

**Upper Hayden Cattle & Horse Allotment's
2013 Annual Monitoring Report
for the
US Fish and Wildlife Service's 6/8/2010 Biological Opinion
(File # 114.0600, 14420-2010-F-0308)**

APPENDIX C

Annual Monitoring Report Form for Actions covered under the Service's Biological Opinion for Grazing on Allotments Managed by the Salmon Challis National Forest.

Please submit annually by March 1 to the Supervisor of the Service's Eastern Idaho Field Office, 4425 Burley Dr., Suite A, Chubbuck, Idaho 83202; telephone (208)237-6975. Please include name and contact information in case additional information is needed.

1. What were the names of the stream in this allotment surveyed for impacted redds?

Bear Valley Creek, Hayden Creek and Kadletz Creek. See attached bull trout redd surveys.

2. What was the date of the survey, and what were the water conditions?

The Bear Valley Creek survey dates were 8/29/2013 and 9/5/2013 and the water conditions were normal and clear. The Hayden Creek survey dates were 8/28/2013, 8/29/2013 and 10/24/2013 all with water conditions that were normal and clear. The Kadletz Creek survey date was 9/5/2013 with water conditions that were normal and clear. See attached bull trout redd surveys.

3. Which stream segment was surveyed and how many redds and impacted redds were found? (Please give GPS start and stop points for segments)?

There were five bull trout redds observed and no bull trout redds were impacted by livestock trampling during all six bull trout redd surveys. See attached bull trout redd surveys.

Hayden Creek (8/28/2013):

The GPS UTM starting location was Zone 12T, Easting 0285316, Northing 4959871

The GPS UTM stopping location was Zone 12T, Easting 0285292, Northing 4958945

Bear Valley Creek (8/29/2013):

The GPS UTM starting location was Zone 12T, Easting 0285003, Northing 4961770

The GPS UTM stopping location was Zone 12T, Easting 0281862, Northing 4962689

Hayden Creek (8/29/2013):

The GPS UTM starting location was Zone 12T, Easting 0285319, Northing 4959874.
The GPS UTM stopping location was Zone 12T, Easting 0285641, Northing 4960850

Bear Valley Creek (9/5/2013):

The GPS UTM starting location was Zone 12T, Easting 0282970, Northing 4961688
The GPS UTM stopping location was Zone 12T, Easting 0283069, Northing 4961574

Kadletz Creek (9/5/2013):

The GPS UTM starting location was Zone 12T, Easting 0283016, Northing 4961541
The GPS UTM stopping location was Zone 12T, Easting 0280790, Northing 4961227

Hayden Creek (10/24/2013):

The GPS UTM starting location was Zone 12T, Easting 0285311, Northing 4959875
The GPS UTM stopping location was Zone 12T, Easting 0285293, Northing 4958940

4. What was the date that livestock removed from the pasture with surveyed stream segment?

8/28/2013 Hayden Creek – Boulder Flat Unit - According to the Actual Use On/Off dates given to the Forest by the Permittee livestock were in the Boulder Flat Unit between 7/1 and 7/21.

8/29/2013 Bear Valley Creek – Kadletz Creek Unit - According to the Actual Use On/Off dates given to the Forest by the Permittee livestock were in the Kadletz Creek Unit between 8/23 and 9/6.

8/29/2013 Hayden Creek – Survey downstream of Upper Hayden Allotment and survey reach was not within any allotment.

9/5/2013 Bear Valley Creek – Kadletz Creek Unit - According to the Actual Use On/Off dates given to the Forest by the Permittee livestock were in the Kadletz Creek Unit between 8/23 and 9/6.

9/5/2013 Kadletz Creek – Kadletz Creek Unit - According to the Actual Use On/Off dates given to the Forest by the Permittee livestock were in the Kadletz Creek Unit between 8/23 and 9/6.

10/24/2013 Hayden Creek - Boulder Flat Unit – According to the Actual Use On/Off dates given to the Forest by the Permittee livestock were in the Boulder Flat Unit between 7/1 and 7/21. This survey was completed to look for redd trampling impacts after livestock were trailed off the allotment.

See attached bull trout redd surveys.

See attached Upper Hayden C&H Allotment's 2013 End of the Year Report.

5. Did this number exceed the scale anticipated in section VII of the Biological Opinion?

NO

6. Were there any changes to the grazing management that differed from the proposed grazing management in the Forest's Biological Assessment? If yes, what were they?

No. See attached Upper Hayden C&H Allotment's 2013 End of the Year Report.

7. Were there any unexpected circumstances or events that resulted in impacts beyond those anticipated in the Forest's Biological Assessment or the Service's Biological Opinion? If yes, please describe.

There were no unexpected circumstances or events that resulted in impacts beyond what the forest anticipated in the 2010 Biological Assessment.

Salmon-Challis National Forest Official:



Daniel A. Garcia
Salmon-Challis National Forest
North Zone Districts Fishery Biologist

Date:

2/28/2014

Contact Information:

Salmon/Cobalt Ranger District, 311 McPherson St South, Salmon, ID 83467
(208) 756-5237 or dgarcia@fs.fed.us

The attached Upper Hayden C&H Allotment's 2013 End of the Year Report was prepared by: Sara Norman – Range Management Specialist (Leadore Ranger District) (208) 768-2505 or scnorman@fs.fed.us

Results of the Range Allotment's implementation and effectiveness monitoring will be available at the following website: <http://www.fs.fed.us/r4/sc/projects/range/index.html>.

The attached Bear Valley Creek, Hayden Creek and Kadletz Creek bull trout redd surveys were reviewed and finalized by: Daniel A. Garcia - North Zone Districts Fishery Biologist (Salmon/Cobalt Ranger District)

UPPER HAYDEN C&H ALLOTMENT

2013 END OF YEAR REPORT

Leadore Ranger District

North Zone Salmon-Challis National Forest Service

MANAGEMENT:

Permittee	Term Grazing Permit			2013 Authorized Use			Actual Use		
	Number	HM	Season of Use	Numbers	HM	Season of Use	Numbers	HM	Season of use
Shiner Ranches 500 c/c	500 c/c	1512	7/1-9/30	500 c/c	1512	7/1-9/30	475 c/c & 25 bulls	1479	7/1-9/28

2013 Rotations (Actual Use):

Unit	Numbers (Actual use)	Authorized Season of Use	Actual Season of Use	Head Months
Boulder Flat	475 c/c & 25 bulls	7/1-7/21	7/1-7/21	345
Payne Ford	475 c/c & 25 bulls	7/22-8/22	7/22-8/22	526
Kadletz	475 c/c & 25 bulls	8/23-9/10	8/23-9/6	247
Upper Hayden	75 c/c & 25 bulls	8/23-9/10	9/7-9/28	72
Tobias/Mogg	400 c/c	9/11-9/30	9/11-9/28	237
Apple Creek	REST	REST	REST	0

Compliance with Unit Schedule in AOI: Actual use was for the same as authorized and permitted numbers. The permittee left the allotment 2 days prior to permitted off dates.

Unit moves complied with critical dates for cattle presence with spawning and incubating fish, per the Biological Assessment, USFWS 2010 Upper Hayden C&H Biological Opinion and the NMFS 2010 Upper Hayden C&H Biological Opinion. Allotment moves were conducted by the permittee on or before scheduled move dates.

The permittee recorded a total of 90 days day riding, using 5 tons of salt and using an aircraft for 2 hours.

Allotment Inspections: Allotment inspections were conducted on the following dates: 7/1, 7/25, 8/8, 8/13, 8/26, 9/11, 9/12, 9/25 and 10/28. Allotment inspections consisted of a qualified SCNF employee working in rangeland management visiting the allotment to monitor implementation of the AOI or term grazing permit, inspect rangeland improvements, to monitor annual use indicators, or to conduct long term monitoring on rangeland health.

Compliance with Special Terms and Conditions Regarding Livestock Locations and Management Practices:

Reasonable and Prudent Measure #1 (USFWS): The whole of this report addresses this term. All conservation measures were followed.

Reasonable and Prudent Measure #2 (USFWS): The whole of this report addresses this term.

Reasonable and Prudent Measure #1a and 2a (NMFS): The whole of this report addresses this term, all conservations measures were followed and monitoring was completed, with two notable exceptions in the Tobias/Mogg unit. On 10/28, SCNF Range technicians went to completed the annual use indicator MIM surveys at the East Fork of Hayden Creek DMA (M261) and the Squaw Creek DMA (M307). They were unable to complete the surveys due to snow (please see attached photo recorded for documentation.)

Reasonable and Prudent Measure #1b and 2b (NMFS): Streambank alteration levels in the Boulder Flat, Kadletz Creek and Payne/Ford Units, met standards outlined in the BO.

Reasonable and Prudent Measure #1c (NMFS): Definitions for a DMA are the same as described in the BA, and each of the three units has at least one DMA. Streambank alteration levels were monitored at the DMA sites in the Boulder Flat, Kadletz and Payne/Ford Units within two weeks of cattle leaving the unit.

Reasonable and Prudent Measure #1d (NMFS): All three units met streambank alteration standards, the adaptive management strategy did not need to implemented.

Reasonable and Prudent Measure #1e and e (NMFS): During the 2013 grazing season, SCNF employees met with the permittee to discuss standards and move triggers identified on the Upper Hayden C&H Allotment.

Reasonable and Prudent Measure #1f and 2f (NMFS): An AOI meeting was scheduled with the Upper Hayden Creek permittee in the spring to discuss the specific actions necessary to protect spawning areas.

Reasonable and Prudent Measure #1g and 2g: The permittee recorded riding a total of 90 days on the allotment, more than twice a week, including when the cattle were in the Kadletz Creek, Boulder Flat and Payne/Ford units.

Reasonable and Prudent Measure #1h and 2h: Riders took all practical measures to keep cattle on established ford crossings during trailing operations between units and off the allotment. On 9/11, the permittee called the SCNF to receive permission to trail across Hayden Creek in the Boulder Flat Unit,

along the road. This area of the creek was near a known bull trout redd. SCNF employees went to the site during the crossing to verify that no redds were trampled during the process.

Reasonable and Prudent Measure #1i and 2i: All improvements were properly maintained and functioned as intended. Cattle did get into the Bear Valley enclosure on a few occasions but they were promptly removed and damage to the fence was quickly fixed.

Reasonable and Prudent Measure #1j and 2j: Turnout dates, move triggers, and annual use indicators were clearly outlined in the 2013 AOI to the permittee.

Reasonable and Prudent Measure #2c, d: The whole of this report addresses this term.

Reasonable and Prudent Measure #3a: Each unit's DMA or key area was monitored during 2013, with the exception of the Tobias/Mogg DMAs (see Reasonable and Prudent Measures #1a and 2a), and upland utilization in the Upper Hayden Unit.

Reasonable and Prudent Measure #3b: The whole of this report addresses this term.

MONITORING DATA:

Annual Use Indicator Monitoring: For the 2013 grazing season, monitoring was complete at Designated Monitoring Areas (DMA) using the Multiple Indicator Monitoring (MIM) technical reference (Burton 2013). Upland monitoring was completed using the Landscape Appearance Method or Height-Weight Method (USDI, BLM 1996). Utilization for the 2013 grazing season met standards in all units. Monitoring was not completed in the Tobias/Mogg unit following the 2013 grazing season. On 10/28 SCNF Range Technicians went to the unit to complete the monitoring; however, there was too much snow to accurately conduct the survey. Upland utilization did not get measured in the Upper Hayden unit during the 2013 season. **PLEASE REFER TO THE ATTACHED TABLE AND PHOTOS FOR ANNUAL INDICATOR RESULTS.**

Improvement Monitoring:

- On September 3rd, the fence around the Bear Valley Enclosure was inspected. It was in functioning condition but will need to be reconstructed in a few locations before the start of the 2014 grazing season.
- On September 3rd, the cattle guard between the Payne/Ford and the Kadletz Creek units was inspected. It is not in functioning condition, and need to be dug out before the start of the 2014 grazing season.

Permit Administration:

- On August 8th, a SCNF employee noted that cattle were on both sides of the cattle guard between the Payne/Ford and the Kadletz Creek units. The permittee informed and sent someone up to the allotment to move the cows into the correct unit

- On August 13th, a SCNF employee noted three cows in the Bear Valley Exclosure. When SCNF Range technicians went to the allotment they did not see cattle in the exclosure, however; there were also cattle both sides of the cattle guard between the Payne/Ford and Kadletz Creek unit. The permittee was informed and said they would be moving cows into the correct unit.
- On August 26th, SCNF range technicians saw about 12 pair in the Apple Creek unit, which was rested during the 2013 grazing season. The permittee was notified, and the Fish Biologist was notified initiating the communication plan. The permittee moved the cattle back to the correct unit.
- On August 29th, SCNF employees noted two cows in the Bear Valley Exclosure. The permittee and fish biologist were notified, initiating the communication plan.
- On September 24th, SCNF range technicians noted 6 pair in the Apple Creek unit. The gate by the cattle guard had been left open. The permittee removed all livestock off the allotment on the 28th.

OTHER INFORMATION

Growing season Conditions: Precipitation for the district was well below average for 2013 (NOAA National Climatic Data Centers 2013). The precipitation information for the District is included in the table below. While this information is collected at the Leadore Ranger Station, Leadore, Idaho, and is not specific to an allotment area, it gives an idea of the available moisture on the District.

Leadore Weather

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Precip. (inches) in 2013	0.3	0.04	0.02	0.01	0.59	0.27	0.83	0.13	1.59	0.38	0.05	Not Available*	4.21
Average Precip. (in.) from 1965-2013	0.34	0.21	0.43	0.68	1.34	1.27	0.77	0.69	0.85	0.61	0.44	0.43	8.05

*Precipitation for the month of December is not yet available.

Recommendations for Future Management:

1. The SCNF will need to reconstruct portions of the Bear Valley Exclosure fence in 2014.
2. The SCNF will need to dig out the cattle guard between the Payne/Ford unit and the Kadletz Creek unit before cattle enter those units in 2014.
3. The permittee should continue to notify the SCNF if they are trailing cattle after August 15th, across streams with known bull trout redds. This allows the SCNF to be present when livestock are crossing the creek.

Sources:

Burton, T.A., S.J. Smith, and E.R. Cowley. 2011. Riparian area management: Multiple indicator monitoring (MIM) of stream channels and streamside vegetation. Technical Reference 1737-23. BLM/OC/ST-10/003+1737. U.S. Department of the Interior, Bureau of Land Management, National Operations Center, Denver, CO. 155p.

NOAA National Climatic Data Centers. 2013. "Monthly Climatological Summary (2013), Salmon KSRA, ID, US." Retrieved Nov. 8th, 2013. <www.ncdc.noaa.gov>

USDI, BLM. 1996. Utilization Studies and Residual Measurements, BLM Interagency Technical Reference, BLM/RS/ST-96/004+1730. 135p.

Western Regional Climate Center. 2013. "Monthly Climate Summary, Salmon KSRA, Idaho (105177)." Retrieved on Nov. 26th, 2013. <www.wrcc.dri.edu>

Prepared by:

A handwritten signature in cursive script that reads "Sara Norman".

Sara Norman
Range Management Specialist
December 8th, 2013

Resource Conditions and Monitoring Results on Upper Hayden C&H Allotment:

Actual Grazing Schedule			Allowable Standards					Actual Results				
Unit Name	On Date	Off Date	Date Read	Riparian			Upland	Riparian			Upland	
Boulder Flat Unit –Hayden Creek (M226)	7/1	7/21	8/8/13 Upland & Annual	Greenline Stubble	Carex Spp.	6 in.	50%	Greenline Stubble	Carex Spp.	10 in.	H-W: 5%	
				Bank Alteration	N/A	<20%		Bank Alteration	N/A	5%		
Apple Creek Unit – Apple Creek (M262)	Rest	Rest	7/25 Allotment Inspection Form 9/25/13 Annual	Greenline Stubble	Hydric Spp.	5 in.	50%	Greenline Stubble	Hydric Spp.	4 in.	H-W: 1%	
				Bank Alteration	N/A	<20%		Bank Alteration	N/A	6%		
Tobias/Mogg-East Fork Hayden Creek (M261)	9/11	9/30	7/25/13	Greenline Stubble	Carex Spp.	4 in.	50%	Greenline Stubble	Carex Spp.	No Data ¹	No Data ¹	
				Bank Alteration	N/A			Bank Alteration	N/A	No Data ¹		
				Browse Use	Alder Willow	30% 50%		Browse Use	Alder Willow	No Data ¹		
Boulder Flat – Tobias Creek (M260)	7/1	7/21	8/8/13	Greenline Stubble	Carex Spp.	4 in.	50%	Greenline Stubble	Carex Spp.	10 in.	H-W: 5%	
				Bank Alteration	N/A	<20%		Bank Alteration	N/A	12%		
Tobias/Mogg –Squaw Creek (M307)	9/11	9/30		Greenline Stubble	Hydric Spp.	4 in.	50%	Greenline Stubble	Hydric Spp.	No Data ¹	No Data ¹	
				Bank Alteration	N/A	<20%		Bank Alteration	N/A	No Data ¹		
Payne/Ford Unit – Ford Creek (M259)	7/22	8/22	8/28/13 Landscape Appearance	Greenline Stubble	Hydric Spp.	5 in.	50%	Greenline Stubble	Hydric Spp.	17 in.	LA: 27%	
				Bank Alteration	N/A	<15%		Bank Alteration	N/A	10%		
				Browse Use	Alder Willow	30% 50%		Browse Use	Alder Willow	12%		

Kadletz Unit – Kadletz Creek (M258)	8/23	9/10	9/12	Greenline Stubble	Carex Spp.	4 in.		50%	Greenline Stubble	Carex Spp.	6 in.	LA: 33%
				Bank Alteration	N/A	<20%			Bank Alteration	N/A	5%	
Upper Hayden	9/7	9/28	No Data ²	Utilization	Hydric spp.	50%		50%	Utilizaiton	Hydric spp.	50%	No Data ²

	Photo Record	Page 1 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Payne-Ford Unit, Range Readiness, 5/25/13



	Photo Record	Page 2 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Kadletz Unit, Kadletz Creek (M258), 9/12/13



Kadletz Unit, Kadletz Creek (M258), 9/12/2013

	Photo Record	Page 3 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Tobias/Mogg LUM East Fork Hayden (heavy snow prevented Range Technicians from completing the MIM survey), 10/28/13



Tobias/Mogg LUM East Fork Hayden (heavy snow prevented Range Technicians from completing the MIM survey), 10/28/13

	Photo Record	Page 4 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Boulder Flat Unit, Tobias Creek (M260), 8/8/2013



Boulder Flat Unit, Tobias Creek (M260), 8/8/2013

	Photo Record	Page 5 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Apple Creek Unit, Apple Creek LUM (M262), 9/25/13



Apple Creek Unit, Apple Creek (M262), 9/25/2013

	Photo Record	Page 6 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Apple Creek Upland, Utilization 9/25/13



Boulder Flat Unit, Hayden Creek (M226), 8/8/2013

	Photo Record	Page 7 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Boulder Flat Unit, Hayden Creek (M226), 8/8/2013



Kadletz Unit, Allotment Inspection, 8/13/2013

	Photo Record	Page 8 of 8
Intermountain Region	Salmon-Challis NF North Zone	District: Leadore
2013 End of Year Report	Observer: Range Employees	Allotment: Upper Hayden C&H Allotment
All Pastures with Completed Utilization, LUM, and MIM Sites		
Subject: EOY Photo Records for Upper Hayden C&H Allotment		



Boulder Flat Unit, Upland Utilization, 8/8/2013



Boulder Flat Unit, Upland Utilization, 8/8/2013

Biological Opinion Name: Livestock grazing on the Upper Hayden Allotment

Biological Opinion Number: 14420-2010-F-0308

Stream Name: Hayden Creek Date: 8-28-13

Allotment Name: Upper Hayden Creek Unit Name: Boulder Flat

Start Time: 10:15 Stop Time: 11:45 Number of Pictures Taken: 59

Stream Segment Length on GPS: 930m

Estimated Stream Segment Length measured with GIS: _____

Site Directions: Take Hwy 28 S. to Hayden Cr. Rd. (08) Follow (08) past Bear Valley Rd. up to fence/cattle guard turn left down to camp area. We started survey at fence line and went upstream to Bridge

Survey Crew: Bill Slavin, Katie Webster

(top) H₂O Temp: 50°F Air Temp: 67° Elevation: 6027 FT

(bottom) H₂O Temp: 50°F Air Temp: 66° Elevation: 5952

Starting Location GPS (UTM): Zone 12T Easting 0285316 Northing 4959871

Degree Decimal: N: 44.7599631726057 W: -113.712577832374

Stopping Location GPS (UTM): Zone 12T Easting 0285292 Northing 4958945

Degree Decimal: N: 44.7516291900438 W: -113.712490880819

Number of Live Adult bull trout Observed: 5 → one of the 5 was huge! 40cm or higher?

Number of bull trout Redds Observed: 1 definite large redd w/ fish on, 1 possible small redd

Number of bull trout Redds Observed that Livestock Trampled: 0

Comments: walked upstream. Cows observed in flats near the creek → 6 observed - none seen in stream. Large redd is 1m below IDFG's fish weir → 3 fish seen are too large to travel any further upstream. Weir also blocks chinook movement. Trap box is oriented to trap fish moving downstream - no upstream trap box. Opening to trap box is not readily apparant - we did not find an opening for fish to enter trap. Spoke w/ IDFG Techs checking trap - they have caught small possible redd at survey start (downstream) was 6in. diameter no fish today! → seen at cattle crossing. Didn't look like a hoof print but still not totally positive if it is really a redd. → no fish observed near redd.

Lots of open stream banks, easy access for cows to cross stream in most of... Fence across boundary at North end of Boulder Nat unit is Red.

Small possible redd: UTM → 12T 0285316 4959871

Large definite redd w/ 3 fish on: UTM → 12T 0285259 4959752
water conditions clear and normal

Biological Opinion Name: Livestock Grazing on Upper Hayden Cr. Allotment

Biological Opinion Number: 1420-2010-F-0308

Stream Name: Bear Valley Creek from D.S. end of enclosure upstream Date: 8/29/13

Allotment Name: Upper Hayden Unit Name: Kadletz Creek

Start Time: 1420 Stop Time: 1537 Number of Pictures Taken: _____

Stream Segment Length on GPS: 954m

Estimated Stream Segment Length measured with GIS: _____

Site Directions: Take Hwy 28 S to Hayden Cr. Road (008) Keep right on Road (009) to enclosure fence at bottom end & walk to top end of enclosure

Survey Crew: Katie Webster Bill Slavin

(top) H₂O Temp: 52°F Air Temp: 71°F Elevation: 6522

(bottom) H₂O Temp: 56°F Air Temp: 82°F Elevation: 6395

Starting Location GPS (UTM): Zone 12T Easting 0285003 Northing 4961770

Degree Decimal: N: 44.7763391522064 W: -113.742578376802 ✓kw

Stopping Location GPS (UTM): Zone 12T Easting 0281862 Northing 4962689

Degree Decimal: N: 44.7842544774507 W: -113.757376189727 ✓kw

Number of Live Adult bull trout Observed: 12

Number of bull trout Redds Observed: 4

Number of bull trout Redds Observed that Livestock Trampled: 0

Comments: 2 cows seen in area before survey that were removed by permittee after start of survey. As of last week no bull trout below weir near mouth of Payne creek could get up to this area. 1st redd seen was in progress w/ 2 fish on. -> Bull trout. 3rd redd seen had trampling - footprints (cow or moose?) just upstream of pot but none seen on redd pot or tailspill.

Many unknown species of yoy/Angerlings seen.

Lots of cow/moose tracks in stream area.

3-4 garter snakes seen. Water condition clear and normal

Biological Opinion Name: NO BOBiological Opinion Number: NO BOStream Name: Hayden Creek (Below Boulder Flat ^{unit}) Date: 8-29-13Allotment Name: Put in an Allotment Unit Name: N/AStart Time: 10:00 Stop Time: 11:20 Number of Pictures Taken: 32Stream Segment Length on GPS: 1.03 km

Estimated Stream Segment Length measured with GIS: _____

Site Directions: Hwy 28 S. to Hayden Cr. Rd (08) follow (08) up past Bear Valley Rd (09) to a cattle guard and fence survey started at fence and we walked downstream ~ 1.03 km

Survey Crew: Bill Slawson, Katie Webster(top) H₂O Temp: 50°F Air Temp: 61°F Elevation: 5987 FT(bottom) H₂O Temp: 53°F Air Temp: 65°F Elevation: 5898 FTStarting Location GPS (UTM): Zone 12T Easting 0285319 Northing 4959874Degree Decimal: N: 44.7599910517971 W: -113.712541232299Stopping Location GPS (UTM): Zone 12T Easting 0285641 Northing 4960850Degree Decimal: N: 44.7688642497285 W: -113.708887659654Number of Live Adult bull trout Observed: 0Number of bull trout Redds Observed: 0Number of bull trout Redds Observed that Livestock Trampled: 0

Comments: NO COWS SEEN ON DAY OF SURVEY - BUT WERE PRESENT NEAR CREEK THE DAY BEFORE -

Large boulders throughout most of survey area with some suitable gravels for Redds.

One Chinook Redd found with no fish on it - but one adult chinook female carcass found downstream ~ 75 m.

About 50% is accessible to cattle -

Water conditions were clear and normal

Biological Opinion Name: Livestock Grazing on the Upper Hayden Allotment

Biological Opinion Number: 14420-2010-F-0308

Stream Name: Bear Valley Creek Date: 9-5-13

Allotment Name: Upper Hayden Unit Name: Kadletz Creek

Start Time: 1310 Stop Time: 1330 Number of Pictures Taken: 11

Stream Segment Length on GPS: 149m

Estimated Stream Segment Length measured with GIS: _____

Site Directions: Take Hwy 28S towards Leadore, turn on Hayden Cr Rd. Rd008. Keep right on Rd 009 at intersection. drive to Bear Valley Cr enclosure + start at fence line -> walked downstream to Kadletz unit border.

Survey Crew: Bru Slavik, Katie Webster

(top) H₂O Temp: 53°F Air Temp: 71°F Elevation: 6242 ft

(bottom) H₂O Temp: 53°F Air Temp: 65°F Elevation: 6216 ft

Starting Location GPS (UTM): Zone 12 Easting 0282970 Northing 4961688

^{upstream} Degree Decimal: N: 44.776591771206 W: -113.742960046744

Stopping Location GPS (UTM): Zone 12 Easting 0283069 Northing 4961574

^{downstream} Degree Decimal: N: 44.7745968155265 W: -113.7412661713068

Number of Live Adult bull trout Observed: ∅

Number of bull trout Redds Observed: ∅

Number of bull trout Redds Observed that Livestock Trampled: ∅

Comments: 2 unkspecies fish observed > 6 in.

Sigh of cows Xing stream + being in stream area
water conditions were clear and normal

Biological Opinion Name: Livestock grazing on the upper Hayden Allotment

Biological Opinion Number: 14420-2010-F-0308

Stream Name: Kadletz Creek Date: 9-5-13

Allotment Name: upper Hayden Unit Name: Kadletz Creek

Start Time: 13:40 Stop Time: 14:05 Number of Pictures Taken: 15

Stream Segment Length on GPS: 386 meters

Estimated Stream Segment Length measured with GIS: _____

Site Directions: Take Hwy 28 S. to Hayden Cr. Rd (008) Follow Rd. (008) to Bear Valley Rd (009) Follow (009) to Kadletz Cr. Bridge - survey started at mouth of stream and went above bridge ~ 30 m.

Survey Crew: Bill Slavin, Katie Webster

(top) H₂O Temp: 53°F Air Temp: 64°F Elevation: 6324 FT

(bottom) H₂O Temp: 53°F Air Temp: 64°F Elevation: 6230 FT

Starting Location GPS (UTM): Zone 12T Easting 0283016 Northing 4961541

Degree Decimal: N: 44.7742839567512 W: -113.742316728339

Stopping Location GPS (UTM): Zone 12T Easting 0282790 Northing 4961227

Degree Decimal: N: 44.7713916931478 W: -113.745035864968

Number of Live Adult bull trout Observed: 0 2 Fish > 70m / UN KNOWN SPECIES

Number of bull trout Redds Observed: 0

Number of bull trout Redds Observed that Livestock Trampled: 0

Comments: lots of Riparian barriers to cows moderate to heavy use in crossings between Riparian zones -

Some good gravel in some areas - good cover. lots of woody debris water conditions were clear and normal

Biological Opinion Name: Livestock grazing on the upper Hayden Allotment

Biological Opinion Number: 14420-2010-F-0308

Stream Name: MS Hayden Creek Date: 10/24/13

Allotment Name: Upper Hayden Creek Unit Name: Boulder flat

Start Time: 15:25 Stop Time: 1600 Number of Pictures Taken: yes

Stream Segment Length on GPS: 937m

Estimated Stream Segment Length measured with GIS: _____

Site Directions: Take Hwy 285 to Hayden Cr. Rd 08 follow past bear valley rd up to fence/cattle guard turn left down to camp area. we started survey at fence line + walked upstream to bridge

Survey Crew: Webster Slavin

(top) H₂O Temp: 38°F Air Temp: 45°F Elevation: 6237ft

(bottom) H₂O Temp: 39°F Air Temp: 62°F Elevation: 6159ft

Starting Location GPS (UTM): Zone 12T Easting 0285311 Northing 4959875

Degree Decimal: N: 44.7599976368466 W: -113.712642622019

Stopping Location GPS (UTM): Zone 12T Easting 0285293 Northing 4958940

Degree Decimal: N: 44.7515845299265 W: -113.712476156963

Number of Live Adult bull trout Observed: 0

Number of bull trout Redds Observed: 0

Number of bull trout Redds Observed that Livestock Trampled: 0

Comments: Substrate mostly large cobble
no cows in area
clear visibility in stream