Workbook Info

Project: Expert Panel 2015-2016
Meeting: Upper Columbia Look Back

Primary Data Recorder: Nick Legg, Geomorphologist, Cardno Inc.
Latest Revision: 7/21/2016

Workbook Description

This workbook is the "Calculation Spreadsheet" used to capture completed actions and calculate functional uplift during the Upper Columbia Look Back process in 2016. The Look Back process spanned multiple meetings including the main meeting on February 24-25, 2016, a meeting with the Yakama Nation on April 27, 2016, and the Look Forward meeting from June 21-23, 2016 in which additional look back data were collected. This meeting reflects all changes made over the course of those meetings. This table was created in support of the biological notes taken in the same meetings, which are contained in the spreadsheets indicated below. The biological notes document the rationale underlying this spreadsheet.

Biological Notes Filenames:

Chinook *UColumbia_LookBack_Chinook_2013-18_HabFunction_Bionotes_LookFWD_QA_7-21-2016.xlsx*
Steelhead *UColumbia_LookBack_Steelhead_2013-18_HabFunction_Bionotes_LookFWD_QA_7-21-2016.xlsx*

Sheets: Sheets are produced for individual assessment units and named by the assessment unit code. When the panel identified no actions in an assessment unit, a sheet was generally not created. The Okanogan panel members created a spreadsheet prior to the panel meeting which is included as a sheet for reference.

Highlighting

Changes made during QA process
Possible follow-up needed.

Steelhead Assessment Units stream mileages - Streamnet Layer

AU Name	AU Code	Watershed Area (mi^2)	Steelhead Stream Miles (StreamNet)
Lower Entiat	ERS1	119.4	23
Mad River	ERS2	91.2	16.8
Middle Entiat	ERS3A	50.3	12.2
Upper Middle Entiat	ERS3B	54.9	8.3
Upper Entiat	ERS4	102.3	0
Beaver Creek	MES1	129.3	9.2
Black Canyon	MES2	24.7	0.7
Early Winters Creek	MES3	80.4	4.5
Gold Creek	MES5A	89	14.8
Libby Creek	MES5B	44	3.7
Lower Chewuch	MES6	242.7	23.9
Lower Methow	MES7	135.4	29.2
Lower Twisp	MES8	68.4	18.6
Middle Methow	MES9A	131.6	25.2
Upper-Middle Methow	MES9B	35.8	11.9
Upper Chewuch	MES10	280.3	26.1
Upper Methow	MES11A	177	28.5
Lost River	MES11B	167.8	7.4
Upper Twisp	MES12	177	21.4
Wolf Creek	MES13	40.4	3.1
Chiwawa	WES1	188.8	42.9
Chumstick	WES2	78.1	7.2
Icicle	WES3	214.3	2.9

Steelhead Assessment Units stream mileages - Streamnet Layer

AU Name	AU Code	Watershed Area (mi^2)	Steelhead Stream Miles (StreamNet)
Little Wenatchee	WES4	101.3	9.5
Lower Wenatchee	WES5	110.7	29.5
Mission	WES6	93.3	22.6
Nason	WES7	106.4	27.7
Peshastin	WES8	134.9	23.6
Middle Wenatchee	WES9A	32.9	10.7
Upper Wenatchee	WES9B	95.5	26.8
White	WES10	156.2	19.5
Loup Loup Creek	ORS1	2.9	0.2
Wells Pool (inundated- Confluence to Chilliwist Creek)	ORS2A	130	15
Okanogan River 01 (Chilliwist to Salmon)	ORS2B	68.5	11.7
Okanogan River 02 (Salmon Creek to Omak Creek)	ORS3A	37.9	7.2
Okanogan River 03 (Omak to Riverside)	ORS3B	36.9	9.2
Okanogan River 04 (Riverside to Janis Bridge)	ORS3C	129.6	13.6
Okanogan River 05 (Janis to Siwash Creek)	ORS3D	22.2	7.4
Lower Omak Creek (Mouth to Mission Falls)	ORS4A	125.8	6.2
Upper Omak Creek (Upstream from Mission Falls)	ORS4B	77.5	21.6
Lower Salmon Creek (OID to Mouth)	ORS5A	3.4	4.1
Upper Salmon Creek (OID to Conconully Dam)	ORS5B	29.6	0
Lower Similkameen (Confluence To Cross Channel)	ORS6A	10.3	4.5
Middle Similkameen (Cross Channel to Canyon)	ORS6B	3.6	3
Upper Similkameen (Canyon to Enloe Dam)	ORS6C	13.9	2.4
Chiliwist Creek	ORS7A	0	0.3

Steelhead Assessment Units stream mileages - Streamnet Layer

AU Name	AU Code	Watershed Area (mi^2)	Steelhead Stream Miles (StreamNet)
Wanacut Creek	ORS7B	1.1	0.4
Tunk Creek	ORS7C	0.3	0.7
Aeneas Creek	ORS7D	0.7	0.2
Bonaparte Creek	ORS7E	0.6	1
Siwash Creek	ORS7F	0.7	1.8
Lower Antoine Creek (Mouth to Rock chute)	ORS7G	0.3	0.9
Upper Antoine Creek (Rocks to Fancher Dam)	ORS7H	0.9	2.1
Wild Horse Spring Creek	ORS7I	38.9	0
Tonasket Creek	ORS7J	2.1	1.4
Nine Mile Creek	ORS7K	12.6	1.1
Okanogan River 06 (Siwash to Conf. with Similkameen)	ORS8A	105.4	18.2
Okanogan River 07 (Conf. with Similkameen to Z. Dam)	ORS8B	9.6	3.8

Chinook Assessment Units Stream mileages- Streamnet Layer			
AU Name	**AU Code**	**Watershed Area (mi^2)**	**Chinook Stream Miles (Stream Net)**
Lower Entiat	ERC1	119.4	16.8
Mad River	ERC2	91.2	9.1
Middle Entiat	ERC3A	50.3	11.6
Upper Middle Entiat	ERC3B	54.9	8.3
Upper Entiat	ERC4	102.3	0
Beaver / Bear Creek	MEC1	129.3	0
Early Winters Creek	MEC2	80.4	4.5
Gold Creek	MEC4A	89	6.6
Libby Creek	MEC4B	44	0.4
Lower Chewuch	MEC5	242.7	22.4
Lower Methow	MEC6A	135.4	28.7
Black Canyon	MEC6B	24.7	0
Lower Twisp	MEC7	68.4	13.5
Middle Methow	MEC8A	131.6	25.2
Upper-Middle Methow	MEC8B	35.8	10.8
Upper Chewuch	MEC9	280.3	24.3
Upper Methow	MEC10A	177	21.4
Lost River	MEC10B	167.8	7.4
Upper Twisp	MEC11	177	18.6
Wolf Creek	MEC12	40.4	3
Chiwawa	WEC1	188.8	39.1
Chumstick	WEC2	78.1	0
Icicle	WEC3	214.3	2.9
Little Wenatchee	WEC4	101.3	9.5

Lower Wenatchee

Mission

Nason

Peshastin

Middle Wenatchee

Upper Wenatchee

White

WEC5	110.7	26.4
WEC6	93.3	0.8
WEC7	106.4	15.8
WEC8	134.9	14.9
WEC9A	32.9	10.7
WEC9B	95.5	23.5
WEC10	156.2	18.5

WEC2 Chumstick

Stream Miles of Chinook Use	2	mi	(used as denominator in uplift calculation)

WEC2 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
Upper Chumstick Barriers (4 barriers)	1.8	0%	0	Above Chinook Access
Total Project Length	1.8		0	
Total # Projects	1			
Total Stream Miles Affected	0			
Total Stream Miles (Denominator)	2	mi.		
% Uplift	**0.0%**			

WEC2 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
Chumstick Creek RM 8.5 Riparian Planting	0.3	0%	0	No Spring Chinook Access
Total Project Length	0.3		0	
Total # Projects	1			
Total Stream Miles Affected	0			
Total Stream Miles (Denominator)	2	mi.		
% Uplift	**0.0%**			

WEC2 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	2	mi.	
% Uplift	**0.0%**		

WEC2 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	2	mi.	
% Uplift	**0.0%**		

WEC2 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	2	mi.	
% Uplift	**0.0%**		

WEC2 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	2%	
Prorating Factor	5%	
% Uplift	**0.1%**	

WEC2 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases								
Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition	
Chumstick Creek Flow (2014) near Eagle Creek Mouth								0.06	0.06 cfs per day over irrigation period (5 month period)
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.06**	

	Average of leases	
	==>	0.0

Total	0.06	cfs
Total # Projects	1	
Denominator	3	cfs
% Uplift	**2.0%**	

WEC5 Lower Wenatchee

Stream Miles of Chinook Use	26.4	mi	(used as denominator in uplift calculation)

WEC5 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Benefit			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.4	mi.	
% Uplift	**0.0%**		

WEC5 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.4	mi.	
% Uplift	**0.0%**		

WEC5 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Lower Wenatchee IF Enhancement (2013, a.k.a. Pioneer Dam)	0.65	10%	0.065
Total Project Length	0.65		0.065
Total # Projects	1		
Total Stream Miles Affected	0.065		
Total Stream Miles (Denominator)	12	mi.	Back channel length from CMZ Report (connected and disconnected)
% Uplift	**0.5%**		

WEC5 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Benefit		0%	0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.4	mi.	
% Uplift	**0.0%**		

WEC5 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Sunnyslope Engineered Log Jam (ELJ) Project	0.2	0%	0
Total Project Length	0.2		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.4	mi.	
% Uplift	**0.0%**		

WEC5 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	5.2%
Prorating Factor	1%
% Uplift	**0.1%**

WEC5 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
Lower Wenatchee IF Enhancement (2013, a.k.a. Pioneer Dam)								38.3
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**38.3**

	Average of leases ==>	0.0

Total	38.3	cfs	
Total # Projects	1		
Denominator	733	cfs	Lowest mean daily baseflow during 55-year period of record
% Uplift	**5.2%**		

WEC7 Nason

Stream Miles of Chinook Use	15.8	mi	(used as denominator in uplift calculation)

WEC7 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Lower White Pine Reconnection Project	1.5	0%	0
Total Project Length	1.5		0
Total # Projects	1		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	15.8	mi.	
% Uplift	**0.0%**		

WEC7 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	15.8	mi.	
% Uplift	**0.0%**		

WEC7 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
YN First Bend (2013)	0.13	5%	0.0065
Total Project Length	0.13		0.0065
Total # Projects	1		
Total Stream Miles Affected	0.0065		
Total Stream Miles (Denominator)	15.8	mi.	

% Uplift	**0.04%**

WEC7 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	Acres Treated		% Improvement (proration factor)	Realized Change in 2018 (mi)
YN First Bend (2013)	0.13			100%	0.13
Nason Creek RM 4.6 (2014)	0.06			50%	0.03
Lower White Pine Reconnect (2012)	1		152	85%	0.85
YN Upper White Pine Sites 3-4 (2015)	0.38			100%	0.38
Total Project Length	1.57				1.39
Total # Projects	4				
Total Side Channel Miles Affected	1.39				
Total Side Channels (Denominator)	10.7	mi.		Includes connected and disconnected side channels (CMZ study)	
% Uplift	**13.0%**				

WEC7 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated		% Improvement (proration factor)	Realized Change in 2018 (mi)
Nason Creek RM 4.6 (2014)	0.06		5%	0.003
Upper White Pine Groups 3-4 (2015)	0.38		45%	0.171
YN First Bend (2013)	0.13		80%	0.104
Total Project Length	0.57			0.278
Total # Projects	3			
Total Stream Miles Affected	0.278			
Total Stream Miles (Denominator)	15.8	mi.		
% Uplift	**1.8%**			

WEC7 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated		% Improvement (proration factor)	Realized Change in 2018 (mi)
YN First Bend (2013)	0.16		100%	0.16
YN Upper White Pine Sites 3-4 (2015)	0.7		50%	0.35
Total Project Length	0.86			0.51
Total # Projects	2			

Total Stream Miles Affected	0.51	
Total Stream Miles (Denominator)	15.8	mi.
% Uplift	**3.2%**	

WEC7 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions, No Benefit			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	15.8	mi.
% Uplift	**0.0%**	

WEC7 - LF 8.1 (Water Quality: Temperature)

	NO ACTIONS
Uplift from Flow Increase (LF 9.2)	
Prorating Factor	100%
% Uplift	**0.0%**

WEC8 Peshastin

Stream Miles of Chinook Use	14.9	mi	(used as denominator in uplift calculation)

WEC8 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Peshastin Fishway Repairs (2012)	0.06	50%	0.03
Total Project Length	0.06		0.03
Total # Projects	1		
Total Stream Miles Affected	0.03		
Total Stream Miles (Denominator)	14.9	mi.	
% Uplift	**0.2%**		

WEC8 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)	
Peshastin Road Decommissioning - Tronsen Cr. (2014)	0	0%	0	Above Spring Chinook use
Total Project Length	0		0	
Total # Projects	1			
Total Stream Miles Affected	0			
Total Stream Miles (Denominator)	14.9	mi.		
% Uplift	**0.0%**			

WEC8 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Peshastin RM 0.8 (2012)	0.2	50%	0.1
Total Project Length	0.2		0.1
Total # Projects	1		
Total Stream Miles Affected	0.1		
Total Side Channel Miles (Denominator)	8.4 mi.		Yakama Nation Tributary Assessment of Cutoff Channels
% Uplift	**1.2%**		

WEC8 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	14.9 mi.		
% Uplift	**0.0%**		

WEC8 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Peshastin RM 0.8 (2012)	0.15	50%	0.075
Total Project Length	0.15		0.075
Total # Projects	1		
Total Stream Miles Affected	0.075		
Total Stream Miles (Denominator)	14.9 mi.		
% Uplift	**0.5%**		

WEC8 - LF 8.1 (Water Quality: Temperature)

NO ACTIONS

Uplift from Flow Increase (LF 9.2)	
Prorating Factor	100%
% Uplift	**0.0%**

WEC8 - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Average of leases ==> 0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow
% Uplift	**0.0%**		

WEC9A Middle Wenatchee

Stream Miles of Chinook Use	10.7	mi	(used as denominator in uplift calculation)

WEC9A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.7	mi.	
% Uplift	**0.0%**		

WEC9A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.7	mi.	
% Uplift	**0.0%**		

WEC9A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.7	mi.	
% Uplift	**0.0%**		

WEC9B Upper Wenatchee

Stream Miles of Chinook Use	23.5	mi	(used as denominator in uplift calculation)

WEC9B - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
Beaver Creek Well Conversion (2014)	2.5		0	(Zero LF Weighting, so the calculation was discontinued)
Beaver Creek Fish Passage and Instream Flow Enhancement (2014)			0	
Total Project Length	2.5		0	
Total # Projects	1			
Total Stream Miles Affected	0			
Total Stream Miles (Denominator)	23.5	mi.		
% Uplift	**0.0%**			

WEC9B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
Beaver Creek Well Conversion (2014)	0.1	4%	0.004
Total Project Length	0.1		0.004
Total # Projects	1		
Total Stream Miles Affected	0.004		
Total Stream Miles (Denominator)	23.5	mi.	
% Uplift	**0.02%**		

WEC9B - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	23.5 mi.		
% Uplift	**0.0%**		

WEC9B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Natapoc Project Wenatchee River RM 51.7 (2015)	0.17	100%	0.17
Total Project Length	0.17		0.17
Total # Projects	1		
Total Stream Miles Affected	0.17		
Total Stream Miles (Denominator)	23.5 mi.		
% Uplift	**0.7%**		

WEC10 White

Stream Miles of Chinook Use	18.5	mi	(used as denominator in uplift calculation)

WEC10 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.5	mi.	
% Uplift	**0.0%**		

WEC10 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.5	mi.	
% Uplift	**0.0%**		

WEC10 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.5	mi.	
% Uplift	**0.0%**		

WEC10 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
White River LWD Atonement Project	1.7	100%	1.7
Total Project Length	1.7		1.7
Total # Projects	1		
Total Stream Miles Affected	1.7		
Total Stream Miles (Denominator)	18.5	mi.	
% Uplift	**9.2%**		

WES2 Chumstick

Stream Miles of Steelhead Use	11.6	mi	(used as denominator in uplift calculation)

WES2 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Upper Chumstick Barriers (4 barriers)	3	75%	2.25
Total Project Length	3		2.25
Total # Projects	1		
Total Stream Miles Affected	2.25		
Total Stream Miles (Denominator)	11.6	mi.	
% Uplift	**19.4%**		

WES2 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chumstick Creek RM 8.5 Riparian Planting	0.1	10%	0.01
Total Project Length	0.1		0.01
Total # Projects	1		
Total Stream Miles Affected	0.01		
Total Stream Miles (Denominator)	11.6	mi.	
% Uplift	**0.1%**		

WES2 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	11.6	mi.	
% Uplift	**0.0%**		

WES2 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	11.6	mi.	
% Uplift	**0.0%**		

WES2 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	11.6 mi.		
% Uplift	**0.0%**		

WES2 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	2%
Prorating Factor	5%
% Uplift	**0.1%**

WES2 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases								
Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**	
Chumstick Creek Flow (2014) near Eagle Creek Mouth								0.06	0.06 cfs per day over irrigation period
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.06**	
			Average of leases ==>	0.0					

Total	0.1	cfs
Total # Projects	1	
Denominator	3	cfs
% Uplift	**2.0%**	

WES5 Lower Wenatchee

Stream Miles of Steelhead Use	29.5	mi	(used as denominator in uplift calculation)

WES5 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Benefit			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	29.5	mi.	
% Uplift	**0.0%**		

WES5 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	29.5	mi.	
% Uplift	**0.0%**		

WES5 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)

Lower Wenatchee IF Enhancement (2013, a.k.a. Pioneer Dam)	0.65	10%	0.065	
Total Project Length	0.65		0.065	
Total # Projects	1			
Total Stream Miles Affected	0.065			
Total Stream Miles (Denominator)	12	mi.		Back channel length from CMZ Report (connected and disconnected)
% Uplift	**0.5%**			

WES5 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	**Miles treated**	**% Improvement (proration factor)**	**Realized Change in 2018 (mi)**
No Benefit		0%	0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	29.5	mi.	
% Uplift	**0.0%**		

WES5 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	**Miles treated**	**% Improvement (proration factor)**	**Realized Change in 2018 (mi)**
YN Sunnyslope Engineered Log Jam (ELJ) Project	0.2	0%	0
Total Project Length	0.2		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	29.5	mi.	
% Uplift	**0.0%**		

WES5 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	5.2%
Prorating Factor	1%
% Uplift	**0.1%**

WES5 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
Lower Wenatchee IF Enhancement (2013, a.k.a. Pioneer Dam)								38.3
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**38.3**

Average of leases ==> 0.0

Total	38.3 cfs	
Total # Projects	1	
Denominator	733 cfs	Lowest mean daily baseflow during 55-year period of record
% Uplift	**5.2%**	

WES7 Nason

Stream Miles of Steelhead Use	20.8	mi	(used as denominator in uplift calculation)

WES7 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Lower White Pine Reconnection Project	1.5	100%	1.5
Coulter Creek	1.6	100%	1.6
Total Project Length	3.1		3.1
Total # Projects	2		
Total Stream Miles Affected	3.1		
Total Stream Miles (Denominator)	20.8	mi.	
% Uplift	**14.9%**		

% Uplift does not reflect panel consensus. Panel arrive on 0% after realizing 0% limiting factor weight.

WES7 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	20.8	mi.	
% Uplift	**0.0%**		

WES7 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
YN First Bend (2013)	0.13	5%	0.0065
Total Project Length	0.13		0.0065
Total # Projects	1		

Total Stream Miles Affected	0.0065	
Total Stream Miles (Denominator)	20.8	mi.
% Uplift	**0.03%**	

WES7 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	Acres Treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
					6-28-16: During QA process, increased proration factor to 100% to align with Chinook calculation.
YN First Bend (2013)	0.13		100%	0.13	
Nason Creek RM 4.6 (2014)	0.06		50%	0.03	
Lower White Pine Reconnect (2012)	1	152	85%	0.85	
YN Upper White Pine Sites 3-4 (2015)	0.38		100%	0.38	
Total Project Length	1.57			1.39	
Total # Projects	4				
Total Side Channel Miles Affected	1.39				
Total Side Channels (Denominator)	10.7	mi.	Includes connected and disconnected side channels (CMZ study)		
% Uplift	**13.0%**				

WES7 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
YN First Bend (2013)	0.13	80%	0.104	
				6-28-16: During QA process, added Upper White Pine project to align with Chinook calculation.
Upper White Pine Groups 3-4 (2015)	0.38	45%	0.171	
Nason Creek RM 4.6 (2014)	0.06	5%	0.003	
Total Project Length	0.57		0.278	
Total # Projects	3			
Total Stream Miles Affected	0.278			
Total Stream Miles (Denominator)	20.8	mi.		
% Uplift	**1.3%**			

WES7 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN First Bend (2013)	0.16	100%	0.16
YN Upper White Pine Sites 3-4 (2015)	0.7	50%	0.35
Total Project Length	0.86		0.51
Total # Projects	2		
Total Stream Miles Affected	0.51		
Total Stream Miles (Denominator)	20.8	mi.	
% Uplift	**2.5%**		

WES7 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions, No Benefit			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	20.8	mi.	
% Uplift	**0.0%**		

WES7 - LF 8.1 (Water Quality: Temperature)

NO ACTIONS

Uplift from Flow Increase (LF 9.2)		
Prorating Factor	100%	
% Uplift	**0.0%**	

WES8 Peshastin

Stream Miles of Steelhead Use	20.6	mi	(used as denominator in uplift calculation)

WES8 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Peshastin Fishway Repairs (2012)	0.06	50%	0.03
Total Project Length	0.06		0.03
Total # Projects	1		
Total Stream Miles Affected	0.03		
Total Stream Miles (Denominator)	20.6	mi.	
% Uplift	**0.1%**		

WES8 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
Peshastin Road Decommissioning - Tronsen Cr. (2014)	0.019	10%	0.002
Total Project Length	0.019		0.002
Total # Projects	1		
Total Stream Miles Affected	0.002		
Total Stream Miles (Denominator)	20.6	mi.	
% Uplift	**0.0%**		

WES8 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
YN Peshastin RM 0.8 (2012)	0.2	50%	0.1	
Total Project Length	0.2		0.1	
Total # Projects	1			
Total Miles Affected	0.1			
Total Side Channel Miles (Denominator)	8.4	mi.		Yakama Nation Tributary Assessment of Cutoff Channels
% Uplift	**1.2%**			

WES8 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	20.6 mi.		
% Uplift	**0.0%**		

WES8 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Peshastin RM 0.8 (2012)	0.15	50%	0.075
Total Project Length	0.15		0.075
Total # Projects	1		
Total Stream Miles Affected	0.075		
Total Stream Miles (Denominator)	20.6 mi.		
% Uplift	**0.4%**		

WES8 - LF 8.1 (Water Quality: Temperature)

NO ACTIONS

Uplift from Flow Increase (LF 9.2)	
Prorating Factor	100%
% Uplift	**0.0%**

WES8 - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Average of leases ==> 0.0

Total	0.0 cfs		
Total # Projects	0		
Denominator	cfs	Example: Base Flow	

% Uplift	**0.0%**

WES9B Upper Wenatchee

Stream Miles of Steelhead Use	28.8	mi	(used as denominator in uplift calculation)

WES9B - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)	
Beaver Creek Well Conversion (2014)	2.5		0	(Calculation discontinued due to zero LF weighting)
Beaver Creek Fish Passage and Instream Flow Enhancement (2014)			0	(Calculation discontinued due to zero LF weighting)
Total Project Length	2.5		0	
Total # Projects	1			
Total Stream Miles Affected	0			
Total Stream Miles (Denominator)	28.8	mi.		
% Uplift	**0.0%**			

WES9B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
Beaver Creek Well Conversion (2014)	0.1	4%	0.004
Total Project Length	0.1		0.004
Total # Projects	1		
Total Stream Miles Affected	0.004		
Total Stream Miles (Denominator)	28.8	mi.	
% Uplift	**0.01%**		

WES9B - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Beaver Creek Well Conversion (2014)	0.1	100%	0.1
Total Project Length	0.1		0.1
Total # Projects	1		
Total Stream Miles Affected	0.1		
Total Stream Miles (Denominator)	28.8	mi.	
% Uplift	**0.3%**		

WES9B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Natapoc Project Wenatchee River RM 51.7 (2015)	0.17	100%	0.17
Total Project Length	0.17		0.17
Total # Projects	1		
Total Stream Miles Affected	0.17		
Total Stream Miles (Denominator)	28.8	mi.	
% Uplift	**0.6%**		

WES10 White

Stream Miles of Steelhead Use	19.5	mi	(used as denominator in uplift calculation)

WES10 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	19.5	mi.	
% Uplift	**0.0%**		

WES10 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	19.5	mi.	
% Uplift	**0.0%**		

WES10 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	19.5	mi.	
% Uplift	**0.0%**		

WES10 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
White River LWD Atonement Project	1.7	100%	1.7
Total Project Length	1.7		1.7
Total # Projects	1		
Total Stream Miles Affected	1.7		
Total Stream Miles (Denominator)	19.5	mi.	
% Uplift	**8.7%**		

ERC1 Lower Entiat

Stream Miles of Chinook Use	16.8	mi	(used as denominator in uplift calculation)

ERC1 - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	Flow Treated (cfs)	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	16.8	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC1 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	16.8	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC1 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Harrison Adaptive Maintenance (2014)	0.2	4%	30%	0.008	0.06
YN Entiat 2.6-3.5	0.15	4%	30%	0.006	0.045
Total Project Length	0.35			0.014	0.105
Total # Projects	1				
Total Stream Miles Affected (Weighted for 2018)	0.014				
Total Stream Miles Affected (Weighted for 2033)	0.105				
Total Stream Miles (Denominator)	16.8 mi.				
% Uplift (2018)	**0.1%**				
% Uplift (2033)	**0.6%**				

ERC1 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Harrison Adaptive Maintenance (2014)	0.04	80%	80%	0.032	0.032
ENFH Habitat Channel Phase 2	0.1	100%	100%	0.1	0.1
Keystone to Kiosk (2014)	0.11	100%	100%	0.11	0.11
Foreman Side Channel - CCNRD (2014)	0.12	50%	50%	0.06	0.06
Total Project Length	0.37			0.302	0.302
Total # Projects	4				
Total Miles Affected (Weighted for 2018)	0.302				
Total Miles Affected (Weighted for 2033)	0.302				
Total Miles (Denominator)	16.8 mi.				
% Uplift (2018)	**1.8%**				
% Uplift (2033)	**1.8%**				

ERC1 - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Harrison Adaptive Maintenance (2014)	0.04	80%	80%	0.032	0.032
Total Project Length	0.04			0.032	0.032
Total # Projects	1				
Total Miles Affected (Weighted for 2018)	0.032				
Total Miles Affected (Weighted for 2033)	0.032				
Total Stream Miles (Denominator)	16.8	mi.	(Streamnet)		
% Uplift (2018)	**0.2%**				
% Uplift (2033)	**0.2%**				

ERC1 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
YN Entiat RM 2.6-3.5 Habitat Enhancement	0.9	5%	10%	0.045	0.09
Harrison Adaptive Maintenance (2014)	0.13	5%	10%	0.0065	0.013
ENFH Habitat Channel Phase 2	0.1	5%	10%	0.005	0.01
Keystone to Kiosk (2014)	0.25	5%	10%	0.0125	0.025
Total Project Length	1.38			0.069	0.138
Total # Projects	4				
Total Stream Miles Affected (Weighted for 2018)	0.069				
Total Stream Miles Affected (Weighted for 2033)	0.138				
Total Stream Miles (Denominator)	16.8	mi.			
% Uplift (2018)	**0.4%**				
% Uplift (2033)	**0.8%**				

ERC1 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
YN Entiat RM 2.6-3.5 Habitat Enhancement	0.9	75%	75%	0.675	0.675
Harrison Adaptive Maintenance (2014)	0.13	75%	75%	0.0975	0.0975
ENFH Habitat Channel Phase 2	0.1	100%	100%	0.1	0.1
Keystone to Kiosk (2014)	0.36	75%	75%	0.27	0.27
Total Project Length	1.49			1.1425	1.1425
Total # Projects	4				

Total Stream Miles Affected (Weighted for 2018)	1.1425	
Total Stream Miles Affected (Weighted for 2033)	1.1425	
Total Stream Miles (Denominator)	16.8	mi.
% Uplift (2018)	**6.8%**	
% Uplift (2033)	**6.8%**	

ERC1 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				

Total Stream Miles Affected (Weighted for 2018)	0	
Total Stream Miles Affected (Weighted for 2033)	0	
Total Stream Miles (Denominator)	16.8	mi.
% Uplift (2018)	**0.0%**	
% Uplift (2033)	**0.0%**	

ERC1 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

		Average of leases	
		==>	0.0
Total	0.0 cfs		
Total # Projects	1		
Denominator	3 cfs	Example: Base Flow	
% Uplift (2018)	**0.0%**		
% Uplift (2033)	**0.0%**		

ERC2 Mad River

Stream Miles of Chinook Use	9.1	mi	(used as denominator in uplift calculation)

ERC2 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions (above Sp. Chinook use)				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	9.1	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC2 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	9.1	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC2 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	9.1 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC2 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	9.1 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC2 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	9.1 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC2 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	9.1 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC3A Middle Entiat

Stream Miles of Chinook Use	11.6 mi	(used as denominator in uplift calculation)

ERC3A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	11.6 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC3A - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	11.6 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERC3A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.25	6%	30%	0.015	0.075
Dillwater (2012)	0.2	6%	30%	0.012	0.06
Total Project Length	0.45			0.027	0.135
Total # Projects	2				
Total Stream Miles Affected (Weighted for 2018)	0.027				
Total Stream Miles Affected (Weighted for 2033)	0.135				
Total Stream Miles (Denominator)	11.6 mi.				
% Uplift (2018)	**0.2%**				
% Uplift (2033)	**1.2%**				

ERC3A - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.25	100%	100%	0.25	0.25
Dillwater (2012)	0.2	100%	100%	0.2	0.2
YN 3D	0.5	100%	100%	0.5	0.5
Total Project Length	0.95			0.95	0.95
Total # Projects	3				
Total Stream Miles Affected (Weighted for 2018)	0.95				
Total Stream Miles Affected (Weighted for 2033)	0.95				
Total Stream Miles (Denominator)	11.6 mi.				
% Uplift (2018)	**8.2%**				
% Uplift (2033)	**8.2%**				

ERC3A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.25	100%	100%	0.25	0.25
Dillwater (2012)	0.29	50%	50%	0.145	0.145

YN 3D	0.25	0%	0%	0	0	
Total Project Length	0.79			0.395	0.395	
Total # Projects	3					
Total Stream Miles Affected (Weighted for 2018)	0.395					
Total Stream Miles Affected (Weighted for 2033)	0.395					
Total Stream Miles (Denominator)	11.6 mi.					
% Uplift (2018)	**3.4%**					
% Uplift (2033)	**3.4%**					

ERC3A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)		
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.7	100%	100%	0.7	0.7		
Dillwater	0.29	100%	100%	0.29	0.29		
YN 3D (not counting side channel habitat; panel recognized inconsistency in metric measurement)	1	80%	80%	0.8	0.8	YN installed seven large woody material structures through this 1 mile of reach. Structures are spaced evenly through this 1-mile reach.	Note, during Look Forward, panel revised prorating factors to 80% to allow for Look Forward improvement from same project with additional treatment
				0	0		
Total Project Length	1.99			1.79	1.79		
Total # Projects	3						
Total Stream Miles Affected (Weighted for 2018)	1.79						
Total Stream Miles Affected (Weighted for 2033)	1.79						
Total Stream Miles (Denominator)	11.6 mi.						
% Uplift (2018)	**15.4%**						
% Uplift (2033)	**15.4%**						

ERC3A - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions or Benefits				0	0
Total Project Length	0			0	0
Total # Projects	0				

Total Stream Miles Affected (Weighted for 2018)	0	
Total Stream Miles Affected (Weighted for 2033)	0	
Total Stream Miles (Denominator)	11.6	mi.
% Uplift (2018)	**0.0%**	
% Uplift (2033)	**0.0%**	

ERS1 Lower Entiat

Stream Miles of Steelhead Use	23	mi	(used as denominator in uplift calculation)

ERS1 - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	Flow Treated (cfs)	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	23	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS1 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	23	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS1 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Harrison Adaptive Maintenance (2014)	0.2	4%	30%	0.008	0.06
YN Entiat 2.6-3.5	0.15	4%	30%	0.006	0.045
Total Project Length	0.2			0.014	0.105
Total # Projects	1				

Total Stream Miles Affected (Weighted for 2018)	0.014	
Total Stream Miles Affected (Weighted for 2033)	0.105	
Total Stream Miles (Denominator)	23	mi.
% Uplift (2018)	**0.1%**	
% Uplift (2033)	**0.5%**	

ERS1 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Harrison Adaptive Maintenance (2014)	0.04	80%	80%	0.032	0.032
ENFH Habitat Channel Phase 2	0.1	100%	100%	0.1	0.1
Keystone to Kiosk (2014)	0.11	100%	100%	0.11	0.11
Foreman Side Channel - CCNRD (2014)	0.12	50%	50%	0.06	0.06
Total Project Length	0.37			0.302	0.302
Total # Projects	4				

Total Miles Affected (Weighted for 2018)	0.302	
Total Miles Affected (Weighted for 2033)	0.302	
Total Miles (Denominator)	23	mi.
% Uplift (2018)	**1.3%**	
% Uplift (2033)	**1.3%**	

ERS1 - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Harrison Adaptive Maintenance (2014)	0.04	80%	80%	0.032	0.032
Total Project Length	0.04			0.032	0.032
Total # Projects	1				
Total Miles Affected (Weighted for 2018)	0.032			Denominator calculation	
Total Miles Affected (Weighted for 2033)	0.032				
Total Stream Miles (Denominator)	23	mi.	(Streamnet)		
% Uplift (2018)	**0.1%**				
% Uplift (2033)	**0.1%**				

ERS1 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
YN Entiat RM 2.6-3.5 Habitat Enhancement	0.9	5%	10%	0.045	0.09
Harrison Adaptive Maintenance (2014)	0.13	5%	10%	0.0065	0.013
ENFH Habitat Channel Phase 2	0.1	5%	10%	0.005	0.01
Keystone to Kiosk (2014)	0.25	5%	10%	0.0125	0.025
Total Project Length	1.38			0.069	0.138
Total # Projects	4				
Total Stream Miles Affected (Weighted for 2018)	0.069				
Total Stream Miles Affected (Weighted for 2033)	0.138				
Total Stream Miles (Denominator)	23	mi.			
% Uplift (2018)	**0.3%**				
% Uplift (2033)	**0.6%**				

ERS1 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
YN Entiat RM 2.6-3.5 Habitat Enhancement	0.9	75%	75%	0.675	0.675

Harrison Adaptive Maintenance (2014)	0.13	75%	75%	0.0975	0.0975
ENFH Habitat Channel Phase 2	0.1	100%	100%	0.1	0.1
Keystone to Kiosk (2014)	0.36	75%	75%	0.27	0.27
Total Project Length	1.49			1.1425	1.1425
Total # Projects	4				

Total Stream Miles Affected (Weighted for 2018)	1.1425	
Total Stream Miles Affected (Weighted for 2033)	1.1425	
Total Stream Miles (Denominator)	23	mi.
% Uplift (2018)	**5.0%**	
% Uplift (2033)	**5.0%**	

ERS1 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				

Total Stream Miles Affected (Weighted for 2018)	0	
Total Stream Miles Affected (Weighted for 2033)	0	
Total Stream Miles (Denominator)	23	mi.
% Uplift (2018)	**0.0%**	
% Uplift (2033)	**0.0%**	

ERS1 - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Average of leases

==> 0.0

Total	0.0	cfs	
Total # Projects	1		
Denominator		cfs	Example: Base Flow

% Uplift (2018)	0.0%
% Uplift (2033)	0.0%

ERS2 Mad River

Stream Miles of Steelhead Use	16.8	mi	(used as denominator in uplift calculation)

ERS2 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)	
Tillicum Creek Culvert Replacement (2013)	0.5	25%	25%	0.125	0.125	Verify projects were in original calc sheet and miles treated may have changed.
Indian Creek Culvert (2014)	0.5	25%	25%	0.125	0.125	
Total Project Length	1			0.25	0.25	
Total # Projects	2					

Total Stream Miles Affected (Weighted for 2018)	0.25	
Total Stream Miles Affected (Weighted for 2033)	0.25	
Total Stream Miles (Denominator)	16.8	mi.
% Uplift (2018)	**1.5%**	
% Uplift (2033)	**1.5%**	

ERS2 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				

Total Stream Miles Affected (Weighted for 2018)	0	
Total Stream Miles Affected (Weighted for 2033)	0	
Total Stream Miles (Denominator)	16.8	mi.
% Uplift (2018)	**0.0%**	

% Uplift (2033)	**0.0%**

ERS2 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	16.8 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS2 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	16.8 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS2 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	16.8 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS2 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	16.8 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS3A Middle Entiat

Stream Miles of Steelhead Use	12.2	mi	(used as denominator in uplift calculation)

ERS3A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	12.2	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS3A - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	12.2	mi.			
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

ERS3A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.25	6%	30%	0.015	0.075
Dillwater (2012)	0.2	6%	30%	0.012	0.06
Total Project Length	0.45			0.027	0.135
Total # Projects	2				
Total Stream Miles Affected (Weighted for 2018)	0.027				
Total Stream Miles Affected (Weighted for 2033)	0.135				
Total Stream Miles (Denominator)	12.2 mi.				
% Uplift (2018)	**0.2%**				
% Uplift (2033)	**1.1%**				

ERS3A - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)	
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.25	100%	100%	0.25	0.25	
Dillwater (2012)	0.2	100%	100%	0.2	0.2	
						6-28-16: During QA process, changed proration factors for YN 3D to match Chinook.
YN 3D	0.31	100%	100%	0.31	0.31	
Total Project Length	0.76			0.76	0.76	
Total # Projects	3					
Total Stream Miles Affected (Weighted for 2018)	0.76					
Total Stream Miles Affected (Weighted for 2033)	0.76					
Total Stream Miles (Denominator)	12.2 mi.					
% Uplift (2018)	**6.2%**					
% Uplift (2033)	**6.2%**					

ERS3A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.25	100%	100%	0.25	0.25
Dillwater	0.29	50%	50%	0.145	0.145
YN 3D	0.25	0%	0%	0	0
Total Project Length	0.79			0.395	0.395
Total # Projects	3				
Total Stream Miles Affected (Weighted for 2018)	0.395				
Total Stream Miles Affected (Weighted for 2033)	0.395				
Total Stream Miles (Denominator)	12.2 mi.				
% Uplift (2018)	**3.2%**				
% Uplift (2033)	**3.2%**				

ERS3A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)	
Tyee 3A Levee Removal, Riparian Plantings, and Exclusion (2012)	0.7	100%	100%	0.7	0.7	
Dillwater	0.29	100%	100%	0.29	0.29	
						6/28/16: During QA process, lowered proration factors from 100 to 80% to align with Chinook.
YN 3D	1	80%	80%	0.8	0.8	
Total Project Length	1.99			1.79	1.79	
Total # Projects	3					
Total Stream Miles Affected (Weighted for 2018)	1.79					
Total Stream Miles Affected (Weighted for 2033)	1.79					
Total Stream Miles (Denominator)	12.2 mi.					
% Uplift (2018)	**14.7%**					
% Uplift (2033)	**14.7%**					

ERS3A - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	2018 % Improvement (prorating factor)	2033 % Improvement (prorating factor)	Realized Change in 2018 (mi)	Realized Change in 2033 (mi)
No Actions or Benefits				0	0
Total Project Length	0			0	0
Total # Projects	0				
Total Stream Miles Affected (Weighted for 2018)	0				
Total Stream Miles Affected (Weighted for 2033)	0				
Total Stream Miles (Denominator)	12.2 mi.				
% Uplift (2018)	**0.0%**				
% Uplift (2033)	**0.0%**				

MEC1 Beaver Creek

Stream Miles of Chinook Use	9.45	mi	(used as denominator in uplift calculation)

Panel used steelhead Streamnet miles since Chinook Streamnet indicated 0 miles plus 0.25 miles in Frazer Creek

MEC1 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Upper Beaver Creek (2013) Diversion Dam Batie	2.8	50%	1.4
Stokes Ranch (2015)	3.6	10%	0.36
Total Project Length	6.4		1.76
Total # Projects	2		
Total Stream Miles Affected	1.76		
Total Stream Miles (Denominator)	9.45	mi.	
% Uplift	**18.6%**		

MEC1 - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	# Screens Improved	% Improvement (proration factor)	Realized Change in 2018 (mi)
Upper Beaver Creek (2013) Diversion Dam Beatty	1	90%	0.9
Total Project Length	1		0.9
Total # Projects	1		
Total Stream Miles Affected	0.9		
Total # Screens in AU (Denominator)	5	# screens	
% of Gap	**18.0%**		
Gap %	**15.0%**	(difference between low and high bookend)	
% Uplift	**2.7%**		

MEC1 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
YN Old Schoolhouse Habitat Improvement (2013)	1	5%	0.05
MSRF Upper Beaver Creek (2013)	0.5	5%	0.025
Total Project Length	1.5		0.075
Total # Projects	2		
Total Stream Miles Affected	0.075		
Total Stream Miles (Denominator)	9.45	mi.	
% Uplift	**0.8%**		

MEC1 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Old Schoolhouse Habitat Improvement (2013)	0.2	100%	0.2
MSRF Upper Beaver Creek (2013)	0.5	100%	0.5
Total Project Length	0.7		0.7
Total # Projects	2		
Total Stream Miles Affected	0.7		
Total Stream Miles (Denominator)	9.45 mi.		
% Uplift	**7.4%**		

MEC1 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Old Schoolhouse Habitat Improvement (2013)	1	90%	0.9
MSRF Upper Beaver Creek (2013)	0.5	90%	0.45
Total Project Length	1.5		1.35
Total # Projects	3		
Total Stream Miles Affected	1.35		
Total Stream Miles (Denominator)	9.45 mi.		
% Uplift	**14.3%**		

MEC1 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proratio	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	9.45 mi.		
% Uplift	**0.0%**		

MEC1 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	14%
Prorating Factor	25%
% Uplift	**3.5%**

MEC1 - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
Beaver Creek #123 Late Season IS Flow		2.08	2.08	2.08	2.08	2.08	2.08	
Total	**0**	**2.08**	**2.08**	**2.08**	**2.08**	**2.08**	**2.08**	**0**

Average of leases

==> 1.8

Total 1.8 cfs

Total # Projects 1

Denominator 10 cfs Panel provided Base Flow

Prorating factor based on affected stream mileage	**77.9%**
% Uplift	**13.9%**

MEC5 Lower Chewuch

Stream Miles of Chinook Use	22.4 mi	(used as denominator in uplift calculation)

MEC5 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	22.4 mi.		
% Uplift	**0.0%**		

MEC5 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	22.4 mi.		
% Uplift	**0.0%**		

MEC5 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
Chewuch 8 Mile Ranch Planting/Fence (2012)	0.75	9%	0.0675
Chewuch RR 11.75-13 (River Left, 2013)	0.25	5%	0.0125
Chewuch RM 10 (2012)	0.1	7%	0.007
WDFW Chewuch Campground	0.1	3%	0.003
Chewuch River Right (2015)	0.5	3%	0.015
Pete Creek (2013)	0.17	5%	0.0085
Total Project Length	1.87		0.1135
Total # Projects	6		
Total Stream Miles Affected	0.1135		
Total Stream Miles (Denominator)	22.4 mi.		

% Uplift	**0.5%**

MEC5- LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chewuch RM 11.75-13 (River Left, 2013)	0.1	100%	0.1
WDFW Chewuch Campground	0.1	100%	0.1
Chewuch River Right (2015)	0.5	100%	0.5
Chewuch RM 10 (2012)	0.23	100%	0.23
Chewuch RM 13-15.5 (2015)	0.2	100%	0.2
Total Project Length	1.13		1.13
Total # Projects	5		
Total Miles Affected	1.13		
Total Side Channel Miles (Denominator)	9.8 mi.		Bureau of Reclamation Tributary Assessment Geodatabase
% Uplift	**11.5%**		

MEC5 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chewuch RM 10 (2012)	0.23	100%	0.23
Chewuch RM 13-15.5 (2015)	0.25	100%	0.25
Total Project Length	0.48		0.48
Total # Projects	2		
Total Stream Miles Affected	0.48		
Total Stream Miles (Denominator)	22.4 mi.		
% Uplift	**2.1%**		

MEC5 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chewuch RM 11.75-13 (River Left, 2013)	1.25	40%	0.5
WDFW Chewuch Campground	0.3	30%	0.09
Chewuch River Right (2015)	1.25	40%	0.5
Chewuch RM 10 (2012)	0.8	90%	0.72
Chewuch 8 Mile Ranch (2012)	0.75	100%	0.75
Chewuch RM 13-15.5 (2015)	2.5	65%	1.625
Pete Creek Complexity (2012)	0.3	50%	0.15
Total Project Length	7.15		4.335

Total # Projects	7	
Total Stream Miles Affected	4.335	
Total Stream Miles (Denominator)	22.4	mi.
% Uplift	**19.4%**	

MEC5- LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Road Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions	2		0
Total Project Length	2		0
Total # Projects	1		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	22.4	mi.	
% Uplift	**0.0%**		

MEC5 - LF 8.1(Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions	
Prorating Factor	100%	
% Uplift	**0.0%**	

MEC5 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Average of leases ==> 0.0

Total	0.0	cfs
Total # Projects	1	
Denominator	3	cfs
% Uplift	**0.0%**	

Example: Base Flow

MEC7 Lower Twisp

Stream Miles of Chinook Use	13.5 mi	(used as denominator in uplift calculation)

MEC7 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.5 mi.		
% Uplift	**0.0%**		

MEC7 - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.5 mi.		
% Uplift	**0.0%**		

MEC7 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.5 mi.		
% Uplift	**0.0%**		

MEC7 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)	
Twisp Ponds Left Bank Riparian Plantings (2012)	0.2	8.0%	0.016	
Twisp River Fencing Project (Little Bridge Creek and Buttermilk Creek - 2012)	7.8	10.0%	0.78	
Total Project Length	0.2		0.796	
Total # Projects	2			
Total Stream Miles Affected	0.796			
Total Stream Miles (Denominator)	18.6 mi.			Steelhead Streamnet to include riparian projects
% Uplift	**4.3%**			

MEC7 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
MSRF Right Elbow Floodplain (#02-LTW-2012-3)	0.3	75%	0.225
Total Project Length	0.3		0.225
Total # Projects	0		
Total Stream Miles Affected	0.225		

Total Side Channel Miles (Denominator)	13.5	mi.
% Uplift	**1.7%**	

MEC7 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.5 mi.		
% Uplift	**0.0%**		

MEC7 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Twisp Ponds Left Bank LWD Enhancement (2012)	0.5	30%	0.15
Poorman Creek Road Instream Structures (2012)	0.2	30%	0.06
Twisp RM 3 FEP LWD (2014)	0.1	80%	0.08
Total Project Length	0.8		0.29
Total # Projects	3		
Total Stream Miles Affected	0.29		
Total Stream Miles (Denominator)	13.5 mi.		
% Uplift	**2.1%**		

MEC7 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	2.3%	
Prorating Factor	5%	During Look Forward, Panel decided they wanted to talk to Steve H about modeling.
% Uplift	**0.1%**	

MEC7 - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
TU-WWP Twisp River IS Flow Enhancement (02-LTW-2011-1)								1
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

Average of leases

==> 0.0

Total	1.0 cfs	
Total # Projects	1	
Denominator	43 cfs	Base Flow
% Uplift	**2.3%**	

MEC8A Middle Methow

Stream Miles of Chinook Use	25.2 mi	(used as denominator in uplift calculation)

MEC8A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Barkley Temporary Pump Station (2012)	0	0%	0
Total Project Length	0		0
Total # Projects	1		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**0.0%**		

MEC8A - LF 2.3 (Injury and Mortality: Mechanical Injury)

Panel judged that the bulldozing of temporary dam was 10% of the remaining gap of injury and mortality in the assessment unit. (Barkley Diversion)

% Uplift	**1.5%**

MEC8A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.7	5%	0.035
Eagle Rocks Cottonwood Restoration (2014)	0.3	7%	0.021
1890s Side Channel Project (2014)	1	8%	0.08
Two Channels Side Channel Restoration - Fencing (2014)	0.1	7%	0.007
Methow Riparian Planting (2015)	0.68	3%	0.0204
M2 3R (2014)	0.2	4%	0.008
Whitefish Island (2012)	0.71	6%	0.0426
M2 RM46 (2012)	0.05	6%	0.003
Total Project Length	3.7		0.217
Total # Projects	8		
Total Stream Miles Affected	0.217		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**0.9%**		

MEC8A - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.3	100%	0.3

1890s Side Channel Project (2014)	0.8	100%	0.8
M2 3R (2014)	0.2	100%	0.2
Whitefish Island (2012)	0.29	100%	0.29
Total Project Length	1.59		1.59
Total # Projects	1		
Total Stream Miles Affected	1.59		
Total Side Channel Miles (Denominator)	20 mi.		Bureau of Reclamation Tributary Assessment Geodatabase on Side Channels
% Uplift	**8.0%**		

MEC8A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.3	50%	0.15
M2 3R (2014)	0.3	25%	0.075
M2 RM 46 (2012)	0.4	50%	0.2
Whitefish Island (2012)	0.2	10%	0.02
Total Project Length	1.2		0.445
Total # Projects	4		
Total Stream Miles Affected	0.445		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**1.8%**		

MEC8A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.3	100%	0.3
M2 3R (2014)	0.3	50%	0.15
M2 RM 46 (2012)	0.2	100%	0.2
Sugardike (2013)	0.5	5%	0.025
Eagle Rocks LWD (2012)	0.1	20%	0.02
Two Channels Large Wood Enhancement-2014	0.2	80%	0.16
Whitefish Island (2012)	0.2	100%	0.2
Total Project Length	1.8		1.055
Total # Projects	7		
Total Stream Miles Affected	1.055		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**4.2%**		

MEC8A - LF 8.1 (Water Quality: Temperature)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 3R (2014)	0.3	25%	0.075
1890s Side Channel Project (2014)	0.8	50%	0.4
Whitefish Island (2012)	0.3	25%	0.075
Total Project Length	1.4		0.55
Total # Projects	3		

Total Stream Miles Affected	0.55	
Total Stream Miles (Denominator)	25.2	mi.
% Uplift	**2.2%**	

MEC8A - LF 9.2 (Water Quantity: Decreased Water Quantity)

Action	*Leases* 2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Average of leases ==> 0.0

Total	0.0	cfs
Total # Projects	1	
Denominator	3	cfs
% Uplift	**0.0%**	

MEC8B Upper-Middle Methow

Stream Miles of Chinook Use	10.8 mi	(used as denominator in uplift calculation)

MEC8B - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MEC8B - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MEC8B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MEC8B - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Fender Mill Side Channel Restoration (2015)	0.5	100%	0.5
Fender Mill Side Channel Restoration (2015) - Stansbury flow improvement	0.2	10%	0.02

Total Project Length	0.7		0.52
Total # Projects	1		
Total Stream Miles Affected	0.52		
Total Side Channel Miles (Denominator)	15.1	mi.	Bureau of Reclamation Tributary Assessment Project Channels
% Uplift	**3.4%**		

MEC8B - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8	mi.	
% Uplift	**0.0%**		

MEC8B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8	mi.	
% Uplift	**0.0%**		

MEC8B - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Average of leases ==> 0.0

Total	0.0	cfs	
Total # Projects	1		
Denominator	3	cfs	Example: Base Flow
% Uplift	**0.0%**		

MEC11 Upper Twisp

Stream Miles of Chinook Use	18.6 mi	(used as denominator in uplift calculation)

MEC11 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6 mi.		
% Uplift	**0.0%**		

MEC11 - LF 3.1 (Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6 mi.		
% Uplift	**0.0%**		

MEC11 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		

Total Stream Miles (Denominator)	18.6	mi.
% Uplift	**0.0%**	

MEC11 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**0.0%**		

MEC11 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**0.0%**		

MEC11 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Scaffold Camp Giant Spruce Protection (2014)	0.1	100%	0.1
Total Project Length	0.1		0.1
Total # Projects	1		
Total Stream Miles Affected	0.1		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**0.5%**		

MEC11 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6 mi.		
% Uplift	**0.0%**		

MEC11 - LF 9.2 (Water Quantity: Increased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0
Total	0.0 cfs			
Total # Projects	0			
Denominator	cfs			
% Uplift (2018)	**0.0%**			

MES1 Beaver Creek

Stream Miles of Steelhead Use	9.2	mi	(used as denominator in uplift calculation)

MES1 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Upper Beaver Creek (2013) Diversion Dam Batie	2.8	50%	1.4
Stokes Ranch (2015)	3.6	10%	0.36
Total Project Length	6.4		1.76
Total # Projects	2		

Total Stream Miles Affected	1.76	
Total Stream Miles (Denominator)	9.2	mi.
% Uplift	**19.1%**	

MES1 - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	# Screens Improved	% Improvement (proration factor)	Realized Change in 2018
Upper Beaver Creek (2013) Diversion Dam Batie	1	100%	1
Total Project Length	1		1
Total # Projects	1		

Effective Diversions Affected	1	
Total # {Problematic Diversions in AU} (Denominator)	2	#
% of Gap	**50.0%**	
Gap %	**15.0%**	(difference between low and high bookend)

% Uplift	7.5%

MES1 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
YN Old Schoolhouse Habitat Improvement (2013)	1	5%	0.05
MSRF Upper Beaver Creek (2013)	0.5	5%	0.025
Total Project Length	1.5		0.075
Total # Projects	2		
Total Stream Miles Affected	0.075		
Total Stream Miles (Denominator)	9.2	mi.	
% Uplift	**0.8%**		

MES1 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
YN Old Schoolhouse Habitat Improvement (2013)	0.2	100%	0.2
MSRF Upper Beaver Creek (2013)	0.5	100%	0.5
Total Project Length	0.7		0.7
Total # Projects	2		
Total Stream Miles Affected	0.7		
Total Stream Miles (Denominator)	9.2	mi.	
% Uplift	**7.6%**		

MES1 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)

YN Old Schoolhouse Habitat Improvement (2013)	1		90%	0.9
MSRF Upper Beaver Creek (2013)	0.5		90%	0.45
Total Project Length	1.5			1.35
Total # Projects	2			
Total Stream Miles Affected	1.35			
Total Stream Miles (Denominator)	9.2	mi.		
% Uplift	**14.7%**			

MES1 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	9.2	mi.	
% Uplift	**0.0%**		

MES1 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	14%
Prorating Factor	25%
% Uplift	**3.5%**

MES1 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
Beaver Creek #123 Late Season IS Flow		2.08	2.08	2.08	2.08	2.08	2.08	
Total	**0**	**2.08**	**2.08**	**2.08**	**2.08**	**2.08**	**2.08**	**0**
			Average of leases ==>	1.8				
Total	1.8	cfs						

Total # Projects	1		
Denominator	10	cfs	Panel provided Base Flow

Prorating factor based on affected stream mileage	**77.9%**
% Uplift	**13.9%**

MES6 Lower Chewuch

Stream Miles of Steelhead Use	23.9	mi	(used as denominator in uplift calculation)

MES6 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	23.9	mi.	
% Uplift	**0.0%**		

MES6 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	23.9	mi.	
% Uplift	**0.0%**		

MES6 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
Chewuch 8 Mile Ranch Planting/Fence (2012)	0.75	9%	0.0675
Chewuch RR 11.75-13 (River Left, 2013)	0.25	5%	0.0125
Chewuch RM 10 (2012)	0.1	7%	0.007
WDFW Chewuch Campground	0.1	3%	0.003
Chewuch River Right (2015)	0.5	3%	0.015
Pete Creek (2013)	0.17	5%	0.0085
Total Project Length	1.87		0.1135
Total # Projects	6		
Total Stream Miles Affected	0.1135		
Total Stream Miles (Denominator)	23.9	mi.	

% Uplift	**0.5%**

MES6 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chewuch RM 11.75-13 (River Left, 2013)	0.1	100%	0.1
WDFW Chewuch Campground	0.1	100%	0.1
Chewuch River Right (2015)	0.5	100%	0.5
Chewuch RM 10 (2012)	0.23	100%	0.23
Chewuch RM 13-15.5 (2015)	0.2	100%	0.2
Total Project Length	1.13		1.13
Total # Projects	5		
Total Stream Miles Affected	1.13		
Total Side Channel Miles (Denominator)	9.8	mi.	Bureau of Reclamation Tributary Assessment Geodatabase
% Uplift	**11.5%**		

MES6 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chewuch RM 10 (2012)	0.23	100%	0.23
Chewuch RM 13-15.5 (2015)	0.25	100%	0.25
Total Project Length	0.48		0.48
Total # Projects	2		
Total Stream Miles Affected	0.48		
Total Stream Miles (Denominator)	23.9	mi.	
% Uplift	**2.0%**		

MES6 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Chewuch RM 11.75-13 (River Left, 2013)	1.25	40%	0.5
WDFW Chewuch Campground	0.3	30%	0.09
Chewuch River Right (2015)	1.25	40%	0.5
Chewuch RM 10 (2012)	0.8	90%	0.72
Chewuch 8 Mile Ranch (2012)	0.75	100%	0.75
Chewuch RM 13-15.5 (2015)	2.5	65%	1.625
Pete Creek Complexity (2012)	0.3	50%	0.15
Total Project Length	7.15		4.335

Total # Projects	7	
Total Stream Miles Affected	4.335	
Total Stream Miles (Denominator)	23.9	mi.
% Uplift	**18.1%**	

MES6 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Road Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	23.9	mi.	
% Uplift	**0.0%**		

MES6 - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions	
Prorating Factor	100%	
% Uplift	**0.0%**	

MES6 - LF 9.2 (Water Quantity: Decreased Water Quantity)

	Leases							
Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
			Average of leases ==>	0.0				

Total	0.0	cfs	
Total # Projects	1		
Denominator	3	cfs	Example: Base Flow
% Uplift	**0.0%**		

MES8 Lower Twisp

Stream Miles of Steelhead Use	18.6	mi	(used as denominator in uplift calculation)

MES8 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**0.0%**		

MES8 - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**0.0%**		

MES8 - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6 mi.		
% Uplift	**0.0%**		

MES8 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
Twisp Ponds Left Bank Riparian Plantings (2012)	0.2	8%	0.016
Twisp River Fencing Project (Little Bridge Creek and Buttermilk Creek - 2012)	7.8	10%	0.78
Total Project Length	8		0.796
Total # Projects	2		
Total Stream Miles Affected	0.796		
Total Stream Miles (Denominator)	18.6 mi.		
% Uplift	**4.3%**		

MES8 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
MSRF Right Elbow Floodplain (#02-LTW-2012-3)	0.3	75%	0.225
Total Project Length	0.3		0.225
Total # Projects	1		
Total Stream Miles Affected	0.225		

Total Side Channel Miles (Denominator)	13.5	mi.
% Uplift	**1.7%**	

MES8 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**0.0%**		

MES8 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Twisp Ponds Left Bank LWD Enhancement (2012)	0.5	30%	0.15
Poorman Creek Road Instream Structures (2012)	0.2	30%	0.06
Twisp RM 3 FEP LWD (2014)	0.1	80%	0.08
Total Project Length	0.8		0.29
Total # Projects	3		
Total Stream Miles Affected	0.29		
Total Stream Miles (Denominator)	18.6	mi.	
% Uplift	**1.6%**		

MES8 - LF 8.1(Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	2.3%	
Prorating Factor	5%	During Look Forward, panel decided they wanted to talk to Steve H about modeling.
% Uplift	**0.1%**	

MES8 - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
TU-WWP Twisp River IS Flow Enhancement (02-LTW-2011-1)								1
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

Average of leases

==> 0.0

Total	1.0 cfs
Total # Projects	1
Denominator	43 cfs
% Uplift	**2.3%**

MES9A Middle Methow

Stream Miles of Steelhead Use	25.2 mi	(used as denominator in uplift calculation)

MES9A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Barkley Temporary Pump Station (2012)	0	0%	0
Total Project Length	0		0
Total # Projects	1		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**0.0%**		

MES9A - LF 2.3 (Injury and Mortality: Mechanical Injury)

Panel judged that the bulldozing of temporary dam was 10% of the remaining gap of injury and mortality in the assessment unit. (Barkley Diversion)

% Uplift	**1.5%**

MES9A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.7	5%	0.035
Eagle Rocks Cottonwood Restoration (2014)	0.3	7%	0.021
1890s Side Channel Project (2014)	1	8%	0.08
Two Channels Side Channel Restoration - Fencing (2014)	0.1	7%	0.007
Methow Riparian Planting (2015)	0.68	3%	0.0204
M2 3R (2014)	0.2	4%	0.008
Whitefish Island (2012)	0.71	6%	0.0426
M2 RM46 (2012)	0.05	6%	0.003
Total Project Length	3.7		0.217
Total # Projects	8		
Total Stream Miles Affected	0.217		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**0.9%**		

MES9A - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.3	100%	0.3
1890s Side Channel Project (2014)	0.8	100%	0.8
M2 3R (2014)	0.2	100%	0.2
Whitefish Island (2012)	0.29	100%	0.29
Total Project Length	1.59		1.59
Total # Projects	0		
Total Stream Miles Affected	1.59		
Total Side Channel Miles (Denominator)	20	mi.	Bureau of Reclamation Tributary Assessment Geodatabase on Side Channels
% Uplift	**8.0%**		

MES9A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.3	50%	0.15
M2 3R (2014)	0.3	25%	0.075
M2 RM 46 (2012)	0.4	50%	0.2
Whitefish Island (2012)	0.2	10%	0.02
Total Project Length	1.2		0.445
Total # Projects	4		
Total Stream Miles Affected	0.445		
Total Stream Miles (Denominator)	25.2	mi.	
% Uplift	**1.8%**		

MES9A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 WDFW Obanion (2013)	0.3	100%	0.3
M2 3R (2014)	0.3	50%	0.15
M2 RM 46 (2012)	0.2	100%	0.2
Sugardike (2013)	0.5	5%	0.025
Eagle Rocks LWD (2012)	0.1	20%	0.02
Two Channels Large Wood Enhancement-2014	0.2	80%	0.16
Whitefish Island (2012)	0.2	100%	0.2
Total Project Length	1.8		1.055
Total # Projects	7		
Total Stream Miles Affected	1.055		
Total Stream Miles (Denominator)	25.2	mi.	

% Uplift	**4.2%**

MES9A - LF 8.1 (Water Quality: Temperature)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
M2 3R (2014)	0.3	25%	0.075
1890s Side Channel Project (2014)	0.8	50%	0.4
Whitefish Island (2012)	0.3	25%	0.075
Total Project Length	1.4		0.55
Total # Projects	3		
Total Stream Miles Affected	0.55		
Total Stream Miles (Denominator)	25.2 mi.		
% Uplift	**2.2%**		

MES9A - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Leases							
Action	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Permanent Acquisition**
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
			Average of leases ==>	0.0				
Total	0.0 cfs							
Total # Projects	1							
Denominator	3 cfs		Example: Base Flow					
% Uplift	**0.0%**							

MES9B Upper-Middle Methow

Stream Miles of Steelhead Use	10.8 mi	(used as denominator in uplift calculation) Panel used the Chinook Streamnet miles

MES9B - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MES9B - LF 3.1 (Food: Altered Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MES9B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (prorating factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MES9B - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Side Channel Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Fender Mill Side Channel Restoration (2015)	0.5	100%	0.5
Fender Mill Side Channel Restoration (2015) - Stansbury flow improvement	0.2	10%	0.02
Total Project Length	0.7		0.52
Total # Projects	2		
Total Stream Miles Affected	0.52		
Total Side Channel Miles (Denominator)	15.1 mi.		Bureau of Reclamation Tributary Assessment Project Channels
% Uplift	**3.4%**		

MES9B - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MES9B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.8 mi.		
% Uplift	**0.0%**		

MES9B - LF 9.2 (Water Quantity: Decreased Water Quantity)

Leases

Action	2012	2013	2014	2015	2016	2017	2018	Permanent Acquisition
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
				Average of leases ==>		0.0		

Total	0.0	cfs	
Total # Projects	1		
Denominator	3	cfs	Example: Base Flow
% Uplift	**0.0%**		

MES12 Upper Twisp

Stream Miles of Steelhead Use	21.4 mi	(used as denominator in uplift calculation)

MES12 - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	21.4 mi.		
% Uplift	**0.0%**		

MES12 - LF 3.1 (Primary Productivity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	21.4 mi.		
% Uplift	**0.0%**		

MES12 - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	21.4 mi.		
% Uplift	**0.0%**		

MES12 - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	21.4 mi.		
% Uplift	**0.0%**		

MES12 - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	21.4 mi.		
% Uplift	**0.0%**		

MES12 - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Scaffold Camp Giant Spruce Protection (2014)	0.1	100%	0.1
Total Project Length	0.1		0.1
Total # Projects	1		
Total Stream Miles Affected	0.1		
Total Stream Miles (Denominator)	21.4 mi.		
% Uplift	**0.5%**		

MES12 - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	21.4	mi.
% Uplift	**0.0%**	

MES12 - LF 9.2 (Water Quantity: Increased Water Quantity)

		Annual Amounts (cfs)		
Action	**Permanent Acquisition**	**2016**	**2017**	**2018**
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow
% Uplift (2018)	**0.0%**		

This calculation sheet for the Okanogan was created by the panel prior to the Look Back meeting (which occurred on 6/22/2016 in the Okanogan) . The main calculation tables generally take precedence over the calculations in this sheet, except when specific calculations indicate "See Panel's Worksheet," which include calculations for limiting factors 1.1 and 9.2 in ORS7K. The remainder of calculations below are provided for the administrative record, but do not necessarily reflect the final uplift calculation by the panel.

AUCode	2012StandardizedLF	Project 1	Project 1 Completed CY	Metric (miles, access, cfs, riparian miles/acres)	My comments	Denominator	% improvement	Questions	Recommendation
ORS2A	2.3: Injury and Mortality: Mechanical Injury	Irrigation Diversion Screening	2015	Screens/31	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)		18.00%	Does this mean 31 screens replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	18% uplift to high bookend
ORS2B	2.3: Injury and Mortality: Mechanical Injury	Irrigation Diversion Screening	2015	Sreens/9	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)		18.00%	Does this mean 9 screens replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	18% to high bookend
ORS2B	5.1: Peripheral and Transitional Habitats: Side Channel and Wetland Conditions	Conservancy Island Side Channel Reconnection - RM 29: Reconnect side channel to the mainstem Okanogan River. Some cold water refugia identified within side channel.	2013	feet/4500	Predicted benefit of 10%, assumed full reconnecting. High flow connectivity is great for summer/fall Chinook but not sure how beneficial to summer steelhead it is?		6%	6% benefit based upon 6,000/feet of added channel total seems generous for this species. EDT results do not show measurable change.	See calculation spreadsheet
ORS3A	2.3: Injury and Mortality: Mechanical Injury	Irrigation Diversion Screening		Screens/1	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)		18.00%	Does this mean 1 screen replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	Up to High bookend

ORS3B	2.3: Injury and Mortality: Mechanical Injury	Irrigation Diversion Screening		Screens/12	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)		18.00%	Does this mean 12 screens replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	Up to High bookend
ORS3C	2.3: Injury and Mortality: Mechanical Injury	Irrigation Diversion Screening	2015	Screens/15	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)		18.00%	Does this mean 15 screens replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	Up to High bookend
ORS3C	5.2: Peripheral and Transitional Habitats: Floodplain Condition	Peterson Sidechannel RM 42: Relic sidechannel excavated. This is a terminal sidechannel with a downstream connection to the Okanogan river. Side channel serves as high water refugia for outmigrants	2014	feet/1600	Could not find any predicted benefit but this alcove is not as functional CI. Most benefits would relate to summer/fall Chinook not summer steelhead.		1.2%	1.6% benefit based upon 1,600/feet of added channel total seems generous for this species. Assume half the benefit as CI. EDT results do not show any measurable change.	Calc spreadsheet
ORS3D	2.3: Injury and Mortality: Mechanical Injury	Irrigation Diversion Screening	2015	Screens/1	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)		6.0%	Does this mean 1 screen replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	Up to High bookend

ORS4B	1.1: Habitat Quantity: Anthropogenic Barriers	Mission Falls - RM 5.1: 12% gradient over an 1/8 mile. High gradient and high velocity. This project will remove debris and install step pool to facilitate fish passage.	2013	access/17 miles	Mission Falls-Was not passable in 2013, Passage of 10 steelhead out of 70 that reached the falls in 2014, 6 out of 39 in 2015. Mission Falls still represents a significant impediment to passage so benefits should be proportional to passage efficency. Three year average passage is 9.67%.		20.00%	No passage of steelhead has ever been documented into Stapaloop Creek, even though fish have made it above mission Falls in 2014, and 2015 plus steelhead where truck above Mission Falls in 2015. Therefore benefits can not be implied until steelhead are documented.	Calc spreadsheet		
ORS4B	7.2: Sediment Conditions: Increased Sediment Quantity	Stabilize bank erosion abatement through in-stream structures	2012	3/ log structures	These projects protect against future degradation. Direct survival beenfits are impossible to evaluate.		0	Fine sediments conditions in Omak Creek where degraded between 2010 and 2013 previous benefits can not be documented on the landscape.			0%
ORS5A	6.2: Channel Structure and Form: Instream Structural Complexity	Instream structures to allow for fish passage	2013	access/11 miles	Passage is still regulated by available water (already credited). These improvements make passage possible with less water		4.1	I see no way to quantify survival benefits separate from water lease.	Calc spreadsheet		
ORS5A	9.2: Water Quantity: Decreased Water Quantity	water lease from BOR and OID	ongoing	1200 acre feet/year-605 CFS/year	22% is based upon existing agreements (#days per year w/water from water lease)and is an increase from 1-5% resulting from overflows at Conconully Dam prior to this agreement. Any change in this period would be out year benefits from more fish returning.		0	Water lease benefits have already been credited. This is ongoing work needed to maintain existing benefits. Outyears beenfits to increased bioloigcal production could occur but not sure how to calculate.			0%
ORS5B	6.2: Channel Structure and Form: Instream Structural Complexity	sediment abatement, flood plain activation and in stream wood structure	2014	1/structure, 150 feet/stabilized, 1 acre/floodplain activated	Small treatment and we have not completed an analysis to evaluate survival benefits or habitat change.	EDT SWAG	1%	McCormack originally slated to improve habitat be 1% is that what this is? Yes	Calc spreadsheet		

ORS5B	9.2: Water Quantity: Decreased Water Quantity	water lease from BOR and OID	ongoing	1200 acre feet/year-605 CFS/year	22% is based upon existing agreements (#days per year w/water from water lease)and is an increase from 1-5% resulting from overflows at Conconully Dam prior to this agreement. Any change in this period would be out year benefits from more fish returning.		0	Water lease benefits have already been credited. This is ongoing work needed to maintain existing benefits. Outyears beenfits to increased bioloigcal production could occur but not sure how to calculate.		0%
ORS6B	5.1: Peripheral and Transitional Habitats: Side Channel and Wetland Conditions	Off channel rearing and side channel enhancement	2014	acres/0.25	Small treatment and we have not completed an EDT analysis to evaluate survival benefits or habitat change. SWAG	?		No history of this project identifed in previous EP documents.		0%
ORS7D	1.1 Barriers	Breach of remnant fish passage obstructions	2012	0.74 miles	EDT analysis set passage impacts at 97% prior to 2010 and this impairment had improved to 63% by 2013, Low bookend was 20% and an improvement of 17% would align with the EDT analysis but if benefits could be given based on 55% of habitat being vailable to adults and including no juvenile passage then 35% improvement could be possible.	0.74	80%		Calc spreadsheet	
ORS7G	1.1: Habitat Quantity: Anthropogenic Barriers	Culvert removal (impediment not barrier) and replacement with Bridge	2014	access/10 miles	Existing EP passage set at 40%, EDT analysis set passage impacts from this culvert at 12% in 2013		12%			12%
ORS7I	1.1: Habitat Quantity: Anthropogenic Barriers	Culvert replacement (impediment) with bridge	2013	access/0.5 miles	Improved access to 7% of the watershed according to our EDT analysis with productivity still impaired by 33% due to anthropogenic barriers		7%	Impact set at 40% by EP after EDT report in 2013 impact would be 33%.		7%
ORS7K	1.1: Habitat Quantity: Anthropogenic Barriers	Culvert replacement (impediment) with bridge	2012	access/ 2 miles	Previous EP set passage at 67% and no additonal passage barriers are known to exist. EDT no longer documents any passage barriers so 100% function could be considered and a 33% improvement seems warranted.		25%	A dewatered reach which seasonally dries up could be considered a barrier. Should this be dealt with as a barrier or a flow issue?	Uplift to 92% to alddress dewatered reach	

ORS7K	9.2: Water Quantity: Decreased Water Quantity	point of diversion change to ground water source	2012	2 cfs for 180 days	The intermittant section of this stream covers 9.4% of the habitat between the mouth and the falls and only has water in it during runoff (2 months, 17% of the year). High book-end should be limited by this amount of the area* time (8%). Plus addition water withdrawals that are still occuring on Eater property (20%)	42%	Reduce high bookend to 92% based on dewatered section. 20% of potential improvements still outstanding. credit for the deference between 50% function and 78%.	Uplift to 92% to allow improvement in dewatered reach
ORS8A	2.3: Injury and Mortality: Mechanical Injury	irrigation diversion screening	2015	screens/7	Screening improvements evaluated based upon 130 screens, Improvement % of the % between current and bookend(not yet calculated)	18.00%	Does this mean 7 screens replaced in 2015 or since the beginning of the project? Need to be certain how many screens were replaced between 2012 and 2015 only.	Uplift to 98%

ORS2A Wells Pool (inundated - Confluence to Chilliwist Creek)

Stream Miles of Fish Use (used as denominator)	15 mi	(used as denominator in uplift calculation)

ORS2A - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift **18.0%** All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS2A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	15 mi.		
% Uplift	**0.0%**		

ORS2A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	15 mi.		
% Uplift	**0.0%**		

ORS2A - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	NO ACTIONS
Prorating Factor	
% Uplift	**0.0%**

ORS2A - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)						
Action	Permanent Acquisition	2012	2013	2014	2015	2016	2017	2018

No Actions									
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Annual Average ==> 0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow
% Uplift (2018)	**#DIV/0!**		

ORS2B Okanogan River 01 (Chilliwist to Salmon)

Stream Miles of Fish Use (used as denominator)	6.33 mi	(used as denominator in uplift calculation)

ORS2B - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift **18.0%** All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS2B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	6.33 mi.		
% Uplift	**0.0%**		

ORS2B - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Conservancy Island Side Channel (2013)	0.85	10%	0.085
Conservancy Island Side Channel (2014)	0.28	95%	0.266
Total Project Length	1.13		0.351
Total # Projects	2		
Total Stream Miles Affected	0.351		
Total Stream Miles (Denominator)	6.33 mi.		
% Uplift	**5.5%**		2/3 of gap from Low to High Bookend

ORS2B - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	6.33	mi.
% Uplift	**0.0%**	

ORS2B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	6.33	mi.	
% Uplift	**0.0%**		

ORS2B - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	6.33	mi.	
% Uplift	**0.0%**		

ORS2B - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	
Prorating Factor	
% Uplift	**0.0%**

ORS2B - LF 9.2 (Water Quantity: Decreased Water Quantity)

Annual Amounts (cfs)

Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow
% Uplift (2018)	**0.0%**		

ORS3A Okanogan River 02 (Salmon Creek to Omak Creek)

Stream Miles of Fish Use (used as denominator)	7.2 mi	(used as denominator in uplift calculation)

ORS3A - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift **18.0%** All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS3A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	7.2 mi.		
% Uplift	**0.0%**		

ORS3A - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	7.2 mi.		
% Uplift	**0.0%**		

ORS3A - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	7.2	mi.
% Uplift	**0.0%**	

ORS3A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	7.2	mi.	
% Uplift	**0.0%**		

ORS3A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	7.2	mi.	
% Uplift	**0.0%**		

ORS3A - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	7.2	mi.	
% Uplift	**0.0%**		

ORS3A - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions
Prorating Factor	
% Uplift	**0.0%**

ORS3A - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	**Permanent Acquisition**	**2016**	**2017**	**2018**
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow
% Uplift (2018)	**0.0%**		

ORS3B Okanogan River 03 (Omak to Riverside)

Stream Miles of Fish Use (used as denominator)	93 mi	(used as denominator in uplift calculation)

ORS3B - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift	**18.0%**	All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS3B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	93 mi.		
% Uplift	**0.0%**		

ORS3B - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	93 mi.		
% Uplift	**0.0%**		

ORS3B - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	93	mi.
% Uplift	**0.0%**	

ORS3B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	93	mi.	
% Uplift	**0.0%**		

ORS3B - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	93	mi.	
% Uplift	**0.0%**		

ORS3B - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions
Prorating Factor	
% Uplift	**0.0%**

ORS3B - LF 9.2 (Water Quantity: Decreased Water Quantity)

Annual Amounts (cfs)

Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow
% Uplift (2018)	**0.0%**		

ORS3C Okanogan River 04 (Riverside to Janis Bridge)

Stream Miles of Fish Use (used as denominator)	13.6 mi	(used as denominator in uplift calculation)

ORS3C - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift	**18.0%**

All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS3C - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.6 mi.		
% Uplift	**0.0%**		

ORS3C - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.6 mi.		
% Uplift	**0.0%**		

ORS3C - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Peterson Side Channel (RM42, 2014)	0.3	50%	0.15
Total Project Length	0.3		0.15
Total # Projects	1		

Total Stream Miles Affected	0.15	
Total Stream Miles (Denominator)	12.11	mi.
% Uplift	**1.2%**	

ORS3C - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.6	mi.	
% Uplift	**0.0%**		

ORS3C - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.6	mi.	
% Uplift	**0.0%**		

ORS3C - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.6	mi.	

% Uplift	0.0%

ORS3C - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2) No Actions
Prorating Factor

% Uplift	0.0%

ORS3C - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	**Permanent Acquisition**	**2016**	**2017**	**2018**
No Actions				
Total	**0**	**0**	**0**	**0**

Annual Average ==> 0.0

Total 0.0 cfs
Total # Projects #REF!
Denominator cfs Example: Base Flow

% Uplift (2018)	0.0%

ORS3D Okanogan River 05 (Janis to Siwash Creek)

Stream Miles of Fish Use (used as denominator)	Not discussed	mi	(used as denominator in uplift calculation)

ORS3D - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift	**6.0%**	All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS3D - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	Not discussed	mi.	
% Uplift	**0.0%**		

ORS3D - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	Not discussed	mi.	
% Uplift	**0.0%**		

ORS3D - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	Not discussed	mi.
% Uplift	**0.0%**	

ORS3D - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	Not discussed	mi.
% Uplift	**0.0%**	

ORS3D - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions	
Prorating Factor		
% Uplift	**0.0%**	

ORS3D - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total	0.0	cfs
Total # Projects	0	
Denominator		cfs
% Uplift (2018)	**0.0%**	

Example: Base Flow

ORS4A Lower Omak Creek (Mouth to Mission Falls

Stream Miles of Fish Use (used as denominator)	5.66 mi	(used as denominator in uplift calculation)

ORS4A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	5.66 mi.		
% Uplift	**0.0%**		

ORS4A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	5.66 mi.		
% Uplift	**0.0%**		

ORS4A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	5.66 mi.		
% Uplift	**0.0%**		

ORS4A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Omak Creek Pool Creation (2015)	0.04	75%	0.03
Total Project Length	0.04		0.03
Total # Projects	1		
Total Stream Miles Affected	0.03		
Total Stream Miles (Denominator)	5.66 mi.		
% Uplift	**0.5%**		

ORS4A - LF 7.1 (Sediment Conditions: Decreased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	5.66 mi.		
% Uplift	**0.0%**		

ORS4A - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	5.66 mi.		
% Uplift	**0.0%**		

ORS4A - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2) — No Actions
Prorating Factor

% Uplift **0.0%**

ORS4A - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	**Permanent Acquisition**	**2016**	**2017**	**2018**
No Actions				
Total	**0**	**0**	**0**	**0**

Annual Average ==> 0.0

Total 0.0 cfs
Total # Projects 0
Denominator cfs — Example: Base Flow

% Uplift (2018) **#DIV/0!**

ORS4B Upper Omak Creek (Upstream from Mission Falls)

Stream Miles of Fish Use (used as denominator)	26.1 mi	(used as denominator in uplift calculation)

ORS4B - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Mission Falls (2013)	23.7	20%	4.74
Total Project Length	23.7		4.74
Total # Projects	1		
Total Stream Miles Affected	4.74		
Total Stream Miles (Denominator)	26.1 mi.		
% Uplift	**18.2%**		

ORS4B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.1 mi.		
% Uplift	**0.0%**		

ORS4B - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.1 mi.		
% Uplift	**0.0%**		

ORS4B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.1 mi.		
% Uplift	**0.0%**		

ORS4B - LF 7.1 (Sediment Conditions: Decreased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	26.1 mi.		
% Uplift	**0.0%**		

ORS4B - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Livestock Management and Spring Development (2013)	0.5	10%	0.05
Bank Stabilization and Erosion Abatement with LWD (2012)	0.05	75%	0.0375
Total Project Length	0.55		0.0875
Total # Projects	2		
Total Stream Miles Affected	0.0875		
Total Stream Miles (Denominator)	26.1 mi.		

% Uplift	0.3%

ORS4B - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2) — No Actions
Prorating Factor

% Uplift	0.0%

ORS4B - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	**Permanent Acquisition**	**2016**	**2017**	**2018**
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total — 0.0 cfs
Total # Projects — 0
Denominator — cfs — Example: Base Flow

% Uplift (2018)	0.0%

ORS5A Lower Salmon Creek (OID to Mouth)

Stream Miles of Fish Use (used as denominator)	4.1 mi	(used as denominator in uplift calculation)

ORS5A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	4.1 mi.		
% Uplift	**0.0%**		

ORS5A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	4.1 mi.		
% Uplift	**0.0%**		

ORS5A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Lower Salmon Instream Structures (2012)	0.037878788	50%	0.018939394
Salmon Creek Floodplain Development (2015)	0.2	75%	0.15
Total Project Length	0.237878788		0.168939394
Total # Projects	2		
Total Stream Miles Affected	0.168939394		
Total Stream Miles (Denominator)	4.1 mi.		

% Uplift	4.1%

ORS5A - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)
Prorating Factor

% Uplift	0.0%

ORS5A - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)						
Action	**Permanent Acquisition**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
No Actions								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Annual Average ==> 0.0

Total	0.0	cfs	
Total # Projects	0		
Denominator		cfs	Example: Base Flow

% Uplift (2018)	0.0%

ORS5B Upper Salmon Creek (OID to Conconully Dam)

Stream Miles of Fish Use (used as denominator)	13.26 mi	(used as denominator in uplift calculation)

ORS5B - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.26 mi.		
% Uplift	**0.0%**		

ORS5B - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	13.26 mi.		
% Uplift	**0.0%**		

ORS5B - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Salmon Creek-McCormick	0.03	100%	0.028409091
Total Project Length	0.03		0.028409091
Total # Projects	1		
Total Stream Miles Affected	0.03		
Total Stream Miles (Denominator)	13.26 mi.		
% Uplift	**0.2%**		

ORS5B - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Messinger - Sediment Abatement/Floodplain Inundation/LWD (2014)	0.14	100%	0.14
Knutson - Bioengineering (2014)	0.04	100%	0.04
Total Project Length	0.18		0.18
Total # Projects	2		
Total Stream Miles Affected	0.18		
Total Stream Miles (Denominator)	13.26 mi.		
% Uplift	**1.4%**		

ORS5B - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Messinger - Sediment Abatement/Floodplain Inundation/LWD (2014)	0.14	100%	0.14
Knutson - Bioengineering (2014)	0.04	100%	0.04
Total Project Length	0.18		0.18
Total # Projects	2		
Total Stream Miles Affected	0.18		
Total Stream Miles (Denominator)	13.26 mi.		
% Uplift	**1.4%**		

ORS5B - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0
Total	0.0 cfs			
Total # Projects	0			

Denominator cfs Example: Base Flow

% Uplift (2018)	**#DIV/0!**

ORS7D Aeneas Creek

Stream Miles of Fish Use (used as denominator)	0.74 mi	(used as denominator in uplift calculation)

ORS7D - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Breach of Remnant Fish Passage Obstruction (2012)	0.74	80%	0.592
Total Project Length	0.74		0.592
Total # Projects	1		
Total Stream Miles Affected	0.592		
Total Stream Miles (Denominator)	0.74 mi.		
% Uplift	**80.0%**		

ORS7D - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	0.74 mi.		
% Uplift	**0.0%**		

ORS7D - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	5.352		0
Total # Projects	11		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	0.74 mi.		
% Uplift	**0.0%**		

ORS7D - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	**Miles treated**	**% Improvement (proration factor)**	**Realized Change in 2018 (mi)**
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	0.74 mi.		
% Uplift	**0.0%**		

ORS7D - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)		NO ACTIONS
Prorating Factor		
% Uplift	**0.0%**	

ORS7D - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	**Permanent Acquisition**	**2016**	**2017**	**2018**
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0
Total	0.0 cfs			
Total # Projects	0			
Denominator	cfs		Example: Base Flow	
% Uplift (2018)	**0.0%**			

ORS7G Lower Antoine Creek (Mouth to Rock chute)

Stream Miles of Fish Use (used as denominator)	1.25 mi	(used as denominator in uplift calculation)

ORS7G - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Antoine Creek Weirs (2015)	1	50%	0.5
Antoine Creek Culvert (2014)	0.25	50%	0.125
Total Project Length	1.25		0.625
Total # Projects	2		
Total Stream Miles Affected	0.625		
Total Stream Miles (Denominator)	1.25 mi.		
% Uplift	**50.0%**		

ORS7G - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.25 mi.		
% Uplift	**0.0%**		

ORS7G - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.25 mi.		
% Uplift	**0.0%**		

ORS7G - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.25 mi.		
% Uplift	**0.0%**		

ORS7G - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			
Total Project Length	0		#REF!
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.25 mi.		
% Uplift	**0.0%**		

ORS7G - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)		No Actions
Prorating Factor		
% Uplift	**0.0%**	

ORS7G - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**

			Annual Average ==>	0.0
Total	0.0	cfs		
Total # Projects	0			
Denominator		cfs	Example: Base Flow	
% Uplift (2018)	**0.0%**			

ORS7H Upper Antoine Creek (Rocks to Fancher Dam)

Stream Miles of Fish Use (used as denominator)	10.48 mi	(used as denominator in uplift calculation)

ORS7H - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Antoine Creek Diversion and Passage (2014)	4.35	100%	4.35
Total Project Length	4.35		4.35
Total # Projects	1		
Total Stream Miles Affected	4.35		
Total Stream Miles (Denominator)	10.48 mi.		
% Uplift	**41.5%**		

ORS7H - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.48 mi.		
% Uplift	**0.0%**		

ORS7H - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.48 mi.		

% Uplift	**0.0%**

ORS7H - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	10.48 mi.		
% Uplift	**0.0%**		

ORS7H - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Antoine Creek Fencing (2013)	0.75	75%	0.5625
Corral Relocation (2014)	1	50%	0.5
Total Project Length	1.75		1.0625
Total # Projects	2		
Total Stream Miles Affected	1.0625		
Total Stream Miles (Denominator)	10.48 mi.		
% Uplift	**10.1%**		

ORS7H - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions
Prorating Factor	
% Uplift	**0.0%**

ORS7H - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				

Total	**0**	**0**	**0**	**0**

Annual Average ==> 0.0

Total	0.0	cfs	
Total # Projects	#REF!		
Denominator		cfs	Example: Base Flow
% Uplift (2018)	**#DIV/0!**		

ORS7I Wild Horse Spring Creek

Stream Miles of Fish Use (used as denominator)	1.08 mi	(used as denominator in uplift calculation)

ORS7I - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
Wild Horse Spring Creek Culvert Replacement (2013)	0.15	40%	0.06
Culvert Removal and Bridge	0.35	40%	0.14
Total Project Length	0.5		0.2
Total # Projects	2		
Total Stream Miles Affected	0.2		
Total Stream Miles (Denominator)	1.08 mi.		
% Uplift	**18.5%**		

ORS7I - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	# Screens Treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Unscreened Diversions in AU (Denomina	1.08 mi.		
% Uplift	**0.0%**		

ORS7I - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.08 mi.		

% Uplift	0.0%

ORS7I - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.08 mi.		
% Uplift	**0.0%**		

ORS7I - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.08 mi.		
% Uplift	**0.0%**		

ORS7I - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.08 mi.		
% Uplift	**0.0%**		

ORS7I - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.08 mi.		
% Uplift	**0.0%**		

ORS7I - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.08 mi.		
% Uplift	**0.0%**		

ORS7I - LF 8.1(Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2) No Actions
Prorating Factor

% Uplift	**0.0%**

ORS7I - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0

Total 0.0 cfs
Total # Projects 0
Denominator cfs

% Uplift (2018)	#DIV/0!

ORS7K Ninemile Creek

Stream Miles of Fish Use (used as denominator)	1.1 mi	(used as denominator in uplift calculation)

ORS7K - LF 1.1 (Anthropogenic Barriers)

See Panel's worksheet

% Uplift	**25.0%**

ORS7K - LF 2.3 (Injury and Mortality: Mechanical Injury)

Action	# Screens Treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Unscreened Diversions in AU (Denominator)	1.1 mi.		
% Uplift	**0.0%**		

ORS7K - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.1 mi.		
% Uplift	**0.0%**		

ORS7K - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0

Total Project Length	0	0
Total # Projects	0	
Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	1.1 mi.	
% Uplift	**0.0%**	

ORS7K - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.1 mi.		
% Uplift	**0.0%**		

ORS7K - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.1 mi.		
% Uplift	**0.0%**		

ORS7K - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.1 mi.		

% Uplift	**0.0%**

ORS7K - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	1.1	mi.	
% Uplift	**0.0%**		

ORS7K - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2) — No Actions
Prorating Factor

% Uplift	**0.0%**

ORS7K - LF 9.2 (Water Quantity: Decreased Water Quantity)

See Panel's worksheet

% Uplift (2018)	**42.0%**

ORS8A Okanogan River 06 (Siwash to Confluence with Similkameen)

Stream Miles of Fish Use (used as denominator)	18.2 mi	(used as denominator in uplift calculation)

ORS8A - LF 1.1 (Anthropogenic Barriers)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.2 mi.		
% Uplift	**0.0%**		

ORS8A - LF 2.3 (Injury and Mortality: Mechanical Injury)

% Uplift	**18.0%**	All unscreened diversions addressed. Uplift equivalent to gap between low and high bookends.

ORS8A - LF 4.1 (Riparian Vegetation)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.2 mi.		
% Uplift	**0.0%**		

ORS8A - LF 5.1 (Peripheral and Transitional Habitats: Side Channel and Wetland Conditions)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	18.2	mi.
% Uplift	**0.0%**	

ORS8A - LF 5.2 (Peripheral and Transitional Habitats: Floodplain Condition)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	18.2	mi.
% Uplift	**0.0%**	

ORS8A - LF 6.1 (Channel Structure and Form: Bed and Channel Form)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	18.2	mi.
% Uplift	**0.0%**	

ORS8A - LF 6.2 (Channel Structure and Form: Instream Structural Complexity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		

Total Stream Miles Affected	0	
Total Stream Miles (Denominator)	18.2	mi.
% Uplift	**0.0%**	

ORS8A - LF 7.2 (Sediment Conditions: Increased Sediment Quantity)

Action	Miles treated	% Improvement (proration factor)	Realized Change in 2018 (mi)
No Actions			0
Total Project Length	0		0
Total # Projects	0		
Total Stream Miles Affected	0		
Total Stream Miles (Denominator)	18.2 mi.		
% Uplift	**0.0%**		

ORS8A - LF 8.1 (Water Quality: Temperature)

Uplift from Flow Increase (LF 9.2)	No Actions
Prorating Factor	
% Uplift	**0.0%**

ORS8A - LF 9.2 (Water Quantity: Decreased Water Quantity)

		Annual Amounts (cfs)		
Action	Permanent Acquisition	2016	2017	2018
No Actions				
Total	**0**	**0**	**0**	**0**
			Annual Average ==>	0.0
Total	0.0 cfs			
Total # Projects	0			
Denominator	cfs		Example: Base Flow	
% Uplift (2018)	**#DIV/0!**			