtanum drainage in the Yakima sub-basin, 1993 - 2002. WDFW Files, Yakima WA.

Ahtanum tributaries	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
N.F. Ahtanum Creek (Shellneck)	9	14	6	5	7	5	7	11	20	17
M.F. Ahtanum Creek				1*	1*		0*	10*	1*	6
S.F. Ahtanum Creek								5*	14	13

*Incomplete survey; index area not fully defined or adequately monitored.

From: Eric Anderson
To: "bpfeifer@parametrix.com"@GWDFW.SMTP
Date: Tue, Dec 3, 2002 9:58 AM
Subject: Re: Cle Elum Kokanee Use

Bob,
French Cabin Creek - dates checked.....no connection on Oct 9, 14, 22, Nov 1, 6, 12. Weather has been clear and dry...all streams low.
A good connection was observed on Nov 19, due to rains the past few days.....slightly turbid water.....did not see kokanee or spawning fish. During a bull trout spawner survey on the upper Kachess River on Nov 21.....this river finally connected due to the rains the past few days. No bull trout were observed in the usual spawning index area (maybe they will not spawn in this river due to the late rains?) however, approx. 50-75 kokanee were observed spawning in Kachess River channels in the lake bed and a few kokanee (7 koks) were found spawning up in the lower mainstem about one third to one half mile above the lake....H2O temp was 5 C. That is all I have Bob. It would have been nice to further investigate the Cle Elum and other streams in the area after we got some rain but I just did not have the time or help. Hope this helps a little.
Eric

>>> "Bob Pfeifer" <bpfeifer@parametrix.com> 12/02 8:00 PM >>>
2 Dec 02

Hi Eric -

Just a friendly reminder that you were going to have some techs keep an eye on French Cabin Creek and let me know when it re-joined (or rejoins) the river. You were also going to try to get some feedback on whether or when kokanee appear in it, or in other major tribs of Cle Elum or Kachess. Any luck on these things? (No rain sure doesn't help.)

Bob

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Seattle Public Utilities desk:
206 733 9117
Bob.Pfeifer@ci.seattle.wa.us

From: "William Meyer" <meyerwrm@dfw.wa.gov>
To: "Eric Anderson" <ANDEREA@dfw.wa.gov>
Date: Thu, Nov 21, 2002 5:07 PM
Subject: Kachess River BT redd survey notes

Hey Eric, Mark and I made a trip up to Kachess River today and did a complete redd survey from the trail crossing up to the confluence with Mineral Creek and ~1/2 mile up Kachess River to the smooth slab of Bedrock on river left. We also walked to the lake on the trail and then back along the stream. Here are my notes for your file on Kachess River. Hope all goes well, William

Date and Time: 11/21/02 8:30am - 12:15pm

Survey Location: Kachess River, from trail crossing to upper Kachess R. and from Lake to Trailhead.

Legal: T22N R13E S5

Survey Type: Day redd survey

Surveyors: William Meyer (WDFW), Mark Teske (WDFW)

Stream Temperature: 5°C

Weather: Foggy, damp, 55°F, good fall weather!

Narrative: We covered the upper Index site first - from the trail crossing to the confluence and up Kachess River ~1/2 mile. We next walked the trail to the Lake bed and walked the bed from the Lake back to the trail crossing. We saw no fish or redds in the index section or in the lower stream, below the trail crossing. The stream was clear and flowing well, with temperatures at Kachess R. at 5°C and Mineral Cr. running 4°C at the confluence. Mineral carried 80-85% of the flow with Kachess carrying 15-20% of the flow, max. Kachess River above the confluence had an abundance of leaves blocking the flow at every stick jam. We saw no redds or test digs - this makes sense in light of the stream probably only connecting Monday or Tuesday with the latest storm. We did not bother walking up Mineral Creek above the confluence.

Next we walked the trail to the lake bed and then to the confluence of Kachess River and the reservoir. Stream temp. here was 5°C. We saw two bald eagles and plenty of whitewash on stumps in the bed of the reservoir. Observed ~50-75 Kokanee spawning throughout the lower portions of Kachess, just a few hundred meters above the reservoir. Walked up the small feeder stream just to the east of lower Kachess River and observed lots of kokanee redds, and eagle whitewash, but no active fish. Also observed kokanee spawning in the section of Kachess River that is at high pool elevation (lots of woody debris). On the way back to the trailhead we observed ~7 kokanee spawning ~ halfway to the trailhead, in a pool just below the giant Cedar fall (4-5 cedars + 1 hemlock crossing the stream) - higher than I've observed them in the past. William

Kokanee were in 10-12" range.

Per. com William Meyer

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

CC: "Mark Teske" <Teskemst@dfw.wa.gov>, "Jeff Thomas" ...

E. Anderson

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From: "William Meyer" <meyerwrm@dfw.wa.gov>
To: "Eric Anderson" <ANDEREA@dfw.wa.gov>
Date: Wed, Dec 4, 2002 5:25 PM
Subject: Kachess River BT Redd Survey - No fish, No redds

Hey Eric, Here are my notes from todays redd survey at Kachess. Didn't see any fish and saw no evidence of redds, so it looks like the fish were delayed too long by the de-watering this year and couldn't spawn. It was cold and snowy up there and it won't be much longer you can drive into the site, plus I'm not sure there is any reason for further visits. William

Date and Time: 12/4/02 9:30am - 11:30pm

Survey Location: Kachess River, from trail crossing to waterfalls on both upper Kachess R. and Mineral Creek. Legal: T22N R13E S5

Survey Type: redd survey

Surveyors: William Meyer (WDFW)

Stream Temperature: 2°C

Weather: Calm, Snowing (2-3 inches accumulation), 30°F.

Narrative: Surveyed from the trail crossing up both forks to the waterfalls, and saw no fish or redds. Stream temperature at the confluence in Kachess River was 3°C whereas in Mineral Creek temps were ~1.5°C. Flows were visibly down from the last visit, and Kachess River now represented roughly 1/3 of the stream flow with Mineral being 2/3 of the flow, at the confluence. Flow at the trail crossing was predominantly in the main channel and didn't go around the crossing log jam, whereas on the last visit (11/21/02) the stream flowed fully around the crossing log jam. The water was clear and based on the flow observed, I would guess the stream is still fully connected to the reservoir. I'm guessing the fish were delayed too long this year and now its too late to spawn.

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

CC: "Mark Teske" <Teskemst@dfw.wa.gov>, "Jeff Thomas" ...

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From: Eric Anderson
To: "JamesP@cwu.EDU"@GWDFW.SMTP
Date: Fri, Oct 4, 2002 11:11 AM
Subject: Re: Gold Creek Redd Survey

Paul,
Thanks for the update. I was at Gold Creek yesterday on some other business....yes, it is still very low and there is no rain to bring it up yet. The thing that worries me about a trapping now is the possibility of blocking adult spawners that may be holding below the I-90 bridge or in the lake....waiting for a fall rain before they move. We usually (but not always) see two waves of spawning activity...one earlier and another later after the the rains connect the dry section to allow passage. Do you have a two way trap? Might be a good idea.
Eric

>>> Paul James <JamesP@cwu.EDU> 10/02 3:49 PM >>>
Eric:

I conducted a redd survey on Gold Creek yester day (10/1) and her is what I found. I was short on time so I began about 1.5 mi above the pond and went to the falls above Silver Creek. The falls looks like a barrier now due to low flows, but at higher flows I'd guess some fish could get past it. I then surveyed from the pond to I-90. The fish are still trapped below the pond until the big rains come so we may see more redds below the pond on the next survey.

Results:

Pond to Falls:

1

Definite: 12
Probable: 0
Possible:0
Fish: 4

2
0
0
2

Pond to I-90:

2

Definite: 4
Probable: 1
Possible: 1
Fish: 5

I saw a few kokanee below the pond but no spawning number yet. I am planning on installing a trap (smaller version of the SF Tieton trap) in Gold Creek under the bridge this weekend. I'll let you know how it working.

Later,

Paul

10/10/02 1010 Hrs
Gold Cr. BLC Redd Count
Start w H₂O Flow near upper
Pond. H₂O Temp. 44°F
E. Anderson + J. Cummins
old Def. ~~||||~~ ||

old Pro.

old Pos.

New Def ~~||||~~ ||

New Pro

New Pos

Fish III

1

Silver Creek Subsurface (Dry) at
mouth. No Redds between lower & upper falls
End 1327 at upper falls.

Gold Cr. Rd to Access Rd Bridge near
1525 Hrs. - 1610 Hrs I-90

old Def IIII Old Pro. | Old Pos |

New Def III Traps under bridge; 1 bull. in
Fish at least 10 probably more 3 RB? Trap

1st log jam above bridge.

2

10/18/02 1045 start

Box Canyon on BLC Redd Survey

E. Anderson & J. Cumming

Foot Bridge to 1st Falls

Old Def. NI III III

Old Pro.

Old Pos.

New Def. II

New Pro

New Pos. I

Fish I

15 Total Redds

End 1240

Bull Trout Spawning Ground Survey

Stream: Gold Creek

Date: 11/04/02

Location: Interstate 90 bridge upstream to first set of cascade falls above Silver Creek

Water Temp.: 35 degrees F (31.5 degrees F at upper end when water was flowing over ice)

Investigator: Croci, Mallas (FWS - Leavenworth) and Nelson (FWS - Leavenworth)

Start Time: 9:30 am

End Time: 3:00 pm

Redds:

	New	Old
Definite:	<u>0</u>	<u>18 above pond + 8 below pond</u>
Probable:	<u>1 above pond + 1 below pond</u>	<u>1 above pond</u>
Possible:	<u>0</u>	<u>0</u>

OK - possible old redds w missing flags

+ 2 from previous survey for total of 22 Redds above pond. E. Anderson (10.10.02)

Bull Trout Observed: **All fish observed were in pool just upstream of trap**

Tagged: 3 or 4

Untagged: 15 to 20

Sub-adults: 0

Juvenile: 0

*total of 9 redds below pond
22 above + 9 below = 31 Redds Total*

Comments: Creek dewatered in usual area. No adult bull trout observed upstream of the dewatered reach. Creek also dewatered from the trail crossing downstream approximately 200 yards. Near this area one redd appeared totally dewatered (could not actually determine location of redd and based decision on sediment size, watered area had large substrate) and another redd was partly dewatered (top two inches of mound). Creek also dewater just above Silver Creek for approximately 200 yards, some pockets of water remain. Above the upper dry section the creek is almost completely covered in ice. Silver Creek was completely dry.

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From: Eric Anderson
To: "JamesP@cwu.EDU"@GWDFW.SMTP; "jthomas@pn.usbr.gov...
Date: Fri, Nov 15, 2002 3:56 PM
Subject: Re: Gold Creek

Thanks for the info Paul. I already have a very full schedule next week....so does Cummins. I may be able to break free the week of the 25th before the Thanksgiving Holiday. In the Interim.....William can you check out the Kachess River early next week? Steve can you hit Gold Creek again?

>>> Paul James <JamesP@cwu.EDU> 11/15 1:51 PM >>>
Guys:

I visited the trap at Gold Creek on Thursday (11/14) and found that the stream had risen about 3-4 inches. There were two untagged bull trout in the box (1 male & 1 female) and neither looked spent, so I put them back above the trap after collecting data.

I walked upstream to where Gold Creek meets the pond outlet channel and found that Gold Creek was flowing into the channel. I don't know if this means that the previously dry sections above the pond are now flowing or not. However, there were no adult bull trout remaining in the pool above the bridge where they have been for the past 3 weeks. My guess is that they did not get around the trap and move downstream, but rather moved upstream with the increasing flow and may be attempting to continue spawning.

This might also be a good time to do a re-check of spawning in Kachess River if anyone has the time.

I'll let you know if I start to see fish moving downstream that look spent in Gold Creek.

Later,

Paul

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From: Paul James <JamesP@cwu.EDU>
To: <ANDEREA@dfw.wa.gov>
Date: Thu, Nov 21, 2002 2:51 PM
Subject: Re: Gold Creek

Eric:

I was out of town on Tuesday and in lab most of the day Wednesday, so sorry for not replying earlier. I got your message about the trap at Gold on Tuesday evening. I was going to give the stream a few days to calm down and then start removing the trap parts.

Once again it was a lot of effort for just a few fish. We had a total of 8 adults that we were able to get data from and tag. I am assuming that all the fish will easily get back to the reservoir with the high flows.

I am planning on going up there on Sunday to get as much out as I can. I can get back again on Tuesday pm to get the rest.

Paul

CC: <jthomas@pn.usbr.gov>, <scroci@pn.usbr.gov>

Nov. 19 2002
croci/Thomas attempted a survey on Gold but high Turbid Flows prevented any survey.

Trap was observed blown out on this date (Nov. 19) by Thomas/croci

E. Anderson

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Date	Intake	#	Condition	Date	Cond
10/1/04	DR	1	N	1	OV
		↓	↓	↓	↓
		10		10	

10/14/04	DR	1			
		↓			
		1B			

2
0
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2

-Notes

10-9-02

Box Canyon Creek Bull Tr.

Redd Survey LK to Falls

J. Cummins Data

old

New

def 17

|||||

Prob

Pos -

	No Tag	Tag
BLC Adults		1

11:15 - 2:00pm

partly cloudy - windy - Didn't see fish @ Lake/creek but wind prevented good observation

No barriers.

saw 5 CT 8-9" several 2-3" juv.

Totals 13 Redds 10 Adult Bulls

Eric Anderson

From: "Paul James" <JamesP@cwu.EDU>
To: <ANDEREA@dfw.wa.gov>
Sent: Monday, September 30, 2002 6:13 PM
Subject: Re: Box Canyon Creek Redd Survey
Eric:

I completed a redd survey on Box Canyon Creek on September 27, 2002. The survey reach was from the mouth at Lake Kachess to the barrier falls (Peek-A-Boo Falls). Here are the disappointing results:

Definite: 2
Probable: 0
Possible: 0

Fish: 1 adult female; 2 juvenile (precocial) males

The 2 redds were about 1/4 mile downstream from the falls. One redd had a female attended by the 2 juvenile males. No adult males were seen.

I hope we see more fish moving up in the two weeks!
I will be doing a redd survey on Gold Creek on Tuesday (10/1).

Paul

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Bull Trout Spawning Ground Survey

Stream: Deep Creek
 Date: 8/29/02

Location: Bumping Res to falls

Water Temp.: 44°F

Investigator: Cummins + Easterbrooks

Start Time: Culvert-Copper - 10:45; Copper to falls 10:49; Culvert to LK - 3pm

End Time: " " 2:15 " " 2:30 " " 4:15

Redds:	Location*	1	2 ^{New}	3	Total	Old
Definite:		10	21	9	40	
Probable:		1	5	0	6	
Possible:		1	7	1	9	
Bull Trout Observed:	Location	1	2	3	Total	
Tagged:		1	1			
Untagged:		2	10			
Sub-adults:		2	1 EB?			
Juvenile:			1			

2
0
0
2

Comments: Fish passage (water flow) adequate up to about 2/3 way between Copper Ck + the falls, but at that point channel is intermittent + dry for about 200 feet. One redd above that point.

Tags are silver
1 EB 8" mort. Culvert p. Copper Ck
1 mort C caudal section of adult BK above Copper Ck.
1 mort C head, part of body, caps) below culvert.

- 1* Culvert to Copper Ck
- 2. Copper Ck to falls
- 3. Culvert to Bumping LK

Deep Creek BLC 8/29/02
 Area: Copperck-Falls Time: 10:49-2:30
 Temp 44°F

Redds			Fish		
Def	Prot	Pos	Tag	Untag	Unknown
###	###	###	1	###	
###	###				

1 8-9" fish, may have seen EB
 1 untag fish had brown patch - SCOM?
 on dorsal area
 1 mort - caudal section only.
 2/3 of distance up from Copper ck to
 falls there is fish passage barrier
 Creek is dry for 150-200'

Easty has data for Culvert to Copper ck
 + Culvert to LK

Deep - Culvert to Lake
 8/29/02 Right as viewed
 looking upstream. 3am - 3:40pm

No Redds or fish.

water flowing, may 15-20' of
 total in right channel, but becomes
 dry about 2/3 way of way to the
 lake.

Sev serial juvenile fish, not all
 positively ID'd, but some BLC

DEEP CROK BULL TROUT SPawning SURVey

8/29/02

Road culvert -> copper CK.

JIM + EASTY

SUNNY, clear excellent vis.

Def =

IN @ 10:30

Prob = .

OUT @ 14:15

POSS = .

Live Fish = .

COMMENTS: FOUND 1 DEAD EBT 315cm (definitely NOT @ BT)

2 Large AD female BT on redd; 1 BLC. 8" SUBADULT BT w/ ♀ (floy tagged)

6" BT OBSERVED IN Copper CK

200' ↓ rd. bridge

CULVERT ↓ BUMPING LAKE EASTY + JIM

Def =

IN @ 1500

Prob =

OUT @ 1615

POSS = .

Bear?

Live fish =

1 AD ♀ Mort (head) PART of Body + eggs

Deep Creek Redd Survey
2002

- From Dr. Paul James
CWU

Date: 9/8/02

Area: Road crossing to Lake

	<u>Definite</u>	<u>Probable</u>	<u>Possible</u>	<u>Fish</u>
Old (8/29/02)	9	0	1	
New (9/8/02)	5	0	0	6

Area: Road crossing to Falls

	<u>Definite</u>	<u>Probable</u>	<u>Possible</u>	<u>Fish</u>
Old (8/29/02)	27	5	6	
New (9/8/02)	11	4	4	7

114
27
11

52

2
0
0
2

9/17/02 Deep Creek 1005-1305

E. Anderson

Copper to Falls 440F

Old Def ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ 24

Pro ++++++

Pos ++++++

New Def ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~

~~||||~~ 47

Pro

Pos

Fish ||

1 old Def. above dry area to Falls
dry area \approx $\frac{1}{4}$ mile.

47
24

71

9/17/02 Deep Creek
Anderson + Cummings
Culvert to Lake 1400-1500

Old Det ~~11~~ ~~11~~ 11 14
Old Pro.
Old Pos

New Det ~~11~~ 11 7

Fish ϕ

14
7
21 - Culvert to Lake
71 - Copper to Falls
28 Culvert to Copper
129 Total

Bull Trout Spawning Ground Survey

Stream: Deep Creek

Date: 9/17/02

Location: Culvert to Copper Cr.

Water Temp.: _____

Investigator: _____

Start Time: 954

End Time: 1230

Redds:	New	Old
Definite:	<u>11</u>	<u>12</u>
Probable:	<u>3</u>	<u>2</u>
Possible:	<u>5</u>	<u>1</u>

12
13
28
Redds

Bull Trout Observed:
Tagged: 0

Untagged: 0

Sub-adults: 0

Juvenile: _____

2
0
0
2

Comments: Eric has additional data

9-4-02 1000 - 1200 Hrs.

Indian Cr. Bull T. Rebel Count
Hwy 12 Bridge to N. Spring (Lower section)
E. Anderson H₂O Temp. 46°F

Def. IIII

Prob.

Poss.

Fish IIII IIII

Recreational Dam @ Indian Creek corral
approx. 100 m. up from Hwy 12 Bridge.
Disassembled part of dam for better passage.

Did not do N. Spring on this 1st pass.
Jim Cummins has additional data for
area above N. Spring

No Kokanee spanning yet.

Bull Trout Spawning Ground Survey

Stream: Indian Creek
 Date: 9/4/02

Location: Trail Crossing + road end to falls + both South Spring

Water Temp.: 44°F @ 11:30 in L.S. Spring | 42°F @ 11:15 U.S. Spring | 40°F mainstem
@ falls - 11:05 am

Investigator: JIM CUMMINS

Start Time: 10:20

End Time: 12:57

Redds:	Indian	L.S. Spring	New U.S. Spring	Old
Definite:	5	0	2	
Probable:	1	0	0	
Possible:	3	0	0	

8 def + Prob total

Bull Trout Observed:
 Tagged: No fish in S. Spring, No tagged fish
 Untagged: 2 untagged + 2 unknown
 Sub-adults: _____
 Juvenile: _____

4 fish Total

Comments: Fish are late or will not show in good numbers this year
Eric, was data for highway 12 bridge to Trail Crossing end of road. Did not survey North Spring.

2
0
0
2

9/18/02 1300-1415 Hrs.
E. Anderson & Y. Reiss
Indian cr. Bull T. Redd count

New Defi. III III II
New Pro. I
New Pos. ♀
Fish III IIII

348x to N. Spring
14
—
48 Total
Fish 13

9/16/02 Sunny/Cool 1000-1300

Indian Cr. BLC Redd Survey
1000 Hrs LK to Hwy 12 Bridge.
No Barriers. - H₂O Temp 46°F
E. Anderson + Y. Reiss

Old Def IIII

New Def ~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~

New Pro.

New Pos IIII

Fish IIII

Tagged Fish 1

Bull Trout Spawning Ground Survey

Stream: Indian Creek
Date: 9/18/02

Location: North Spring to falls, including 2 South Springs

Water Temp.: 44.0°F @ 1035

Investigator: Jim Cummins

Start Time: 1035

End Time: 1300 @ falls 1443 @ N. Spring

Redds:	New	Old
Definite:	<u>25</u>	<u>10</u>
Probable:	<u>5</u>	<u>0</u>
Possible:	<u>6</u>	<u>2</u>

(540) ^{at 7}
prob

Bull Trout Observed:
Tagged: _____

Untagged: 4 Fish total 1-12", 1-14" 2 larger

Sub-adults: 2 7-8" on pos redd. maybe EB

Juvenile: _____

Comments: Eric has additional data

2
0
0
2

440F

10-2-02 E. Anderson 0950 Star

Indian Cr Hwy 12 to N. Spring

old Def IIII IIII IIII IIII IIII IIII IIII IIII

old Pro,

old Pos. ++

New Def. IIII IIII

Fish II

End 1230

Final Count - 100 Redds
Total.

Bull Trout Spawning Ground Survey

Stream: Indian Creek
 Date: 10/2/02

Location: Lower South Spring Mainstem from L.S. Spring to N. Spring + North Spring

Water Temp.: 41° F

Investigator: CUMMINS

Start Time: 1015

End Time: 1330?

Redds:
 31 def + Prob

	New			Old		
	L.S. SP	Mainstem	N. SP	L.S. SP	Mainstem	N. SP
Definite:	2	0	2	8	6	12
Probable:	0	0	0	0	0	1
Possible:	0	0	0	1	0	0

Bull Trout Observed:
 Tagged: 1
 Untagged: 3 (one 14")
 Sub-adults: 1 12" untagged (Not positive ID)
 Juvenile: _____

Comments: Eric Anderson + Steve Rocci have additional data

2
0
0
2

Bull Trout Spawning Ground Survey

Stream: Indian Creek
Date: 10/2/02

Location: Little Buck Trail (Road end) to falls, including Upper S. Spring

Water Temp.: _____

Investigator: Steve Crocci (this form completed by Tim Cummins)

Start Time: 1015

End Time: _____

25 definite + probable total

Redds:	New	Old
Definite:	<u>2</u>	<u>18</u>
Probable:	<u>0</u>	<u>5</u>
Possible:	<u>0</u>	<u>0</u>

Bull Trout Observed:
Tagged: 1
Untagged: _____
Sub-adults: _____
Juvenile: _____

Comments: Additional data from Cummins & Anderson

2002

Sep 5 '02

S. F. Tieton R. 1035-1245 Hrs.
Bull T. Spanner Survey (Redd Count)
New Def. 1 41.70F Falls → Bear?
" Pos. III E. Anderson
Fish 1 Alana High

Bear Cr. 1300 45.10F
New Def. III III III
Fish III III (1 Yellow Tag)

S. F. Tieton Bear to 1050 Rd.
1435

New Pos 1 1 mort 29" Female
Fish II (2) No Tag
Probable Natural
mort or
Hooking mort.?

Bull Trout Spawning Ground Survey

Stream: South Fork Tieton R
Date: 9/5/02
Location: Rd 1050 down to Blue slide
Water Temp.: 42°F @ 1100 42°F @ 1:55
Investigator: Jim Cummins + Derrick (USFS)
Start Time: 1055
End Time: 2:30

Redds:	New	Old
Definite:	<u>6</u>	_____
Probable:	<u>21</u>	_____
Possible:	<u>20</u>	_____

Bull Trout Observed:
Tagged: 1 yellow
Untagged: 1
~~Sub-adults:~~ unknown 27
Juvenile: _____

2
0
0
2

Comments: Most of redds & 21 fish were just above blue slide in one pool + 2 tail bits.

Sep 5 '02

S.F. Tieton R. 1035-1245 Hrs.

Bull T. Spanner Survey (Redd count)

New Def. 1 41.70F Falls → Bear?

" Pos. III E. Anderson

Fish 1 Alana High

Bear Cr. 1300 45.10F

New Def. III III III

Fish III III (1 Yellow Tag)

S.F. Tieton Bear to 1050 Rd.

1435

New Pos 1

Fish II (2)

1 mort 29" Female

No Tag

Probable Natural

Mort or

Hooking mort.?

1000-

S.F. Tieton 9-19-02

E. Anderson + G. Torretta

Blue slide → 1050 Br.

430 F

old Def III I

old Pro. ~~+++ ++++++~~

old Pos ~~+++++~~ ||

New Def ~~III III III III III III III III III~~

New Pro.

New Pos. III I

Fish. III I

90 Redds

47

47

12

357

Bull Trout Spawning Ground Survey

Stream: S.F. Tinton + Bear Creek
 Date: 9/19/02
 Location: 1050 Rd - Falls + Bear Cr-mouth to falls
 Water Temp.: 42° F
 Investigator: Jim Cummins, Yukie Reis
 Start Time: 9:30
 End Time: 2:30

Redds:	1050 to Bear	Bear New Bear	Bear Old Bear	1050 to Bear	Bear Old Bear	Bear to falls
Definite:	13	6	12	0	13	1
Probable:	1	1	0	0	0	
Possible:	1	1	1	1	0	

Totals
 def 45
 prob 2
 47

Bull Trout Observed:
 Tagged: _____
 Untagged: 0 (1050 to Bear Cr) 2 (Bear)
 Sub-adults: _____
 Juvenile: _____

Comments: _____

2
0
0
2

Bull Trout Spawning Ground Survey

Stream: S. F. Tinton R
Date: 10/3/02

Location: Blue slide to falls

Water Temp.: 43°F @ 1050 @ 1130

Investigator: Gummins, Crocci, Torella

Start Time: 1000 - 1245

End Time: 1245

Redds: Blue side to 1050 New 1050 to falls Bear Blue side to 1050 Old 1050 to falls Bear

Definite: _____

Probable: _____ see a Hatch

Possible: _____

Bull Trout Observed:

Tagged: 0

Untagged: 0

Sub-adults: _____

Juvenile: _____

Comments: Crocci walk Blue side to Coral Creek, Gummins
Coral to 1/2 mile above 1050 & Bear, & Torella
walked 1/2 mile above 1050 to falls. Torella
should have started at Bear Creek, although we
all got done within 1/2 hour of each other.

2002

S.E. Tieton 10/3/02

		Old	New	Total
Blueside to 1050	def	78	5	83
	pros	0	0	0
	pas	8	1	9
<hr/>				
1050 to falls	def	26	11	37
	pros	0	0	0
	pas			
<hr/>				
Bear Creek	def	20	0	20
	pros	1	0	1
	pas	0	1	1

141 def + pros
Final count

2
0
0
2

Bull Trout Spawning Ground Survey

Stream: Crow Creek
 Date: 9/10/02
 Location: Index area
 Water Temp.: 45°F @ 8:50
 Investigator: Cummins/Crocci
 Start Time: 8:45 am
 End Time: 1:20 pm

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

Bull Trout Observed:
 Tagged: No Tagged fish
 Untagged: 5 4 ≈ 20" 1 ≈ 12" all on redds
 Sub-adults: -
 Juvenile: -

Comments: 1 redd with 2 fish, est. 20 + 23." 1 redd with 3
fish. 20-22" + 1-12". All fish on redds.
Also saw salmonids from fry to 10," probably Ct.
1 redd + 2 fish below beaver pond area, all
others above. 2 redds + 3 fish at very upper
end of index area. Flag at upper end of index
area.

2
0
0
2

9-24-02

Crow Cr. 0830-1315

440K

G. Torretta E. Anderson

Old Def III

Old Pos. +

New Def III

No Fish Observed.

Bull Trout Spawning Ground Survey

Stream: Union Cr. | Kettle Cr | American R
 Date: 9/9/02

Location: American R to Falls | Lower 1/2 m | Mesatchie Cr to camp above Lodgepole

Water Temp.: 45°K Union + Kettle, 47 American near Mesatchie CG

Investigator: Groski, Reis, Cummins

Start Time: 10:00

End Time: 1:45

Redds:	1 Union	2 Kettle	New 3 American	Union	Old Kettle	American
Definite:	<u>9</u>	<u>1</u>	<u>3</u>			
Probable:	<u>0</u>	<u>0</u>	<u>0</u>			
Possible:	<u>2</u>	<u>0</u>	<u>0</u>			

Bull Trout Observed:	Union	Kettle	American
Tagged:	<u>0</u>	<u>0</u>	<u>0</u>
Untagged:	<u>2</u>	<u>0</u>	<u>1</u>
Sub-adults:	<u>0</u>	<u>0</u>	<u>0</u>
Juvenile:	<u>0</u>	<u>0</u>	<u>0</u>

Comments: 1 BLC adult mort in Union Cr
1 BLC 15" mature male - American R below Union Cr, -
no hooking scars or marks on carcass.

2002

India Cr - N. Spring 2 det 1 pos 1 untagg fish 9/8

9/23/02 1030 - 1315 Hrs.

American R. Masatchee Cr. Tr Xing
to Hwy xing near Lodgepole
(1st turnout past Hwy 310 Lodgepole
C.G. Bridge).

E. Anderson

42°F

Old Det → III

New Det → I

No Fish Observed.

From: "Karin Y Reiss/R6/USDAFS" <kreiss@fs.fed.us>
 To: "Eric Anderson" <ANDEREA@dfw.wa.gov>, <ANDEREA@dfw...
 Date: Mon, Sep 23, 2002 6:21 PM
 Subject: Re: Redd Surveys - American

Hello Eric -

Here's our data from today (9/23/02):

1 Kettle Creek - 1 old def
 2 new def
 1 new prob
 1 new poss (for what it's worth, which is not
 much I guess!)
 TOTAL: 4

2 Union Creek - 8 old def
 2 old poss > now 2 def
 6 new def
 2 new prob
 TOTAL: 18

3 American (below Union) - 1 new def

Talk to you soon,
Yuki

*Discussed w/ Yuki on 9/23 - No Fish observed.
 Fish have left Union Cr.*

E. Anderson

2
0
0
2

From: "Gary D Torretta/R6/USDAFS" <gtorretta@fs.fed.us>
To: "Eric Anderson" <ANDEREA@dfw.wa.gov>, <ANDEREA@dfw...>
Date: Tue, Sep 17, 2002 2:48 PM
Subject: Rattlesnake redd survey

Eric, here are the numbers for Rattlesnake Creek: Survey dates September 11 and 12. One item of note is that I saw several large redd areas where it was difficult to determine if they were multiple redds or just one. These mainly were seen in the L. Wildcat to McNeil Creek section. These would have 2-3 pockets, with mounds that all were close together and intermingled. One of these sites I called multiple redds, and another I called one redd. On the single redd call I left a note on the flag for second pass surveyors to give a second opinion. Just a heads up to watch for. Hope Jim and Steve has fantastic weather like we did!

Gary

1

1114 trail crossing to MJB trail crossing (9-11)

Definite - 0
 Probable - 0
 Possible - 2
 Fish - 0

2

MJB trail to Shell Creek: (9-11 and 9-12)

Definite - 16
 Probable - 1
 Possible - 2
 Fish - 8

3

Shell Cr. to L. Wildcat Cr. (9-11)

Definite - 5
 Probable - 2
 Possible - 1
 Fish - 7

4

L. Wildcat to McNeil Cr. (9-11)

Definite - 21
 Probable - 3
 Possible - 0
 Fish - 4

5

Little Wildcat Cr. (9-11)

Definite - 6
 Probable - 2
 Possible - 2
 Fish - 2

6

Shell Creek (9-12)

Definite - 2
 Probable - 0
 Possible - 0
 Fish - 0

TOTAL

Definite - 50
 Probable - 8

2
0
0
2

Possible - 7
Fish - 21

Gary Torretta - District Fisheries Biologist
Naches Ranger District, Wenatchee National Forest
(509) 653-2205 ext 260
email: gtorretta@fs.fed.us

2
0
0
2

S.F.
80



ROUTING SLIP
SF 80 F

DATE

TO

ADDRESS

Cammins & Anderson

MAIL STOP

FROM

MAIL STOP

PHONE

()

OCT () 15 '02 FAX

- For Action
- For Approval
- For Signature

- Per Your Request
- Read and Return
- For Your Information

- Per Our Conversation
- Read & Route to Files
- For Your Comments

Rattlesnake Cr.

Bull Trout Region

Survey Hook-n-Like.

— Post spawners

Bulls about 10 in
the 2nd pool & 3rd pool above

No F. confluence

1 caught Hook-n-like.



Bull Trout Spawning Ground Survey

Stream: Rattlesnake Cr
Date: 9/23/02

Location: 1114 trail to McNeil + L. Wildcat

Water Temp.: 41° F

Investigator: Tim Cummins + Steve Croce

Start Time: ≈ 9am - 4pm

End Time: 4pm

Redds:

	New	Old
Definite:	<u>see attached</u>	
Probable:	_____	_____
Possible:	_____	_____

Bull Trout Observed:
Tagged: _____
Untagged: 1
Sub-adults: _____
Juvenile: _____

Comments: _____

2
0
0
2

Rattlesnake Creek - J. Cummins + S. Croci 9/23/02
 WDFW USFWS

			Old	New	Total	
1	1114 to MJB	def	0	1	1	
		prob	0	0	0	
2	MJB to Shell Cr	def	16	3	19	
		prob	0	1	1	
3	Shell Cr to Wildcat Cr	def	3	6	9	
		prob	1	0	1	
4	Little Wildcat Cr	def	6	5	11	
		prob	1	0	1	2
5	Little Wildcat to McNeil	def	20	3	23	0
		prob	1		1	0
Grand Total					67	2
Shell					+ 2	69

Eric's Summary Note:

Dec 23, 2002

Gary Torretta USFS Noted 2 Def in Shell Cr on previous pass thus 2 Def added to above total $67 + 2 = 69$ Total Adds.

We have been doing occasional spot checks of lower shell in previous years but did not see redds. Observed this year + added to total. E. Melan...

From: Eric Anderson
To: Gary Torretta
Date: Mon, Dec 23, 2002 1:51 PM
Subject: Rattlesnake Bull Trout Redd Count - 2002

Gary,
Here is the final bull trout redd count (by section) for the Rattlesnake (these were the counts for the final pass on 9/23):

1

1114 to MJB
Def 1
Pro 0

2

MJB to Shell
Def 19
Pro 1

3

Shell to L. Wildcat
Def 9
Pro 1

4

L. Wildcat to McNeil
Def 23
Pro 1

5

L. Wildcat
Def 11
Pro 1

6

Shell
Def 2
Pro 0

Season Total
Def + Pro = 69 Redds

Mainstem Temp 41 F
Only 1 bull trout was observed on the final pass.

End

Summary Only

see next page for detail

2002

9-3-02 M.F. Ahtanam
Survey for bull t. redds
spawning activity. E. Anderson
0700 - 0920 Hrs.

New Redds ♂

" " Pro. ♀

New Pos. III (3)

Fish IIII (45)

hanging in area below braids.

Appears spawning is just beginning.

started at a point 4 miles upstream of the MF/NF junction and surveyed upstream to the DNR Treephones Camp Ground. (This start point is about 2 miles downstream of the campground at a pull off camp site next to the gravel road that borders the stream)

From: <Scott_Deeds@r1.fws.gov>
 To: "Eric Anderson" <ANDEREA@dfw.wa.gov>
 Date: Tue, Sep 17, 2002 2:05 PM
 Subject: redd survey results

Eric,

First I would like to thank you for having us down your way and showing us some of your bull trout areas. It is always great to see new places, meet new people, and develop lasting partnerships as well as friendships. Here is a quick summary of what Toni and I observed.

N.F. Ahtanum

1

North Fork Ahtanum Creek (9/12/02)

Started at last camp site approx. three miles above the mouth - this is the camp site before the road leaves the creek, it was approx 2.5 road miles up to Gray Rock Trailhead.

start time 1050 hr - water temp. = 8 degrees Celsius
 end time 1530 hr at Gray Rock

No redds observed, however we saw lots of fish, most were likely cutthroat but we did positively identify several bull trout in this section.

2

Middle Fork Ahtanum Creek (9/13/02)

Started at pull off/camp site approx 4 miles up from mouth (2 miles below Tree Phones)

start time 1000 hr - water temperature = 6 degrees Celsius
 1010 hr, one definite redd, one fish (approx. 11 inches) on the redd
 1045 hr, one definite redd
 1105 hr, one definite redd
 1130 hr, one probable redd
 1200 hr, one definite redd
 1210 hr, one definite redd
 1220 hr, one definite redd
 end survey at 1330 hr

Did not record poss. bles!

*6 DAF.
 Season Total?
 Re-check index*

2002

That's it for now - I will be leaving mid day on Thursday and won't be back until Oct. 7 if you have any questions.

Talk to ya later,
 Scott

M.F. Ahtanum

Scott Deeds
 Fish and Wildlife Biologist
 U.S. Fish and Wildlife Service
 Upper Columbia Fish and Wildlife Office
 11103 E. Montgomery Drive
 Spokane, WA 99206
 509-893-8007
 scott_deeds@fws.gov

M.F. Antanum Creek 9-13-02

E. Anderson + B. Rogers (YV)

1015 - ^{WDFW} 1145 HRS. Bull T. Redd count

Treephones to upstream past
falls. 450F.

.25 mile above falls

Spot check for redds.

No Redds Found - Not
Index area.

Some CT observed.



Bull Trout Spawning Ground Survey

Stream: Middle Fork Antanum

Date: 9/20/02

Location: 4 miles upstream from UF + NF junction to Tree Phones Cr.

Water Temp.: 41°F

Investigator: J Cummins

Start Time: 0910

End Time: 1305

Redds:	New	Old
Definite:	<u>1</u>	<u>4</u>
Probable:	<u>0</u>	<u>2</u>
Possible:	<u>3</u>	<u>0</u>

ok
6 Total
for Season

Bull Trout Observed:
Tagged: _____

Untagged: 1

Sub-adults: _____

Juvenile: _____

Comments: ok
Cleaned 2 old rds to new pos.
Saw 3-4 6-8" Gt.
No Fish [Balls] in area.

2
0
0
2

Nov. 8, 2002

Upper Kachess R. Bull Trout Spawner
Survey, Start 1030 Hrs,

E. Anderson + J. Cummins

H₂O Temp, 38°F

No Fish or Redds Observed.

River was dry approx. $\frac{1}{2}$ mile
downstream of trail x-ing.

End 1200 Hrs.

N.F. Ahtanum Creek 9-9-02

E. Anderson 0945 Hrs, 42.6°F

Grey Rock to Shellneck

New Def. 11 (2)

old Def. 11 (2)

Fish 11 (2)

Shellneck creek 42.5°F

1240 Hrs.

New Def. 111

" Pro 1

Fish 11 (2)

End 1440 Hrs.

N. F. Ahtanum Creek

Grey Rock to Shellrock Cr.

9-16-02 H₂O Temp. 46°F

1010 - 1250 Hrs.

Old Det. 1111

New " 1

New Pro. 1

Fish 1

New Pos. 1

Shellneck Cr.

Old Det. 111

Old Pro. + changed to New Det.

New Det. ~~111~~

New Pro. 1

Fish 1111 (4)

Nov. 8, 2002 1245 Start
Cooper R. Hook-n-Line Survey.

Followup to an Oct. 18 Report
of spawning bull trout (Joel Freudenberger)
E. Anderson + J. Cummins.

Surveyed $\frac{1}{2}$ mile of stream approx.
start $\frac{1}{4}$ mile above Trailhead to upstream.

Observed multiple redds in
riffle areas \approx 30 redds +
15 brown trout. No bull
trout caught or observed.

Brown trout ranged about 11-14"
Caught + released 1 brown (Cummins)
Difficult to catch. (11 $\frac{1}{2}$ ")

Redds were approx range of
10" x 18" to 12 x 24"

H₂O Temp, 40°F,

Spawning appeared to be nearly over.

9-3-02 1000 - 1500 hrs.
N.F. Ahtanum Bull T. Redd Count
Grey Rock T. H. Br. to Shellneck cr.
E. Anderson H₂O Temp. 46.4°F
Def. 11

Prob. 1 No Redds in
Pos. Shellneck.

Fish 1

Steve Wetzel, DNR accompanied
Eliminated 1 ^{or 1 possible} previously marked probable
redd recorded by Brandon Rogers (YN)
at cow flats, 1st evidence of
cow (track) at cow flats. Some
elk tracks present.

1 Redd above & 1 below Snow Cabin.
1 Probable below.

Saw 1 large 14-15" bull not
on redd.

Few cattle & elk sign - a few tracks.
Some cow & elk tracks near
Snow Cabin. Not a lot of sign.

9-9-02

0945 - 1400 Hrs. - N.F. + Shellneck

N.F. Ahtanum Bull T Redd Count
Grey Rock T.H. Br. to Shellneck Cr.

E. Anderson H₂O Temp 42.6°F

Old Definite Redds 11⁽²⁾

New " " " 11⁽²⁾

Fish (Bull T.) 11⁽²⁾

1

- Very little cattle sign in the area.
- Permittees keeping cows out (herding).
- Conditions look much better

Shellneck Cr. 9-9-02

Temp. 42.1 @ 1240 Hrs

New Definite Redd 111⁽²⁾

" Pos. 1

Fish 11⁽²⁾

2

Did not see cows in the area.

9-16-02

N.F. Ahtanum Bull Tr. Redd Comit
Grey Rock to Shellneck Cr.
E. Anderson 1010-1250 Hrs

H₂O Temp 46°F

Old Def. Redds IIII

New " " I

New Probable Redd I

Fish IIII

New Possible I

A little more cattle sign than
last survey but conditions
much better than previous years.
(Permittees herding).

1

Shellneck Cr. 9-16-02

Temp 43.0°F

Old Def. Redd III (3)

New Def. " IIII (5)

New Pro Redd I

Fish IIII

No cattle observed on this date.
Conditions better.

2

10-1-02

N.F. Ahtanum Cr. Bull Tr. Redd Count
Gray Rock to Shellneck Cr. + Up
E. Anderson 1030-1630 Hrs.
old Def. Redds III

1

New " " 1 (1 old Probable
New + old Possible & (changed to Def.)

Fish & spawning complete.

- Noted more fresh cattle sign
in upper area of the index.

Fresh cattle trail, hoof shear along
banks + gravel bars by redds
below junction of Shellneck Cr.

Trailing across redd in the flat below
shellneck - *Ask Stan Emerick about?

- Cows came in at end of season.

Shellneck Cr. 10-1-02

old Def. III III

2

old Pro changed to new definite

New Def. III Fish &

A lot more sign of recent cattle
activity in shellneck area +
below confluence.