

LRC 2 Mainstem Lemhi River, Hayden Creek, Big Springs

Chinook Streamnet Miles		80.3 mi			
LRC 2 - LF 1.1 (Barriers)					
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>		Partial/seasonal barrier to Upstream migration. Panel decides miles were not the appropriate metric. Decides uplift is approximately 0.25 % based on the number of available barriers remaining in AU (see bio notes)	
L-1 Barrier Project					
Uplift	0.25%				
LRC 2 - LF 1.3					
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>			
Group decides there is no measurable improvement to this limiting factor.					
No hatchery influence in this AU.					
Consider Brook Trout, but decide no issue?					
LRC 2 - LF 2.3 (Mechanical Injury - Screens)					
<u>Action</u>	<u>Flow through screen (cfs)</u>	<u>Available Screened Flow (cfs) in AU</u>	<u>Action Uplift by Flow Proportion</u>	<u>Uplift Decided on by Panel</u>	
L-1	2.25	50	5%	1%	
LHC-8				0.25%	
Total Uplift	1.25%				
LRC 2 - Riparian Vegetation (LF 4.1)					
<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment size</u>	<u>% Improvement</u>	<u>Change</u>	
Upper Lemhi Channel - Snyder		0.5	2.1%	3%	0.06%
Mabey Lane		0.17	0.7%	2%	0.01%
HC Exclosure		0.5	2.1%	10%	0.21%
Pine Creek		2	8.2%	0%	0.00%
Amonson		0.15	0.7%	5%	0.04%
Tyler		21	86.3%	0%	0.00%
<u>Total</u>		24.32			0.32%
<u>Total Stream Miles (Denominator)</u>		80.3 mi.			
<u>Change Relative to Impaired Area (Change from above/low bookend)</u>	23.79/80.3		30%	Uplift	0.10%
24					
LRC 2 - LF 5.2 (Peripheral Habitats - Floodplain Condition)					
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>			
Upper Lemhi Channel - Snyder		0.12	13.2%		
Mabey Lane		0.17	18.7%		
Amonson		0.15	16.5%		
Pine Creek Ranch River Restoration - 2015 (one phase of multiple)		0.33	36.3%		
			0.0%		
Total		0.77			
Total Stream Miles (Denominator)		80.3 mi.			
Change Relative to Impaired Area (Change from above/low bookend)		0.96% (Uplift)	***Rounded UP to 1% - EWL 2/2/16		
LRC 2 - LF 6.1 (Channel Form)					
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>			
Upper Lemhi Channel - Snyder		0.12	13.2%		
Mabey Lane		0.17	18.7%		
Amonson		0.15	16.5%		
Pine Creek Ranch River Restoration - 2015 (one phase of multiple)		0.33	36.3%		
Lower Lemhi (Jakovic)		0.02	2.2%		
Sager		0.12	13.2%		
			0.0%		
Total		0.91	The division =		
Total Stream Miles (Denominator)		80.3 mi.		0.011332503 But the EP chose to round up to 1% **** EWL 2/2/16	
Change Relative to Impaired Area (Change from above/low bookend)		1% (Uplift)			
LRC 2 - LF 7.2 (Sediment)					
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>	<u>% Improvement</u>	<u>Changed Stream Miles</u>	

Snyder	0.12	13.2%	3%	0.0036
Mabey	0.17	18.7%	2%	0.0034
Amonson	0.15	16.5%	2%	0.003
Pine Creek Ranch River Restoration - 2015 (one phase of multiple)	0.33	36.3%	0%	0
Lower Lemhi (Jakovic)	0.02	2.2%	50%	0.01
Sager	0.12	13.2%	50%	0.06
		0.0%		0.08
Total	0.91			
Total Stream Miles (Denominator)	80.3 mi.			
Change Relative to Impaired Area (Change from above/low bookend)	0.10% (Uplift)			

LRC 2 - LF 8.1 (Temperature)

Action	Miles	Rel. Treatment Size		
Hayden Creek Exclosure Fence	0.5	100.0%		
		0.0%		
Total	0.5		Riparian Beneit	0.1%
Total Stream Miles (Denominator)	80.3 mi.		Flow Benefit	7.4%
Change Relative to Impaired Area (Change from above/low bookend)	7.5% (Uplift)			
		Added uplift scores of 4.1 and 9.2 LFs (see math above)		
		Actions from these two LFs need to be added in Taurus.		

LRC 2 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Big Springs (add)					4.5
Tyler					12.7
Lower Lemhi (2012)	16.2				
Lower Lemhi (2013)		16.2			
Lower Lemhi - Permanent					0.6
Lemhi L-1 Diversion					2.23
Lower Lemhi River (2014-2015)			15.6	15.6	
Lemhi Big Springs (2014)			4.5		
Lemhi Big Springs (2015)				4.5	
Canyon Creek (upstream AU, maybe add after doing LMC1 (tribs))					
LHC-08					1
Lemhi Little Springs Creek (L-50 and LSC03 Diversion)					0.9
Kenney Creek (2013)					0.14
Bohannon Creek (2014)			2		
Bohannon Creek (2015)				2	
Lee Creek, Big8-mile Cr Reconnects - TNC					14.5
Total	16.2	16.2	22.1	22.1	36.57
			Average of leases ==>		19.15

This was reported in Taurus multiple places, but the diversion was removed only once. Annual leases were removed to avoid double counting.

Fish screen entries are not accurate for flow benefits.

Total	55.72	
Estimated water right diversions from Lemhi (Donato Report,)	750 cfs	Lemhi Surface Water/Groundwater Report (Donato, 1998; page 11)
Change Relative to Impaired Area (Change from above/low bookend)	7.4% (Uplift)	

LRS 2 - LF 7.2

Action	Miles	Rel. Treatment Size	
Snyder		0.12	13.2%
Mabey		0.17	18.7%
Amonson		0.15	16.5%
Pine Creek Ranch River Restoration - 2015 (one phase		0.33	36.3%
Lower Lemhi (Jakovic)		0.02	2.2%
Sager		0.12	13.2%
Total		0.91	100.0%
Total Stream Miles (Denominator)		107.8 mi.	
Change Relative to Impaired Area (Change from above)		0.8% (Uplift)	

LRS 2 - LF 8.1 (Temperature)

Action	Miles	Rel. Treatment Size	
Total Stream Miles (Denominator)		107.8 mi.	Riparian Benefit 0.07%
Change Relative to Impaired Area (Change from above)		7.8% (Uplift)	Flow Benefit 7.70%

LRS 2 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent	Rel. Treatment Size
Big Springs (add)					4.5	0.0%
Tyler					12.7	0.0%
Lower Lemhi (2012)	16.2					0.0%
Lower Lemhi (2013)		16.2				0.0%
Lower Lemhi - Permanent					0.6	0.0%
Lemhi L-1 Diversion					2.23	0.0%
Lower Lemhi River (2014-2015)				15.6	15.6	2.1%
Lemhi Big Springs (2014)				4.5		0.0%
Lemhi Big Springs (2015)					4.5	0.6%
Canyon Creek (upstream AU, maybe add after doing LMC1 (tribs))						
LHC-08					1	
Boh Diversion					2	
Kenny Creek					0.14	
Bohannon IDWR				2		
Bohannon Creek - Early Season					2	
Lemhi Little Springs Creek (L-50 and LSC03 Diversion)					0.9	
Lee Creek, Big8-mile Cr Reconnects - TNC					14.5	
Total	16.2	16.2		22.1	22.1	38.57

Average of leases ==> 19.15

Total	57.72		31.2
Estimated water right diversions from Lemhi (Donato	750 cfs	Lemhi Surface Water/Groundwater Report (Donato, 1998; page 11)	
Change Relative to Impaired Area (Change from above	7.7% (Uplift)		

LRC1 **Disconnected Lemhi River tributaries and Carmen Cr.**

Chinook Miles	60 mi	Decided on my the group based on 2012 pan
LRC 1 - LF 1.1, Barriers		
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Carmen Creek Diversion #3 (SCC-03)	1	3.4%
Little Springs	3.8	12.9%
Hawley	7.13	24.1% modified to match LRS3 1.1 (see LRS-3 tab for explanation)
18 Mile	3.3	11.2% modified to match LRS3 1.1 (see LRS-3 tab for explanation)
4th of July	8.5	28.8% modified to match LRS3 1.1 (see LRS-3 tab for explanation)
Agency	0.1	0.3%
Canyon	1	3.4%
Bohannon	0.2	0.7% lower number for chinook than steelhead due to fish use distribution
Pratt	0	0.0%
Kenney	0	0.0%
Wimpy	1.5	5.1%
Tower	0	0.0%
Lee	1	3.4%
		In Taurus as one action with Lee (2013 - Lemhi - Lee Creek, Big Eightmile Creek Reconnects Habitat Enhancement and Reconnection / Lemhi River Flow
Big Eight	2	6.8% Enhancement Project - TNC; 3 miles)
Total Treatment	29.53	100.0%
Total Stream Miles (Denominator)	60 mi.	
Change Relative to Impaired Area (Change from above/low bo	49% (Uplift)	

LRC 1 - LF 2.3

	<u>Design Flow of</u>	
<u>Action</u>	<u>Screen (cfs)</u>	<u>Rel. Treatment Size</u>
Scc-12	6	9.2%
SCC-14	16	24.6%
LBC-07	5	7.7%
LBC-09	8	12.3%
SCC-13	7.4	11.4%
STC-03	2	3.1%
LHAWC-03	12.25	18.9%
SCC-03	7.27	11.2%
SToC-02	1	1.5%
		0.0%
		0.0%
Total	64.9	100.0%
Estimate of total trib diversions is the difference between total diversions (1500 cfs, Donato) and the mainstem (750 cfs), plus 200 cfs for Carmen Cr, Tower, and 4th of July Creeks, plus main Salmon River		
Total Stream Miles (Denominator)	950 cfs	
Change Relative to Impaired Area (Change from above/low bo	6.8% (Uplift)	Lemhi Surface Water/Groundwater Report (Donato, 1998; page 11)

LRC 1 - LF 4.1

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatme</u>	<u>% Improvement</u>	<u>Changed Miles</u>
Lower Little Springs (enclosure fence)	0.4	8.7%		0.04
Lee Creek Fencing (2013) - Big 8-Mile Creek	1.5	32.6%		0.3
Lee Creek Fencing - SBT	1.5	32.6%		0.3
Upper Little Springs - TroutUnlimited	1.2	26.1%		0.06
Total	4.6			0.7
Total Stream Miles (Denominator)	60 mi.			
Change Relative to Impaired Area (Change from above/low b	1.2%			

LRC 1 - LF 5.2

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment size</u>
Lower Little Springs - IDFG	0.4	28.6%
Lee Creek Fencing (2013) - Big 8-Mile Creek	1	71.4%
		0.0%
<i>Total</i>	1.4	100.0%
Total Stream Miles (Denominator)	60 mi.	
Change Relative to Impaired Area (Change from above/low bo	2.3%	

LRC 1 - LF 6.1

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Lower Little Springs - IDFG	0.4	15.4%
Lee Creek Fencing (2013) - Big 8-Mile Creek	1	38.5%
Upper Little Springs Channel Complexity	1.2	46.2%
		0.0%
Total	2.6	
Total Stream Miles (Denominator)	60 mi.	
Change Relative to Impaired Area (Change from above/low bo	4.3%	

LRC 1 - LF 6.2

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Lower Little Springs - IDFG	0.4	15.4%
Lee Creek Fencing (2013) - Big 8-Mile Creek	1	38.5%
Upper Little Springs Channel Complexity	1.2	46.2%
		0.0%
Total	2.6	
Total Stream Miles (Denominator)	60 mi.	
Change Relative to Impaired Area (Change from above/low bo	4.3%	

LRC 1 - LF 7.2

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatme % Improvement</u>	<u>Changed Miles</u>
Lower Little Springs (enclosure fence)	0.4	8.7%	10% 0.04
Lee Creek Fencing (2013) - Big 8-Mile Creek	1.5	32.6%	20% 0.3
Lee Creek Fencing - SBT	1.5	32.6%	20% 0.3
Upper Little Springs - TroutUnlimited	1.2	26.1%	5% 0.06
		0.0%	0% 0
Total	4.6	100.0%	0% 0
Total Stream Miles (Denominator)	60 mi.		0.7
Change Relative to Impaired Area (Change from above/low bo	1.2% (Uplift)		

LRC 1 - LF 8.1 (Temperature)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Total		Riparian Uplift (LF 4.1) 1.2%
Total Stream Miles (Denominator)	mi.	Instream Flow Uplift (LF 9.2) 2.9%
Change Relative to Impaired Area (Change from above/low bo	4.1% (Uplift)	
		Added uplift scores of 4.1 and 9.2 LFs (see math above)
		Actions from these two LFs need to be added in Taurus.

LRC 1 - LF 9.2

<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
Carmen Creek (SSC-03, 2014)					1.2
Bohannon Creek (permanent)					2
Lemhi Little Springs Creek (L-50 and LSC03 Diversion)					0.9
Kenney Creek (2013)					0.14
Bohannon Creek (2014)				2	
Upper Hawley					5.3
Carmen - 20yr source switch BS (2015)					1
Carmen - 20yr source switch DS (2015)					1
Bohannon Creek (2015)				2	
Lee Creek, Big8-mile Cr Reconnects - TNC					14.5
Hawley-18 mile LSWCD					0.7

This was reported in Taurus multiple places, but the diversion was removed only once. Annual leases were removed to avoid double counting.

Fish screen entries are not accurate for flow benefits.

Total	0	0	2	2	26.74
		Average of leases ==>		1	
Total	27.74				
Estimated water right diversions from Lemhi (Donato Report,)	950 cfs	Estimate of total trib diversions is the difference between total diversions (1500 cfs, Donato) and the mainstem (750 cfs), plus 200 cfs for Carmen, Tower, and 4th of July Creeks, plus main Salmon River. (same rationale as LF 2.3)			
Change Relative to Impaired Area (Change from above/low bo	2.9% (Uplift)				

LRS1 **Carmen, Bohannon, Wimpy, Kenny Creeks**

Steelhead Miles

40 mi

LRS 1 - LF 1.1 (Barriers)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Carmen Creek Diversion #3 (SCC-03)	1	11.3%
Bohannon Diversion	2.3	26.0%
Kenny	0	0.0%
Wimpy Back Rd	1.5	16.9%
Bohannon Low Culvert (LSWCD)	0.5	5.6%
Bohannon Back Rd (IDFG)	0.25	2.8%
Bohannon Up Culvert	3.3	37.3%
 Total Treatment	 8.85	 100.0%
Total Stream Miles (Denominator)	40 mi.	
Change Relative to Impaired Area (Change from above/low bookend)	22.1% (Uplift)	

LRS 1 - LF 2.3 (Fish Screens)

<u>Action</u>	<u>Design Flow of Screen (cfs)</u>	<u>Rel. Treatment Size</u>
SCC-12	6	12.1%
SCC-14	16	32.2%
LBC-07	5	10.1%
LBC-09	8	16.1%
SCC-13	7.4	14.9%
SCC-03	7.27	14.6%
		0.0%
Total	49.7	100.0%
Total Flow (Denominator)	160 cfs	
Change Relative to Impaired Area (Change from above/low bookend)	31.0% (Uplift)	

Lemhi Surface Water/Groundwater Report (Donato, 1998; page 11)

LRS 1 - LF 8.1 (Temperature)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Total	#REF!	Riparian Uplift (L 0.0%
Total Stream Miles (Denominator)	mi.	Instream Flow U 4.0%
Change Relative to Impaired Area (Change from above/low bookend)	4.0% (Uplift)	

Added uplift scores of 4.1 and 9.2 LFs (see math above)
Actions from these two LFs need to be added in Taurus.

LRS 1 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Boh Diversion					2
Kenny Creek					0.14
Bohannon IDWR			2		
Carmen Creek (SCC-03)					1.2
Bohannon Creek - Early Season				2	
Carmen Creek BS					1
Carmen Creek DS					1
Total	0	0	2	2	5.34
			Average of lease	1	

Total	6.34	
Estimated water right diversions from Lemhi (Donato Report,)	160 cfs	Same demoninator as LF 2.3
Change Relative to Impaired Area (Change from above/low bookend)	4.0% (Uplift)	

LRS3 Other Salmon & Lemhi R seasonally & disconnected tribs

Steelhead Miles	140 mi	Increase the 60 mile number (LRC1) by a factor of 3, minus the three excluded tributaries (40 miles, these have their own assessment unit (LRS-1)).	
		Excluded Tributaries (LRS-1) Carmen, Bohannon, Wimpy, Kenny Creeks	
LRS 3 - LF 1.1			
<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>	
Little Springs	3.8	13.7%	
			added 2013 - Hawley Creek Culvert to Bridge Replacement (Private) – LSWCD- 4.7 miles; 2013 - Hawley Creek Culvert to Bridge Replacement Project (BLM) – LSWCD- 0.13 miles; 2014 - Lower Hawley Creek County Road Culvert to Bridge – LSWCD- 0.8 miles; 2014 - Upper Hawley Creek Water Rights Transfer (LHaC-03) – LSWCD- 1.5
Hawley	7.13	25.6%	miles for a total of 7.13 miles; added 2013 - Eighteen mile Creek Railroad Grade Culvert Replacement – LSWCD- 2 miles (estimate as per JT) miles; 2015 - Hawley-Eighteenmile Creek Intercept
18 Mile	3.3	11.9%	Removal – LSWCD – 1.3 miles = 3.3
4th of July	8.5	30.5%	miles - added 12.23.15
Agency	0.1	0.4%	
Canyon	1	3.6%	
Tower	0	0.0%	
Lee	1	3.6%	
			In Taurus as one action with Lee (2013 - Lemhi - Lee Creek, Big Eightmile Creek Reconnects Habitat Enhancement and Reconnection / Lemhi River Flow
Big Eight	2	7.2%	Enhancement Project - TNC; 3 miles)
Souix Lane Culvert	1	3.6%	
Total Treatment	27.83	100.0%	
Total Stream Miles (Denominator)	140 mi.		
Change Relative to Impaired Are:	19.9% (Uplift)		

LRS 3 - LF 2.3

<u>Action</u>	<u>Design Flow of Screen (cfs)</u>	<u>Rel. Treatment Size</u>			
Hawley Creek; LHasC-03 (2014)	12.25	80.3%			
Tower (SToC-02) IDFG	1	6.6%			
STC-03 (Tower Creek)	2	13.1%			
		0.0%			
Total	15.25	100.0%			
Total Flow (Denominator)	790 cfs		See 4 trib flows to right	Carmen	100
			Referenced Danoto Report for mainstem,		
Change Relative to Impaired Area (Change)	1.9% (Uplift)		added 4 tribs	Bohannon	20
				Wimpy	25
				Kenny	15
LRS 3 - LF 4.1					160

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment % Improvement</u>		<u>Changed Miles</u>
Lower Little Springs (enclosure fence)	0.4	8.7%	10%	0.04
Lee Creek Fencing (2013) - Big 8-Mile Creek	1.5	32.6%	20%	0.3
Lee Creek Fencing - SBT	1.5	32.6%	20%	0.3
Upper Little Springs - TroutUnlimited	1.2	26.1%	5%	0.06
Total	4.6			0.7
Total Stream Miles (Denominator)	140 mi.			
Change Relative to Impaired Area (Change)	0.5%			

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment size</u>
Lower Little Springs - IDFG	0.4	28.6%
Lee Creek Fencing (2013) - Big 8-Mile Creek	1	71.4%
		0.0%
<i>Total</i>	1.4	100.0%
Total Stream Miles (Denominator)	140 mi.	
Change Relative to Impaired Area (Change)	0.6%	

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Lower Little Springs - IDFG	0.4	15.4%
Lee Creek Fencing (2013) - Big 8-Mile Creek	1	38.5%
Upper Little Springs Channel Complexity	1.2	46.2%
		0.0%
Total	2.6	
Total Stream Miles (Denominator)	140 mi.	
Change Relative to Impaired Area (Change)	1.9%	

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Lower Little Springs - IDFG	0.4	15.4%

Lee Creek Fencing (2013) - Big 8-Mile Cre	1	38.5%
Upper Little Springs Channel Complexity	1.2	46.2%
Total	2.6	
Total Stream Miles (Denominator)	140 mi.	
Change Relative to Impaired Area (Chang	1.9%	

LRS 3 - LF 7.2

Action	Miles	Rel. Treatment Size		
Lower Little Springs (enclosure fence)	0.4	8.7%	10.00%	0.04
Lee Creek Fencing (2013) - Big 8-Mile Cre	1.5	32.6%	20.00%	0.3
Lee Creek Fencing - SBT	1.5	32.6%	20.00%	0.3
Upper Little Springs - TroutUnlimited	1.2	26.1%	5.00%	0.06
Total	4.6			0.7
Total Stream Miles (Denominator)	140 mi.			
Change Relative to Impaired Area (Chang	0.5% (Uplift)			

LRS 3 - LF 8.1 (Temperature)

Action	Miles	Rel. Treatment Size		
Total	#REF!	Riparian Uplift (LF 4.1)		0.5%
Total Flow (Denominator)	cfs	Instream Flow Uplift (LF 9.2)		2.7%
Change Relative to Impaired Area (Chang	3.2% (Uplift)*			
		*Summed Riparian and Instream Flow Uplift scores		

LRS 3 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Lemhi Little Springs Creek (L-50 and LSC03 Diversion)					0.9
Upper Hawley					5.3
Lee Creek, Big8-mile Cr Reconnects - TNC					14.5
Hawley-18 mile LSWCD					0.7
Total	0	0		0	21.4
		Average of leases ==>		0	

Total	21.4	
Estimated water right diversions from Ler	790 cfs	See rationale for LF 2.3
Change Relative to Impaired Area (Chang	2.7% (Uplift)	

PRC1 **Pahsimeroi River & tributaries downstream from mouth of Big Creek**

Chinook Miles

62 mi

Habitat in mainstem Pahs. R., Big Springs Creek, and associated tribs. Does not include the disconnected tribs.

PRC 1 - LF 1.1 (Barriers)

Action	Miles	Rel. Treatment Size	
Lower Sulfur Creek Bridge	0.6	6.9%	
2015 Sulfur Creek Bridge Install BOR	0.6	6.9%	
2012 Sulfur Creek Rip. Rest. IDFG	2	23.0%	
Removal of two Illegal Barriers	0	0.0%	Miles of benefit are claimed under Sulfur Creek Bridge (BOR)
PBSC-04	1	11.5%	
2015 P15 - Removal BOR	4.5	51.7%	
Total Treatment	8.7	100.0%	
Total Stream Miles (Denominator)	62 mi.		
Change Relative to Impaired Area (Change fro	14.0% (Uplift)		

PRC 1 - LF 2.3

Action	Design Flow of Screen (cfs)	Rel. Treatment Size	
PSC-01 - IDFG (2013)	4.5	19.4%	
P-13 - IDFG (2014)	6	25.8%	
P-15 - IDFG (2015)	9.24	39.8%	
P-10 - IDFG (2015)	3.5	15.1%	
Total	23.24	100.0%	
Total Flow (Denominator)	291 cfs		IDFG Cumulative Screened Flow Value
Change Relative to Impaired Area (Change fro	8.0% (Uplift)		

PRC 1 - LF 4.1 (Riparian Vegetation)

Action	mi. treated	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
Trout Creek Ranch Conservation Easement	2.5	17.5%		5% 0.125
TNC - Uresti Conservation Easement	3	21.0%		7% 0.21
Mainstem Pahsimeroi - Sulfur Creek East Conservation Easement TNC (Upstream from Hooper Lane)	2.25	15.8%		2% 0.045
Trout Creek Ranch Riparian Improvement	0.34	2.4%		10% 0.034
Stockwater Fence, SWCD (Hoffman Conservat	0.64	4.5%		1% 0.0064
IDFG - Active Riparian Improvement	1.5	10.5%		3% 0.045
Removal/Reconnect BOR	0.8	5.6%		85% 0.68

TNC - Fence Installation Uresti	3	21.0%	5%	0.15
O'Neal Conservation Easement	0.25	1.8%	2%	0.005
Total	14.28			1.3004
Total Stream Miles (Denominator)	62 mi.			
Change Relative to Impaired Area (Change fro	2.1%			

PRC 1 - LF 6.1

Action	Miles	Rel. Treatment Size
BOR Pahs. Reconnect	0.8	44.4%
Sulfur Creek Riparian Restoration	1	55.6%
		0.0%
Total	1.8	
Total Stream Miles (Denominator)	62 mi.	
Change Relative to Impaired Area (Change fro	2.9%	

PRC 1 - LF 7.2

Action	Miles	Rel. Treatment Size		
Trout Creek Ranch Conservation Easement	2.5	17.5%	0%	0
TNC - Uresti Conservation Easement	3	21.0%	20%	0.6
Mainstem Pahsimeroy - Sulfur Creek East Conservation Easement TNC (Upstream from Hooper Lane)	2.25	15.8%	2%	0.045
Trout Creek Ranch Riparian Improvement	0.34	2.4%	0%	0
Stockwater Fence, SWCD (Hoffman Conservation Easement w/TNC)	0.64	4.5%	5%	0.032
IDFG - Active Riparian Improvement	1.5	10.5%	3%	0.045
Removal/Reconnect BOR	0.8	5.6%	0%	0
TNC - Fence Installation Uresti	3	21.0%	5%	0.15
O'Neal Conservation Easement	0.25	1.8%	1%	0.0025
PRC2 Big Creek Conservation Easement - TNC	2.5	17.5%	2%	0.05
PRC2 Page, Mill Creek	0.6	4.2%	5%	0.03
Total	17.38			0.9545
Total Stream Miles (Denominator)	62 mi.			
Change Relative to Impaired Area (Change fr	1.5% (Uplift)			0.015395161

PRC 1 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.1)	2.1%
Total Flow (Denominator)	cfs	Instream Flow Uplift (LF 9.2)	13.2%
Change Relative to Impaired Area (Change fro	15.3% (Uplift)*		

*Summed Riparian and Instream Flow Uplift scores

PRC 1 - LF 9.2

<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
Paterson Big Springs Creek (2012) - PBSC-09					6
Sulfur Creek Donation/Uresti Conservation Easement					1.07
Sulfur Creek East (Pivot relocation upstream of Hooper Lane)					4.5
P13					8.8
P16 Headgate					15
Sulfur Creek Irrigation Stop Water (Sulfur Creek 1, Irrigation pipeline project), Hoffman Easement TNC					3
Total	0	0		0	38.37
			Average of leases ==>	0	

Total	38.37 cfs	
Estimated water right diversions	291 cfs	See rationale for LF 2.3
Change Relative to Impaired Area (Change fro	13.2% (Uplift)	

PRS1 **Pahsimeroi Downstream Of Big Springs Ck**

Steelhead Miles	62 mi	Habitat in mainstem Pahs. R., Big Springs Creek, and associated tribs. Does not include the disconnected tribs. (Group decided the demoninator was the same as Chinook)
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PRS 1 - LF 1.1 (Barriers)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>	
Lower Sulfur Creek Bridge	0.6	6.8%	
2015 Sulfur Creek Bridge Install BOR	0.6	6.8%	
2012 Sulfur Creek Rip. Rest. IDFG	2	22.7%	
Removal of two Illegal Barriers	0	0.0%	Miles of benefit are claimed under Sulfur Creek Bridge (BOR)
P16 headgate	0.1	1.1%	Updated by EWL - 12.23.15 as per conversation with Jude to include P-16 headgate
PBSC-04	1	11.4%	
2015 P15 - Removal BOR	4.5	51.1%	
Total Treatment	8.8	100.0%	
Total Stream Miles (Denominator)	62 mi.		
Change Relative to Impaired Area (Change from above/low bookend)	14.2%	(Uplift)	

PRS 1 - LF 2.3

<u>Action</u>	<u>Design Flow of Screen (cfs)</u>	<u>Rel. Treatment Size</u>	
PSC-01 - IDFG (2013)	4.5	19.4%	
P-13 - IDFG (2014)	6	25.8%	
P-15 - IDFG (2015)	9.24	39.8%	
P-10 - IDFG (2015)	3.5	15.1%	
Total	23.24	100.0%	
Total Flow (Denominator)	291 cfs		IDFG Cumulative Screened Flow Value
Change Relative to Impaired Area (Change from above/low bookend)	8.0%	(Uplift)	

PRS 1 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment size</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
Trout Creek Ranch Conservation Easement	2.5	17.5%	5%	0.125	
TNC - Uresti Conservation Easement	3	21.0%	7%	0.21	
Mainstem Pahsimeroi - Sulfur Creek East Conservation Easement TNC (Upstream from Hooper Lane)	2.25	15.8%	2%	0.045	
Trout Creek Ranch Riparian Improvement	0.34	2.4%	10%	0.034	
Stockwater Fence, SWCD (Hoffman Conservation Easement w/TNC)	0.64	4.5%	1%	0.0064	Pahs. Mill Creek
IDFG - Active Riparian Improvement	1.5	10.5%	3%	0.045	
Removal/Reconnect BOR	0.8	5.6%	85%	0.68	
TNC - Fence Installation Uresti	3	21.0%	5%	0.15	
O'Neal Conservation Easement	0.25	1.8%	2%	0.005	
Total	14.28			1.3004	
Total Stream Miles (Denominator)	62 mi.				
Change Relative to Impaired Area (Change from above/low bookend)	2.1%				

PRS 1 - LF 5.2					
<u>Action</u>		<u>Miles</u>	<u>Rel. Treatment size</u>		
Total		#REF!	#REF!		
Total Stream Miles (Denominator)		62 mi.			
Change Relative to Impaired Area (Change from above/low bookend)		#REF!			
PRS 1 - LF 6.1					
<u>Action</u>		<u>Miles</u>	<u>Rel. Treatment Size</u>		
BOR Pahs. Reconnect		0.8	44.4%		
Sulfur Creek Riparian Restoration		1	55.6%		
Total		1.8			
Total Stream Miles (Denominator)		62 mi.			
Change Relative to Impaired Area (Change from above/low bookend)		2.9%			
PRS 1 - LF 7.2					
<u>Action</u>		<u>Miles</u>	<u>Rel. Treatment Size</u>		
Trout Creek Ranch Conservation Easement		2.5	17.5%	0%	0
TNC - Uresti Conservation Easement		3	21.0%	20%	0.6
Mainstem Pahsimeroy - Sulfur Creek East Conservation Easement TNC (Upstream from Hooper Lane)		2.25	15.8%	2%	0.045
Trout Creek Ranch Riparian Improvement		0.34	2.4%	0%	0
Stockwater Fence, SWCD (Hoffman Conservation Easement w/TNC)		0.64	4.5%	5%	0.032
IDFG - Active Riparian Improvement		1.5	10.5%	3%	0.045
Removal/Reconnect BOR		0.8	5.6%	0%	0
TNC - Fence Installation Uresti		3	21.0%	5%	0.15
O'Neal Conservation Easement		0.25	1.8%	1%	0.0025
PRS3	Big Creek Conservation Easement - TNC	2.5	10.8%	2%	0.05
PRS3	Page, Mill Creek	0.6	2.6%	5%	0.03
Total		17.38			0.9545
Total Stream Miles (Denominator)		62 mi.			
Change Relative to Impaired Area (Change from above/low bookend)		1.5% (Uplift)			
PRS 1 - LF 8.1 (Temperature)					
Total				Riparian Uplift (LF 4.1)	2.1%
Total Flow (Denominator)		cfs		Instream Flow Uplift (LF 9.2)	13.2%
Change Relative to Impaired Area (Change from above/low bookend)		15.3% (Uplift)*			
				*Summed Riparian and Instream Flow Uplift scores	
PRS 1 - LF 9.2					
<u>Action</u>		<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>
Paterson Big Springs Creek (2012) - PBSC-09					6
Sulfur Creek Donation/Uresti Conservation Easement					1.07
Sulfur Creek East (Pivot relocation upstream of Hooper Lane)					4.5
P13					8.8
P16 Headgate					15
Sulfur Creek Irrigation Stop Water (Sulfur Creek 1, Irrigation pipeline project), Hoffman Easement					
TNC					3
Total		0	0	0	38.37
Average of leases ==>					0

Total	38.37 cfs	
Estimated water right diversions	291 cfs	See rationale for LF 2.3
Change Relative to Impaired Area (Change from above/low bookend)	13.2% (Uplift)	

PRC2 Pahsimeroi River and tributaries upstream from the mouth of Big Ck. Including Big Ck.

Chinook Miles	33 mi	Measured approximate distance of high intrinsic potential (chinook) streams
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PRC 2 - LF 1.1 (Barriers)
No benefit to this LF

PRC 2 - LF 1.3

No benefit to this LF

PRC 2 - LF 2.3

	<u>Design Flow of Screen</u> (cfs)	<u>Rel. Treatment Size</u>
<u>Action</u>		
<i>No benefit to this LF</i>		

PRC 2 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
Big Creek Conservation Easement - TNC	2.5	80.6%		2%	0.05
Page, Mill Creek	0.6	19.4%		5%	0.03
Total	3.1				0.08
Total Stream Miles (Denominator)	33 mi.				
Change Relative to Impaired Area (Change fro	0.2%				

PRC 2 - LF 5.2

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment size</u>
<i>No benefit to this action</i>		

PRC 2 - LF 7.2

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>		
Big Creek Conservation Easement - TNC	2.5	80.6%	2%	0.05
Page, Mill Creek	0.6	19.4%	5%	0.03
Total	3.1			0.08

Total Stream Miles (Denominator) 33 mi.
Change Relative to Impaired Area (Change fro 0.2% (Uplift)

PRC 2 - LF 9.2

<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
O'Neal Conservation Easement/Big Spring Cr.					15
Page, Mill Creek Reconnect					2
Total	0	0	0	0	17
		Average of leases ==>		0	

Total	17 cfs	
Estimated water right diversions	319 cfs	Morgan Case (IDWR) calculation based on diversions. Spreadsheets provided.
Change Relative to Impaired Area (Change fro	5.3% (Uplift)	

PRS3
Salmon River & Tributaries

Steelhead Miles	89 mi	Measured approximate distance of high intrinsic potential (steelhead) streams. (NOAA layer)	Note this was indicated as PRS2 in GIS layers, but PRS3 is correct.
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PRS 3 - LF 1.1 (Barriers)

Action	Miles	Rel. Treatment Size	
O'Neal Conservation Easement			
Barrier/Hamilton Ditch	*	#VALUE!	
Big Creek Conservation Easement - TNC	*	#VALUE!	
			* O'Neal and Big Creek are lumped into one action titled "Big Creek
Big Creek Culvert to Bridge	9.7	73.5%	Culvert to Bridge"
McCoy Lane	0.5	3.8%	
Lone Pine	1.5	11.4%	
Page Mill Creek Reconnect	1.5	11.4%	
		0.0%	
Total Treatment (opened miles)	13.2	100.0%	
Total Stream Miles (Denominator)	89 mi.		
Change Relative to Impaired Area (Change fro	14.8% (Uplift)		

PRS 3 - LF 2.3

No actions or uplift

PRS 3 - LF 4.1 (Riparian Vegetation)

Action	mi. treated	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)	
Big Creek Conservation Easement - TNC	2.5	80.6%		2%	0.05
Page, Mill Creek	0.6	19.4%		5%	0.03
		0.0%			0
Total	3.1				0.08
Total Stream Miles (Denominator)	89 mi.				
Change Relative to Impaired Area (Change fro	0.1%				

PRS 3 - LF 7.2

Action	Miles	Rel. Treatment Size		
Big Creek Conservation Easement - TNC	2.5	80.6%	2%	0.05
Page, Mill Creek	0.6	19.4%	5%	0.03
		0.0%	0%	0
Total	3.1			0.08

Total Stream Miles (Denominator) 89 mi.
Change Relative to Impaired Area (Change fro 0.1% (Uplift)

PRS 3 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
O'Neal Conservation Easement/Big Cr. Ranch					15
Page, Mill Creek Reconnect					2
Total	0	0		0	17
			Average of leases ==>	0	

Total 17 cfs
Estimated water right diversions 319 cfs
Change Relative to Impaired Area (Change fro 5.3% (Uplift)

Morgan Case (IDWR) summation of diversions. Spreadsheets provided.

UMS3 Upper Salmon River Tributaries

Steelhead Miles	184.5 mi	Streamnet (NOAA GIS) Steelhead use
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UMS 3 - LF 1.1 (Barriers)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Pole Creek Diversions	7	70.0%
Henslee Culvert Pole Creek	3	30.0%
Total Treatment	10	100.0%
Total Stream Miles (Denominator)	184.5 mi.	
Change Relative to Impaired Area (Change from above/lo	5.4% (Uplift)	

UMS 3 - LF 2.3

<u>Action</u>	<u>Design Flow of Screen (cfs)</u>	<u>Rel. Treatment Size</u>
Pole Creek Screens	15.3	100.0%
		#REF!
Total	15.3	#REF!
Morgan Case (IDFG) summation including Salmon River irrigation withdrawal. In the future, limit to tributaries. (remove mainstem Salmon river)		
Total Flow (Denominator)	386 cfs	
Change Relative to Impaired Area (Change from above/low)	4.0% (Uplift)	

UMS 3 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>
Pole Creek Fence - SBT Phase 1	1.25	55.6%	5%	0.0625
Pole Creek Fence - SBT Phase 2	1	44.4%	10%	0.1
Total	2.25			0.1625
Total Stream Miles (Denominator)	184.5 mi.			
Change Relative to Impaired Area (Change from above/lo	0.1%			

UMS 3 - LF 7.2 (Increased Sediment)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>
Pole Creek Fence - SBT Phase 1	1.25	55.6%	5%	0.0625
Pole Creek Fence - SBT Phase 2	1	44.4%	10%	0.1

Total	2.25	0.1625
Total Stream Miles (Denominator)	184.5 mi.	
Change Relative to Impaired Area (Change from above/low)	0.1%	

UMS 3 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.1	0.1%
Total Flow (Denominator)	cfs	Instream Flow Uplift	5.7%
Change Relative to Impaired Area (Change from above/low)	5.8% (Uplift)*	*Summed Riparian and Instream Flow Uplift scores	

UMS 3 - LF 9.2 (Instream Flow)

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Pole Creek	5	6	6		
Pole Creek Diversion					12
Beaver Creek (20-yr lease)					5.9
Total	5	6	6	0	17.9
		Average of leases ==		4.25	

Total	22.15 cfs	
Estimated water right diversions	386 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low)	5.7% (Uplift)	

PRS2
Pahsimeroi River

Steelhead Miles61.8 miStreamnet (NOAA GIS) Steelhead use

PRS 2 - LF 1.1 (Barriers)

Action	Miles	Rel. Treatment Size
Iron Creek 7 (SIC-07)	4.5	46.9%
Poison Creek Diversion Removal	1.6	16.7%
Cow Creek	3.5	36.5%
Total Treatment	9.6	100.0%
Total Stream Miles (Denominator)	62 mi.	Stream net Steelhead use
Change Relative to Impaired Area (Change f	15.5% (Uplift)	

PRS 2 - LF 2.3

Action	Design Flow of Screen (cfs)	Rel. Treatment Size
Poison Creek Screens	2.1	36.8%
Cow Creek Screens	3.6	63.2%
		0.0%
Total	5.7	100.0%

Total Flow (Denominator)	497 cfs	Morgan Case (IDFG) summation including Salmon River irrigation withdrawal. In the future, limit to tributaries. (remove mainstem Salmon river)	Note in summation tables this assessment unit is referred to as PRS-3
Change Relative to Impaired Area (Change f	1.1% (Uplift)		

PRS 2 - LF 4.1 (Riparian Vegetation)

Action	mi. treated	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
Cole Ranch PRotection - Fencing	1.96	95.6%	20%	0.392
Cole Ranch - Bank Planting	0.09	4.4%	3%	0.0027
		0.0%		0
Total	2.05			0.3947
Total Stream Miles (Denominator)	62 mi.			
Change Relative to Impaired Area (Change f	0.6%			

PRS 2 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.1)	0.6%
Total Flow (Denominator)	cfs	Instream Flow Uplift (LF 9.2)	2.0%
Change Relative to Impaired Area (Change f	2.6% (Uplift)*		

*Summed Riparian and Instream Flow Uplift scores

PRS 2 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Poison Creek Diversion					6
Cow Creek					2
Big Hat/Hat Creek					2.13

Total	0	0		0	0	10.13
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Average of leases ==> 0

Total	10.13 cfs	
Estimated water right diversions	497 cfs	See rationale and notes under LF 2.3
Change Relative to Impaired Area (Change f	2.0% (Uplift)	

UMS2 Mainstem Upper Salmon River

Steelhead Miles		73.3 mi	Streamnet (NOAA GIS) Chinook use		
UMS 2 - LF 4.1 (Riparian Vegetation)					
Action	mi. treated	Rel. Treatment size	% Improvement	Realized Change in 2015 (mi)	
Salmon River Headwaters - USFS		2	100.0%	20%	0.4
Total		2			0.4
Total Stream Miles (Denominator)		73.3 mi.			
Change Relative to Impaired Area (Change from above)		0.5%			
UMS 2 - LF 7.2 (Increased Sediment)					
Action	mi. treated	Rel. Treatment size	% Improvement	Realized Change in 2015 (mi)	
Salmon River Headwaters - USFS		2	100.0%	20%	0.4
Total		2			0.4
Total Stream Miles (Denominator)		73.3 mi.			
Change Relative to Impaired Area (Change from above)		0.5%			
UMS 2 - LF 8.1 (Temperature)					
Total			Riparian Uplift (LF 4.1)	0.5%	
Total Flow (Denominator)		210 cfs	Instream Flow Uplift (LF 9.2)	10.5%	
Change Relative to Impaired Area (Change from above)		11.0% (Uplift)*			
			*Summed Riparian and Instream Flow Uplift scores		
UMS 2 - LF 9.2 (Instream Flow)					
Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Pole Creek		5	6	6	
Pole Creek Diversion					12
Beaver Creek (20-yr lease)					5.9
Total		5	6	6	17.9
			Average of leases ==>		
				4.25	
Total		22.15 cfs			
Estimated water right diversions		210 cfs	Morgan Case (IDWR) summation of diversions		
Change Relative to Impaired Area (Change from above)		10.5% (Uplift)			

Yankee Fork Salmon River

Chinook Miles	25 mi	Expert Panel Measurement of Chinook Intrinsic Potential (NOAA) plus 5 miles for tributaries.
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YFC 3 - LF 4.2 (LWD Recruitment)

Action	mi. treated	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
PS-3 Side Channel	0.5	5.6%	3%	0.015
PS-2	0.5	5.6%	2%	0.01
Preachers Cove	0.5	5.6%	1%	0.005
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	0%	0
		0.0%		0
Total	8.9			0.03
Total Stream Miles (Denominator)	25 mi.			
Change Relative to Impaired Area (Change frc	0.1%			

Considering and counting both potential to recruit large wood naturally. (applies to all actions shown)

YFC 3 - LF 5.2 (Side Channels and Floodplains)

Action	Miles	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
PS-3 Side Channel	0.5	5.6%	90%	0.45
PS-2	0.5	5.6%	45%	0.225
Preachers Cove	0.5	5.6%	5%	0.025
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	80%	5.92
		0.0%		0
		0.0%		
Total	8.9	100.0%		6.62
Total Stream Miles (Denominator)	25 mi.			
Change Relative to Impaired Area (Change frc	26.5%			

YFC 3 - LF 6.1 (Channel Bed Form)

Action	Miles	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
PS-3 Side Channel	0.5	5.6%	90%	0.45
PS-2	0.5	5.6%	80%	0.4
Preachers Cove	0.5	5.6%	70%	0.35
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	90%	6.66

		0.0%	
Total	8.9	100.0%	7.86
Total Stream Miles (Denominator)	25 mi.		
Change Relative to Impaired Area (Change frc	31.4%		

YFC 3 - LF 6.2 (Channel Complexity)

Action	Miles	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
PS-3 Side Channel	0.5	5.6%	70%	0.35
PS-2	0.5	5.6%	95%	0.475
Preachers Cove	0.5	5.6%	80%	0.4
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	95%	7.03
		0.0%		
Total	8.9	100.0%		8.255
Total Stream Miles (Denominator)	25 mi.			
Change Relative to Impaired Area (Change frc	33.0%			

YFC 3 - LF 7.1 (Decreased Sediment Quantity)

Action	Miles	Rel. Treatment	% Improvement	Realized Change in 2015 (mi)
PS-3 Side Channel	0.5	5.6%	55%	0.275
PS-2	0.5	5.6%	20%	0.1
Preachers Cove	0.5	5.6%	75%	0.375
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	80%	5.92
Total	8.9	100.0%		6.67
Total Stream Miles (Denominator)	25 mi.			
Change Relative to Impaired Area (Change frc	26.7%			

Includes both addition of spawning gravel plus improved natural ability to capture and sort spawning gravels.

YFC2

West Fork Yankee Fork

Chinook Miles

57.2 mi

Stream Net Chinook Miles (NOAA GIS Layer)

YFC 2 - LF 1.1 (Barriers)

Action	Miles	Rel. Treatment Size
No actions, no uplift		
Total Treatment	0	
Total Stream Miles (Denominator)	mi.	
Change Relative to Impaired Area (Change from above/low b (Uplift)		

YFC 2 - LF 2.3

Action	Design Flow of Screen		Rel. Treatment Size
	(cfs)		
No actions, no uplift			#REF!
Total	#REF!		#REF!
Total Flow (Denominator)		cfs	IDFG Cumulative Screened Flow Value
Change Relative to Impaired Area (Change fro	#REF!	(Uplift)	

YFC 2 - LF 4.1 (Riparian Vegetation)

Action	mi. treated	Rel. Treatment % Improvement	Realized Change in 2015 (mi)
No actions, no uplift			0
Total	0		0
Total Stream Miles (Denominator)		mi.	
Change Relative to Impaired Area (Change fro	#DIV/0!		

YFC 2 - LF 5.2

Action	Miles	Rel. Treatment size
No actions, no uplift		
Total	0	0.0%
Total Stream Miles (Denominator)		mi.
Change Relative to Impaired Area (Change fro	#DIV/0!	

YFC 2 - LF 6.1

Action	Miles	Rel. Treatment Size
No actions, no uplift		
Total	0	#DIV/0!

Total Stream Miles (Denominator) 62 mi.
Change Relative to Impaired Area (Change fro 0.0%

YFC 2 - LF 7.2

Action	Miles	Rel. Treatment Size	
No actions, no uplift			0
Total	0		0
Total Stream Miles (Denominator)		mi.	
Change Relative to Impaired Area (Change fro	#DIV/0!	(Uplift)	

YFC 2 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.1)	2.1%
Total Flow (Denominator)	cfs	Instream Flow Uplift (LF 9.	13.2%
Change Relative to Impaired Area (Change fro	15.3% (Uplift)*		
*Summed Riparian and Instream Flow Uplift scores			

YFC 2 - LF 9.2

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
No actions, no uplift					
Total	0	0	0	0	0
			Average of leases ==>	0	

Total	0 cfs	
Estimated water right diversions	cfs	See rationale for LF 2.3
Change Relative to Impaired Area (Change from above/low b (Uplift)		

UMS5 **Yankee Fork Salmon River**

Steelhead Miles

30 mi

Expert Panel Measurement of
Steelhead Intrinsic Potential (NOAA)
plus 5 miles for tributaries.

UMS 5 - LF 1.1 (Barriers)
No actions

UMS 5 - LF 4.2 (LWD Recruitment)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment % Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
PS-3 Side Channel	0.5	5.6%	3%	0.015
PS-2	0.5	5.6%	2%	0.01
Preachers Cove	0.5	5.6%	1%	0.005
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	0%	0
		0.0%		0
Total	8.9			0.03
Total Stream Miles (Denominator)	30 mi.			
Change Relative to Impaired Area (Change	0.1%			

Considering and counting both potential to recruit large wood naturally. (applies to all actions shown)

UMS 5 - LF 5.2 (Side Channels and Floodplains)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment % Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
PS-3 Side Channel	0.5	5.6%	90%	0.45
PS-2	0.5	5.6%	45%	0.225
Preachers Cove	0.5	5.6%	5%	0.025
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	80%	5.92
		0.0%		0
		0.0%		
Total	8.9	100.0%		6.62
Total Stream Miles (Denominator)	30 mi.			
Change Relative to Impaired Area (Change	22.1%			

UMS 5 - LF 6.1 (Channel Bed Form)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment % Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
PS-3 Side Channel	0.5	5.6%	90%	0.45
PS-2	0.5	5.6%	80%	0.4
Preachers Cove	0.5	5.6%	70%	0.35
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	90%	6.66
		0.0%		0
		0.0%		
Total	8.9	100.0%		7.86

Total Stream Miles (Denominator) 30 mi.
Change Relative to Impaired Area (Change 26.2%

UMS 5 - LF 6.2 (Channel Complexity)

Action	Miles	Rel. Treatment % Improvement	Realized Change in 2015 (mi)	
PS-3 Side Channel	0.5	5.6%	70%	0.35
PS-2	0.5	5.6%	95%	0.475
Preachers Cove	0.5	5.6%	80%	0.4
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	95%	7.03
		0.0%		0
		0.0%		
Total	8.9	100.0%		8.255
Total Stream Miles (Denominator)	30 mi.			
Change Relative to Impaired Area (Change	27.5%			

UMS 5 - LF 7.1 (Decreased Sediment Quantity)

Action	Miles	Rel. Treatment % Improvement	Realized Change in 2015 (mi)	
PS-3 Side Channel	0.5	5.6%	55%	0.275
PS-2	0.5	5.6%	20%	0.1
Preachers Cove	0.5	5.6%	75%	0.375
Y-Fork LWD Enhancement - Phase 1 & 2	7.4	83.1%	80%	5.92
				0
Total	8.9	100.0%		6.67
Total Stream Miles (Denominator)	30 mi.			
Change Relative to Impaired Area (Change	22.2%			

Includes both addition of spawning gravel
plus improved natural ability to capture and
sort spawning gravels.

EFS8 Morgan Creek

EFS8 - LF 8.1 (Temperature)

Total			Riparian Uplift (LF 4.1)	0.0%	Not a limiting Factor
Total Flow (Denominator)	57	cfs	Instream Flow Uplift (LF 9.2)	1.8%	
Change Relative to Impaired Area (Change from above/low bookend)	1.8%	(Uplift)*			

*Summed Riparian and Instream Flow Uplift scores

EFS8 - LF 9.2 (Instream Flow)

<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
Morgan Creek				2	2
<i>Total</i>	<i>0</i>		<i>0</i>	<i>2</i>	<i>2</i>
					<i>0</i>
			<i>Average of leases ==></i>		1

Total	1.00	cfs	
Estimated water right diversions	57	cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	1.8%	(Uplift)	

UMC1 Mainstem Upper Salmon River, Alturas Lake Creek, and tributaries upstream from Alturas Lake Creek

Chinook Miles	91.6 mi	Streamnet (NOAA GIS) Chinook use
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UMC 1 - LF 1.1 (Barriers)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Pole Creek Diversions	7	70.0%
Henslee Culvert Pole Creek	3	30.0%
		0.0%
Total Treatment	10	100.0%
Total Stream Miles (Denominator)	91.6 mi.	
Change Relative to Impaired Area (Change from above)	10.9% (Uplift)	

UMC 1 - LF 1.3 (Competition)

Expert PAnel decided to remove this limiting factor.

UMC 1 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment size</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>
Salmon River Headwaters - USFS	2	47.1%	20%	0.4
Pole Creek Fence - SBT Phase 1	1.25	29.4%	5%	0.0625
Pole Creek Fence - SBT Phase 2	1	23.5%	10%	0.1
Total	4.25			0.5625
Total Stream Miles (Denominator)	91.6 mi.			
Change Relative to Impaired Area (Change from above)	0.6%			

UMC 1 - LF 7.2 (Increased Sediment)

Action	mi. treated	Rel. Treatment size	% Improvement	Realized Change in 2015 (mi)
Salmon River Headwaters - USFS	2	47.1%	20%	0.4
Pole Creek Fence - SBT Phase 1	1.25	29.4%	5%	0.0625
Pole Creek Fence - SBT Phase 2	1	23.5%	10%	0.1
Total	4.25			0.5625
Total Stream Miles (Denominator)	91.6 mi.			
Change Relative to Impaired Area (Change from above)	0.61			

UMC 1 - LF 8.1 (Temperature)

Total		Riparian Uplift (I	0.61%
Total Flow (Denominator)	cfs	Instream Flow U	11.54%
Change Relative to Impaired Area (Change from above/low bookend)			12.15%
		rounded to 12.2%	*Summed Riparian and Instream Flow Uplift scores

12.1					
UMC 1 - LF 9.2 (Instream Flow)					
<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
Pole Creek	5		6	6	
Pole Creek Diversion					12
Beaver Creek (20-yr lease)					5.9
Total	5		6	6	0
			Average of lease		4.25

Total	22.15 cfs	
Estimated water right diversions	192 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above)	11.54 (Uplift)	

LMC6 **Remaining lower Mainstem tributaries (Bayshore, Mill, Hit, Thompson, Slate, Gordon, Warm Springs Cr. etc.)**

Chinook Miles	53.3 mi	Streamnet (NOAA GIS) Chinook use
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LMC 6 - LF 1.1 (Barriers)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Poison Creek Diversion Removal	1.6	25.4%
Bayhorse Creek Culvert to Bridge	1	15.9% Based on Chinook extent
Garden Creek	1.2	19.0%
Lyon Creek	1.5	23.8%
Cow Creek - 2/3 Diversion	1	15.9%
Total Treatment	6.3	100.0%
Total Stream Miles (Denominator)	53.3 mi.	
Change Relative to Impaired Area (Change)	11.8% (Uplift)	

LMC 6 - LF 2.3 (Screens)

<u>Action</u>	<u>Total</u>	
	<u>Design</u>	
	<u>Flow (cfs)</u>	<u>Rel. Treatment Size</u>
SBA-C-01	3	15.2%
Cow Creek-02-3	3.6	18.2% Based on Chinook extent
SPoiC-01	2.1	10.6%
SGC-01	11.09	56.0%
Total Treatment	19.79	
Total Flow (Denominator)	291 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Ch	6.8% (Uplift)	

LMC 6 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>
Lyon Creek	0.75	100.0%	3%	0.0225
Total	0.75			0.0225
Total Stream Miles (Denominator)	53.3 mi.			
Change Relative to Impaired Area (Ch	0.04%			

LMC 6 - LF 7.2 (Increased Sediment)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>
Lyon Creek	0.75	100.0%	3%	0.0225

		0.0%	0
Total	0.75		0.0225
Total Stream Miles (Denominator)	53.3 mi.		
Change Relative to Impaired Area (Ch	0.04%		

LMC 6 - LF 9.2 (Instream Flow)

Action	Lease (2011)	Lease (2013)	Lease (2014)	Lease (2015, Permanent (cfs)	
Bayhorse Creek - 20-yr					2.23
Cow Creek					2
Poison Creek					6
Garden					1.6
Big Hat & Hat Creek				2.13	
Lyon Creek					2.6
Total	0	0	0	2.13	14.43

Average of lea: 0.5325

Total	14.96 cfs	
Estimated water right diversions	291 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Ch	5.1% (Uplift)	

LMC4 **Morgan Creek**

LMC 4 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.:	0.0% Not a limiting Factor
Total Flow (Denominator)	cfs	Instream Flow Uplift	2.2%
Change Relative to Impaired Area (Change from above/low bookend)	2.2% (Uplift)*		
		*Summed Riparian and Instream Flow Uplift scores	

LMC 4 - LF 9.2 (Instream Flow)

<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
Morgan Creek				2	2
Total	0	0		2	2
			Average of leases ==		1

Total	1.00 cfs	
Estimated water right diversions	44.8 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	2.2% (Uplift)	

LMC3 **Mainstem Salmon River (including Basin Ck)**

Chinook Miles

145 mi

Streamnet (NOAA GIS) Chinook use

LMC 3 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
Cole Ranch Protection - Fencing	1.96	95.6%		20%	0.392
Cole Ranch - Bank Planting	0.09	4.4%		3%	0.0027
					0
Total	2.05				0.3947
Total Stream Miles (Denominator)	145 mi.				
Change Relative to Impaired Area (Change from above/low bookend)	0.3%				

LMC 3 - LF 7.2 (Increased Sediment)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
Cole Ranch Protection - Fencing	1.96	95.6%		20%	0.392
Cole Ranch - Bank Planting	0.09	4.4%		3%	0.0027
					0
Total	2.05				0.3947
Total Stream Miles (Denominator)	145 mi.				
Change Relative to Impaired Area (Change from above/low bookend)	0.3%				

EFS1 Bayhorse Creek

Steelhead Miles 12 mi Adjusted with local knowledge

EFS 1 - LF 1.1 (Barriers)

Action	Miles	Rel. Treatment Size
Bayhorse Creek Culvert to Bridge	7	100.0% Based on Chinook extent
Total Treatment	7	100.0%
Total Stream Miles (Denominator)	12 mi.	
Change Relative to Impaired Area (Change from above/low bookend)	58.3% (Uplift)	

EFS 1 - LF 2.3 (Screens)

Action	Total Design	
	Flow (cfs)	Rel. Treatment Size
SBaC-01	3	100.0% 0.0%
Total Treatment	3	
Total Flow (Denominator)	8 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	37.5% (Uplift)	

EFS 1 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.1	0.0% Not a limiting Factor
Total Flow (Denominator)	cfs	Instream Flow Uplift	27.9%
Change Relative to Impaired Area (Change from above/low bookend)	27.9% (Uplift)*		
		*Summed Riparian and Instream Flow Uplift scores	

EFS 1 - LF 9.2 (Instream Flow)

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Bayhorse Creek - 20-yr					2.23
Total	0	0	0	0	2.23
			Average of leases ==		0

Total	2.23 cfs	
Estimated water right diversions	8 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	27.9% (Uplift)	

Garden Creek

Streamnet (NOAA GIS) Steelhead use

EFS 5 - LF 1.1 (Barriers)

<u>Action</u>	<u>Miles</u>	<u>Rel. Treatment Size</u>
Garden Creek	1.2	100.0%
Total Treatment	1.2	100.0%
Total Stream Miles (Denominator)	8.1 mi.	
Change Relative to Impaired Area (Change from above/low bookend)	14.8% (Uplift)	

EFS 5 - LF 2.3 (Screens)

<u>Action</u>	<u>Total Design</u>	
	<u>Flow (cfs)</u>	<u>Rel. Treatment Size</u>
SGC-01	11.09	100.0%
		0.0%
Total Treatment	11.09	
Total Flow (Denominator)	26.4 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	42.0% (Uplift)	

EFS 5 - LF 8.1 (Temperature)

Total		Riparian Uplift (LF 4.1)	0.0% Not a limiting Factor
Total Flow (Denominator)	cfs	Instream Flow Uplift	6.1%
Change Relative to Impaired Area (Change from above/low bookend)	6.1% (Uplift)*		
		*Summed Riparian and Instream Flow Uplift scores	

EFS 5 - LF 9.2 (Instream Flow)

<u>Action</u>	<u>Lease (2012)</u>	<u>Lease (2013)</u>	<u>Lease (2014)</u>	<u>Lease (2015, cfs)</u>	<u>Permanent (cfs)</u>
Garden					1.6
Total	0	0	0	0	1.6
			Average of leases ==	0	

Total	1.60 cfs	
Estimated water right diversions	26.4 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	6.1% (Uplift)	

EFS9

Salmon River Tributaries

Steelhead Miles

N/A

mi

EFS 9 - LF 9.2 (Instream Flow)

Action	Lease (2012)	Lease (2013)	Lease (2014)	Lease (2015, cfs)	Permanent (cfs)
Lyon Creek					2.6
Total	0	0		0	2.6
			Average of leases ==		0

Total	2.60 cfs	
Estimated water right diversions	118 cfs	Morgan Case (IDWR) summation of diversions
Change Relative to Impaired Area (Change from above/low bookend)	2.2% (Uplift)	

EFC1 **East Fork Salmon River**

Chinook Miles

92.7 mi

Streamnet (NOAA GIS) Chinook use

EFC 1 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>		<u>Realized Change in 2015 (mi)</u>
East Fork Fence Project	0.8	100.0%		3%	0.024
		0.0%			0
					0
Total	0.8				0.024
Total Stream Miles (Denominator)	92.7 mi.				
Change Relative to Impaired Area (Change from above/low bookend)	0.03%				

EFC 1 - LF 7.2 (Increased Sediment)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>		<u>Realized Change in 2015 (mi)</u>
<i>No actions no uplift.</i>					0
Total	0				0
Total Stream Miles (Denominator)	92.7 mi.				
Change Relative to Impaired Area (Change from above/low bookend)	0.0%				

EFS3 **East Fork Salmon River (Steelhead)**

Steelhead Miles	37.2 mi	Streamnet (NOAA GIS) Steelhead use
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EFS 3 - LF 4.1 (Riparian Vegetation)

<u>Action</u>	<u>mi. treated</u>	<u>Rel. Treatment</u>	<u>% Improvement</u>	<u>Realized Change in 2015 (mi)</u>	
East Fork Fence Project	0.8	100.0%		3%	0.024
		0.0%			0
					0
Total	0.8				0.024
Total Stream Miles (Denominator)	37.2 mi.				
Change Relative to Impaired Area (Change from above/low bookend)	0.06%				

EFS7

East Fork Salmon River (Steelhead)

Steelhead Miles

37.2 mi

Streamnet (NOAA GIS) Chinook use

EFS 7 - LF 4.1 (Riparian Vegetation)

Action	mi. treated	Rel. Treatment size	% Improvement	Realized Change in 2018 (mi)
Lyon Creek Fence Project	0.75	100.0%	0.0%	0
				0
				0
Total	0.75			0
Total Stream Miles (Denominator)	37.2 mi.			
Change Relative to Impaired Area (Change	2.02%			