Biological notes from May 3-4, 2016 Expert Panel session in Enterprise, Oregon (Steelhead Assessment Units).
Notetaker: Kim Gould, Cardno, Inc.
Combined Look Back and Look Forward

Notes:
If a cell is blank, presume not discussed due to no applicable actions for that LF.
Yellow cells are highlighted per Panel request to revisit.
"No action" statements refer to Action Agency nexus projects. Other actions with no Action Agency nexus may have ocurred, but are not considered in EP process.
Calculation tables (separate spreadsheets) accompany these biological notes and capture project metrics and uplift calculations. Separate calculation tables were created for the look back and look forward process.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS1	Lower Grande Ronde River Mainstem - mouth to Wenaha River	2.1: Injury and Mortality: Predation	13.30%	20.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS1	Lower Grande Ronde River Mainstem - mouth to Wenaha River	6.2: Channel Structure and Form: Instream Structural Complexity	13.30%	20.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS1	Lower Grande Ronde River Mainstem - mouth to Wenaha River	7.2: Sediment Conditions: Increased Sediment Quantity	13.30%	20.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS1	Lower Grande Ronde River Mainstem - mouth to Wenaha River	8.1: Water Quality: Temperature	13.30%	20.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS1	Lower Grande Ronde River Mainstem - mouth to Wenaha River	9.2: Water Quantity: Decreased Water Quantity	13.30%	20.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	1.1: Habitat Quantity: Anthropogenic Barriers	9.60%	14.28%							Grouse Ck. Buford Ck. & Rattlesnake culverts - full juvenile & adult barriers; EP not familiar with the Washington tribs which represents about 60% of the AU		0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	4.1: Riparian Condition: Riparian Vegetation	9.60%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	6.2: Channel Structure and Form: Instream Structural Complexity	9.60%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	7.2: Sediment Conditions: Increased Sediment Quantity	9.60%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	8.1: Water Quality: Temperature	9.60%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	9.1: Water Quantity: Increased Water Quantity	9.60%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS2	Lower tributaries to the Lower Grande Ronde River	9.2: Water Quantity: Decreased Water Quantity	9.60%	14.32%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS3	Wenaha River Mainstem	6.2: Channel Structure and Form: Instream Structural Complexity	6.40%	100.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS5	Lower Grande Ronde River Mainstem - Wenaha River to Wallowa River	4.1: Riparian Condition: Riparian Vegetation	10.60%	5.00%	90.05	90.05		95	90.05	95	lots of wild & scenic, roadless area - a little use in bottom end.		90.05	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						90.05	90.05	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS5	Lower Grande Ronde River Mainstem - Wenaha River to Wallowa River	6.2: Channel Structure and Form: Instream Structural Complexity	10.60%	5.00%	90	90		95	90	95			90	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						90	90	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS5	Lower Grande Ronde River Mainstem - Wenaha River to Wallowa River	7.2: Sediment Conditions: Increased Sediment Quantity	10.60%	10.00%	60	60		70	60	75			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS5	Lower Grande Ronde River Mainstem - Wenaha River to Wallowa River	8.1: Water Quality: Temperature	10.60%	40.00%	60	60		70	60	75			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS5	Lower Grande Ronde River Mainstem - Wenaha River to Wallowa River	9.2: Water Quantity: Decreased Water Quantity	10.60%	40.00%	60	60		80	60	80	Watershed effects from Grande Ronde valley		60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	1.1: Habitat Quantity: Anthropogenic Barriers	35.30%	2.00%	85	90		100	90	100		about 8 miles improved access	85	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						85	85	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	4.1: Riparian Condition: Riparian Vegetation	35.30%	30.00%	50	50		51	50	60			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	6.2: Channel Structure and Form: Instream Structural Complexity	35.30%	5.00%	60	60		65	60	70			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	7.2: Sediment Conditions: Increased Sediment Quantity	35.30%	20.00%	55	56		60	57	65			55	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						55	55	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	8.1: Water Quality: Temperature	35.30%	30.00%	50	50		51	50	55			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	9.1: Water Quantity: Increased Water Quantity	35.30%	3.00%	70	70		70	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS6	Courtney, Mud, Grossman, and Wildcat Creeks	9.2: Water Quantity: Decreased Water Quantity	35.30%	10.00%	70	70		70	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS7	Upper Tributaries of the Lower Grande Ronde River	6.2: Channel Structure and Form: Instream Structural Complexity	4.60%	50.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Grande Ronde River lower mainstem tributaries	LGS7	Upper Tributaries of the Lower Grande Ronde River	7.2: Sediment Conditions: Increased Sediment Quantity	4.60%	50.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

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Snake River Steelhead	Imnaha River	IRS1	Lower Imnaha R.	7.2: Sediment Conditions: Increased Sediment Quantity	9.90%	30.00%	80.05	80.05		80.05	80.05	85	Upstream effects		80.25	0.2	As per Chinook assessment unit IRC1: 1 project in calc table. Denominator is 36.4 miles. Uplift = 0.2 %.						80.25	80.25	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS1	Lower Imnaha R.	8.1: Water Quality: Temperature	9.90%	30.00%	70	70		80	70	85	naturally hot; upstream factors contribute to higher temps		70	0	As per Chinook assessment unit IRC1: 1 project in calc table, but prorated at 0%, so no measurable uplift.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS1	Lower Imnaha R.	8.2: Water Quality: Oxygen	9.90%	5.00%	80	80		90	80	90	no feedlots remaining in 2012; some in place 2009		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS1	Lower Imnaha R.	9.2: Water Quantity: Decreased Water Quantity	9.90%	35.00%	70	70		80	70	80	Big & Little Sheep are considerations		70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS2	Lower Imnaha Tribs	1.1: Habitat Quantity: Anthropogenic Barriers	1.90%	20.00%	70	95		100	95	100	changed low bkend from 60	some remaining on Thorn Ck.	70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS2	Lower Imnaha Tribs	4.1: Riparian Condition: Riparian Vegetation	1.90%	25.00%	50	50		51	50	70			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS2	Lower Imnaha Tribs	7.2: Sediment Conditions: Increased Sediment Quantity	1.90%	25.00%	50	50		51	50	70			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS2	Lower Imnaha Tribs	8.1: Water Quality: Temperature	1.90%	25.00%	50	50		51	50	70			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS2	Lower Imnaha Tribs	8.2: Water Quality: Oxygen	1.90%	5.00%	80	80		90	80	95			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS3	Cow, Lightning, & Horse Creeks	1.1: Habitat Quantity: Anthropogenic Barriers	23%	25.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS3	Cow, Lightning, & Horse Creeks	6.1: Channel Structure and Form: Bed and Channel Form	23%	25.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS3	Cow, Lightning, & Horse Creeks	7.2: Sediment Conditions: Increased Sediment Quantity	23%	25.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS3	Cow, Lightning, & Horse Creeks	8.1: Water Quality: Temperature	23%	25.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS4	Upper Imnaha River Mainstem	1.1: Habitat Quantity: Anthropogenic Barriers	11.90%	10.00%	85	85		100	85	100			85	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						85	85	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS4	Upper Imnaha River Mainstem	6.1: Channel Structure and Form: Bed and Channel Form	11.90%	30.00%	85	85		86	85	90			85	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						85	85	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS4	Upper Imnaha River Mainstem	7.2: Sediment Conditions: Increased Sediment Quantity	11.90%	25.00%	80.01	80.01		82	80.01	85			80.01	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80.01	80.01	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS4	Upper Imnaha River Mainstem	8.1: Water Quality: Temperature	11.90%	30.00%	80	80		82	80	85			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

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Snake River Steelhead	Imnaha River	IRS4	Upper Imnaha River Mainstem	8.2: Water Quality: Oxygen	11.90%	5.00%	90	90		95	90	96			90	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						90	90	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	15.40%	15.00%	70	80		100	80	100		all partial barriers	70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	4.1: Riparian Condition: Riparian Vegetation	15.40%	20.00%	60	60		62	60	65			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	6.1: Channel Structure and Form: Bed and Channel Form	15.40%	20.00%	50	50		55	50	70			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	15.40%	15.00%	65	65.1		70	65.1	75			65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	8.1: Water Quality: Temperature	15.40%	15.00%	80	80		82	80	85			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	8.2: Water Quality: Oxygen	15.40%	5.00%	80	80		82	80	85			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	9.1: Water Quantity: Increased Water Quantity	15.40%	0.00%	70	70		72	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS5	Upper Imnaha R. Tributaries	9.2: Water Quantity: Decreased Water Quantity	15.40%	10.00%	65	65		70	65	75			65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	1.1: Habitat Quantity: Anthropogenic Barriers	13.40%	15.00%	70	75		90	75	90	weir; 3900 rd culvert; 020 road culvert; little sheep diversion; Buehler barrier (addressed in 2010); all partial barriers - juvenile & adult	Estimate assumes that still have the Litte Sheep satellite facility & double culverts on county road.	80.6	10.6	Same project and proration as BSC1: Big Sheep Buhler diversion. Opened 17 miles of steelhead habitat. Denominator based on 53.1 Streamnet steelhead miles, resulting in 10.6% uplift.						80.6	80.6	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	4.1: Riparian Condition: Riparian Vegetation	13.40%	10.00%	40	40		60	40	70	Coyote Ck. to Carrol Ck. & Little Sheep is heavily degraded		40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	6.1: Channel Structure and Form: Bed and Channel Form	13.40%	5.00%	40.1	40.1		55	40.1	55	Highway construction, Big Sheep channelization		40.1	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40.1	40.1	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	7.2: Sediment Conditions: Increased Sediment Quantity	13.40%	10.00%	60	60		70	60	80			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	8.1: Water Quality: Temperature	13.40%	10.00%	50	50		55	50	60			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	8.2: Water Quality: Oxygen	13.40%	5.00%	80	80		85	80	85	small feedlot operations		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS6	Lower Big Sheep Mainstem	9.2: Water Quantity: Decreased Water Quantity	13.40%	45.00%	30	30		80	30	80	divert lots of low seasonally on reach above; little sheep		30	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						30	30	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	15.20%	5.00%	80	85		100	85	100		all naturally produced steelhead are passed above weir; provide volitional passage for juveniles	88.4	8.4	Limiting factor 1.1 action from IRS6 benefits upstream assessment units. 51.1 steelhead miles per Streamnet, but not all tributaries are affected by passage action (affected 13 miles). Yields 8.4% uplift. Only one other barrier in assessment unit (on Little Sheep Creek), plus Camp Creek (not done yet).						88.4	88.4	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	4.1: Riparian Condition: Riparian Vegetation	15.20%	20.00%	70	70		71	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	15.20%	25.00%	50	50		55	50	65			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	8.1: Water Quality: Temperature	15.20%	22.00%	50	50		55	50	65			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	8.2: Water Quality: Oxygen	15.20%	5.00%	75	75		80	75	85			75	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						75	75	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	9.1: Water Quantity: Increased Water Quantity	15.20%	3.00%	80	80		80	80	82			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS7	Lower Big Sheep and Little Sheep Cr. Tributaries	9.2: Water Quantity: Decreased Water Quantity	15.20%	20.00%	65	70		70	70	75		1.17 cfs; Camp Ck. only diversion on all the tribs	65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS8	Upper Big Sheep & Little Sheep Mainstems	1.1: Habitat Quantity: Anthropogenic Barriers	4.10%	10.00%	80	80		90	80	90	Wallowa Valley Improvement Canal - doesn't block a lot of steelhead habitat; culvert above the Splitter;		90	10	Limiting factor 1.1 action from IRS6 benefits upstream assessment units. Buhler Diversion project benefited 11.9 miles in this assessment unit (entire steelhead mileage), which yields 33% uplift. However, panel decreased proration to 10% to account for distance upstream, resulting in 10% uplift.						90	96.3	6.3	Little Sheep Creek AOP barrier removal (USFS project). Panel assumed it is a partial juvenile barrier (25% proration). Yields 6.3% uplift. USFS to review.
Snake River Steelhead	Imnaha River	IRS8	Upper Big Sheep & Little Sheep Mainstems	7.2: Sediment Conditions: Increased Sediment Quantity	4.10%	10.00%	80.05	80.05		85	80.05	85			80.05	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80.05	80.05		Need USFS review of calc table.
Snake River Steelhead	Imnaha River	IRS8	Upper Big Sheep & Little Sheep Mainstems	8.1: Water Quality: Temperature	4.10%	10.00%	80	80		85	80	85	Big Sheep Canal diverts some cold water but stays relatively cool instream;		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS8	Upper Big Sheep & Little Sheep Mainstems	9.2: Water Quantity: Decreased Water Quantity	4.10%	70.00%	30	30		80	30	80			30	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						30	30	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	5.30%	20.00%	51	71		100	71	100		Lick Ck. about 5% & WVIC other 15%	53.5	2.5	Limiting factor 1.1 action from IRS6 benefits upstream assessment units. Buhler Diversion project benefited 5.5 miles out of 21.8 steelhead miles in this assessment unit. Panel decreased proration to 10% to account for distance upstream, yielding 2.5% uplift.						53.5	55.2	1.7	Lick Creek Culvert: 3.7 miles of access. Need Nez Perce Tribe Research Team review of mileage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	4.1: Riparian Condition: Riparian Vegetation	5.30%	15.00%	75	75		76	75	80			75	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						75	75	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	5.30%	20.00%	50.25	53.25		60	53.25	65			50.25	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50.25	50.25	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	8.1: Water Quality: Temperature	5.30%	10.00%	60	60		61	60	70			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	8.2: Water Quality: Oxygen	5.30%	3.00%	85	85		90	85	95			85	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						85	85	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	9.1: Water Quantity: Increased Water Quantity	5.30%	2.00%	80	80		80	80	82			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Imnaha River	IRS9	Upper Big Sheep & Little Sheep tributaries	9.2: Water Quantity: Decreased Water Quantity	5.30%	30.00%	40	40		85	40	90			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Joseph Creek	JCS1	Joseph Cr. Mainstem	6.1: Channel Structure and Form: Bed and Channel Form	20.50%	15.00%	80	80		90	80	95	3-4 miles channelized on Forest Service & private lands		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS1	Joseph Cr. Mainstem	7.2: Sediment Conditions: Increased Sediment Quantity	20.50%	35.00%	70	70		75	70	80	upstream influence; FS pebble counts indicate sediment not as bad as previously thought; 75 bookend from upstream projects		70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS1	Joseph Cr. Mainstem	8.1: Water Quality: Temperature	20.50%	45.00%	66	66		70	66	75			66.1	0.1	Birkmaier: leasing 0.8 cfs at confluence. Base flows are 3-5 cfs (July 1 = 5 cfs measured with no irrigation). Helps maintain temperature, but not thought to produce measurable temperature reduction benefit, so prorated as 0. Or, if 0.8 cfs is divided by 5 cfs base flow, proration is 16%, resulting in 0.3% uplift. Forward looking infrared (FLIR) data: at RM 9 in late Aug: 16 degrees C, warming to 18 degrees C downstream. Panel chose to prorate to 5%, resulting in 0.1% uplift.						66.1	66.1		Depends on flow prorations and data (see limiting factor 9.2). No uplift calculated by panel yet.
Snake River Steelhead	Joseph Creek	JCS1	Joseph Cr. Mainstem	8.2: Water Quality: Oxygen	20.50%	5.00%	75	75		80	75	85	some winter feeding areas		75	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		0	Oxygen not considered to be limiting by panel.			75	75	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS1	Joseph Cr. Mainstem	9.2: Water Quantity: Decreased Water Quantity											0				5	Panel added LF 9.2 (flow) on May 4, 2016.	75	Not a major factor, but there are several irrigation diversions on this small creek.	75	81.5	6.5	Denominator: baseflow is 5 cfs at point of diversion in project reach (measured in July 2015). No gage in Joseph Creek. Birkmaier Project is at the top of the assessment unit and is adding 0.85 cfs (May-Sept). Weighted based on 5 out of 12 months when flow would be an issue (40% proration), resulting in 6.5% expected uplift (following proration logic used in Lostine). But we are addressing 100% of the critical low flow period, so prorate higher? Revisit with more data? Limited/no monitoring data available here. To do: sum of total water rights to determine percentages.
Snake River Steelhead	Joseph Creek	JCS2	Cottonwood Creek	5.2: Peripheral and Transitional Habitats: Floodplain Condition	14.50%	15.00%	55	55		70	55	80			55	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						55	55	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS2	Cottonwood Creek	7.2: Sediment Conditions: Increased Sediment Quantity	14.50%	30.00%	55	57		65	59	70			55	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						55	55	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS2	Cottonwood Creek	8.1: Water Quality: Temperature	14.50%	30.00%	70	70		72	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS2	Cottonwood Creek	8.2: Water Quality: Oxygen	14.50%	5.00%	80	80		85	80	90			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS2	Cottonwood Creek	9.2: Water Quantity: Decreased Water Quantity	14.50%	20.00%	70	70		70	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS3	Joseph Creek Small Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	4.50%	20.00%	90	90		100	90	100			90	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						90	90	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS3	Joseph Creek Small Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	4.50%	10.00%	75	75		80	75	85			75	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						75	75	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS3	Joseph Creek Small Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	4.50%	20.00%	60	60		70	60	75			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS3	Joseph Creek Small Tributaries	8.1: Water Quality: Temperature	4.50%	20.00%	60	60		62	60	65			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS3	Joseph Creek Small Tributaries	8.2: Water Quality: Oxygen	4.50%	10.00%	85	85		90	85	95			85	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						85	85	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS3	Joseph Creek Small Tributaries	9.2: Water Quantity: Decreased Water Quantity	4.50%	20.00%	65	65		67	65	75			65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS4	Swamp & Davis Creeks	4.1: Riparian Condition: Riparian Vegetation	13.70%	50.00%	66	66		75	66	85			66	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						66	66	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS4	Swamp & Davis Creeks	7.2: Sediment Conditions: Increased Sediment Quantity	13.70%	25.00%	65	65		75	65	85	upstream portions of Swamp Ck. has good riparian filters		65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS4	Swamp & Davis Creeks	8.1: Water Quality: Temperature	13.70%	20.00%	70	70		80	70	85			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS4	Swamp & Davis Creeks	8.2: Water Quality: Oxygen	13.70%	5.00%	80	80		90	80	95	lots of exclosure fencing in place		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	4.1: Riparian Condition: Riparian Vegetation	11.20%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15	Riparian, temperature, and sediment are the dominant issues.	50		50	50.04	0.04	Crow Creek-Krebs project: fencing, off-site solar and gravity watering systems. Will take some time for riparian function changes. Denominator set at 26.2 miles based on Streamnet steelhead mileage. Assuming 1% growth per year, panel expects 0.04% uplift.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	5.2: Peripheral and Transitional Habitats: Floodplain Condition	11.20%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15		50		50	50	0	Crow Creek-Krebs project is planned but will have no measurable benefit within the 2016-2018 time period (as indicated by 0% prorating factor in calculation spreadsheet.)
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	6.2: Channel Structure and Form: Instream Structural Complexity	11.20%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15		50		50	50	0	No action.
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	7.2: Sediment Conditions: Increased Sediment Quantity	11.20%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		20	Riparian, temperature, and sediment are the dominant issues.	50		50	50.2	0.2	Crow Creek-Krebs project. Prorated at 5% resulting in 0.2% uplift expected.
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	8.1: Water Quality: Temperature	11.20%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		20	Riparian, temperature, and sediment are the dominant issues.	50		50	50	0	No effect expected from project in 2018 period.
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	8.2: Water Quality: Oxygen	11.20%	14.28%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		0	Not considered a problem by panel. Remove limiting factor.			0	0	0	No action.
Snake River Steelhead	Joseph Creek	JCS5	Elk & Crow Creeks	9.2: Water Quantity: Decreased Water Quantity	11.20%	14.32%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15	No diversion in Elk, 2 in Crow.	50		50	50	0	No action.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		14		50	Barriers are on USFS land.	50	50	0	No action.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	4.1: Riparian Condition: Riparian Vegetation	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15	Riparian, temperature, and sediment are the dominant issues.	50		50	50.1	0.1	West Fork Pine Creek - Krebs; Chesnimnus - Williams projects: exclusion fencing. Panel prorated at 1% each, yielding 0.1% expected uplift.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	5.2: Peripheral and Transitional Habitats: Floodplain Condition	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		13		50		50	50.3	0.3	West Fork Pine Creek - Krebs; Chesnimnus - Williams projects: includes bank layback. Calc table yields 0.3% expected uplift.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		13		50		50	50	0	No action.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15		50		50	50.1	0.1	West Fork Pine Creek - Krebs; Chesnimnus - Williams projects: fencing, planting, bank layback. Calc table has prorations. Panel determined 0.1% expected uplift.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	8.1: Water Quality: Temperature	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15		50		50	50	0	Not enough time for measurable change.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	8.2: Water Quality: Oxygen	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		0	Not considered an LF by the panel.	50		50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS6	Lower Chesnimnus Creek and Prairie Tributaries	9.2: Water Quantity: Decreased Water Quantity	12.40%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		15		50		50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS7	Upper Chesnimnus Creek and Forest Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	23.20%	10.00%	80	80		100	80	100			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS7	Upper Chesnimnus Creek and Forest Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	23.20%	15.00%	40	40		60	40	70			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS7	Upper Chesnimnus Creek and Forest Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	23.20%	25.00%	40.05	46.05		65	46.05	75		assume 10 miles/yr for 4 years; assumes TMP is approved before start of project; many upland roads.	40.05	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40.05	40.05	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS7	Upper Chesnimnus Creek and Forest Tributaries	8.1: Water Quality: Temperature	23.20%	25.00%	50	50		52	50	60			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS7	Upper Chesnimnus Creek and Forest Tributaries	8.2: Water Quality: Oxygen	23.20%	5.00%	70	70		80	70	85			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Joseph Creek	JCS7	Upper Chesnimnus Creek and Forest Tributaries	9.2: Water Quantity: Decreased Water Quantity	23.20%	20.00%	65	65		67	65	75			65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Wallowa River	WRS1	Lower Wallowa River	7.2: Sediment Conditions: Increased Sediment Quantity	3.80%	50.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS1	Lower Wallowa River	8.1: Water Quality: Temperature	3.80%	50.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	1.1: Habitat Quantity: Anthropogenic Barriers	9.90%	15.00%	85	95		100	95	100			95.6	10.6	Equivalent Chinook assessment unit and actions yield 10.6% uplift. Same distance as for Chinook NOTE: Revise bookend in Look Forward.				35	Higher than Chinook bookend, due to steelhead ease of migration during early part of irrigation season due to run timing.	35	62.3	27.3	Denominator: 26.3 steelhead miles from Streamnet. Projects in calc table are from equivalent Chinook assessment unit: WLC7. Flow is limiting to both adults and juveniles, but is not as acute for steelhead as for Chinook, so panel adjusted proration accordingly for seasonality of migration and jumping abilities. Steelhead juveniles are more apt to migrate upstream than Chinook. Many steelhead juveniles seen when salvage is performed. Panel adjusted project lengths based on steelhead distribution in assessment unit boundary. Prorated physical barriers based on adult steelhead timing. Adjusted flow barriers based on timing of migration and benefit. Flow program was designed to benefit adult Chinook rather than juvenile steelhead. Flow project prorations: 2 out of 12 months, 3.5 miles of reach = 16%, but divided by 2 for only 1 life stage affected, resulting in 8% proration. Yields 27.3% expected uplift.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	3.1: Food: Altered Primary Productivity	9.90%	5.00%	70	70		70	70	70			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this LF expected within 2013-2018 period in this AU. No change in function percentage.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	5.2: Peripheral and Transitional Habitats: Floodplain Condition	9.90%	10.00%	65	65		70	65	75			65	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						65	65	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	6.2: Channel Structure and Form: Instream Structural Complexity	9.90%	20.00%	65	65		70	65	75			65.04	0.04	Calc table = 0.04% uplift per Chinook actions.						65.04	65.04	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	7.2: Sediment Conditions: Increased Sediment Quantity	9.90%	10.00%	60	60		75	60	80			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	8.1: Water Quality: Temperature	9.90%	10.00%	75	75		77	75	80			75.7	0.7	Same as Chinook, but different denominator; panel determined 0.7% uplift.						75.7	79.1	3.4	Calc table has Chinook projects, but panel reduced benefit by half due to run timing/life stage difference between Chinook and steelhead. See Chinook rationale re: flows. Only benefits juveniles. Yields 3.4% expected uplift.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	8.2: Water Quality: Oxygen	9.90%	0.00%	75	75		80	75	90			75	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						75	75	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS10	Lostine River	9.2: Water Quantity: Decreased Water Quantity	9.90%	30.00%	50	50		80	50	80			81.3	31.3	Same as Chinook.						81.3	91	9.7	Calc table has Chinook projects, but reduced benefit by half due to run timing/life stage difference between Chinook and steelhead. Only benefits juveniles. Yields 9.7% expected uplift.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	1.1: Habitat Quantity: Anthropogenic Barriers	2.90%	15.00%	50	50		100	50	100			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	4.1: Riparian Condition: Riparian Vegetation	2.90%	15.00%	30	30		35	30	60			30	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						30	30	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	5.2: Peripheral and Transitional Habitats: Floodplain Condition	2.90%	15.00%	30	30		50	30	60			30	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						30	30	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	6.2: Channel Structure and Form: Instream Structural Complexity	2.90%	15.00%	30	35		50	38	60			30	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						30	30	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	7.2: Sediment Conditions: Increased Sediment Quantity	2.90%	4.00%	60	60		70	60	80			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	8.1: Water Quality: Temperature	2.90%	15.00%	70	70		72	70	75			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	8.2: Water Quality: Oxygen	2.90%	1.00%	70	70		80	70	80			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS11	Hurricane Creek	9.2: Water Quantity: Decreased Water Quantity	2.90%	20.00%	40	40		90	40	95			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	1.1: Habitat Quantity: Anthropogenic Barriers	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	4.1: Riparian Condition: Riparian Vegetation	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	5.2: Peripheral and Transitional Habitats: Floodplain Condition	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	6.1: Channel Structure and Form: Bed and Channel Form	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	6.2: Channel Structure and Form: Instream Structural Complexity	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	7.2: Sediment Conditions: Increased Sediment Quantity	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	8.2: Water Quality: Oxygen	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS12	Prairie Creek	9.1: Water Quantity: Increased Water Quantity	5.30%	12.50%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	12.30%	5.00%	50.4	55.4		100	55.4	100		Spring Ck is a small stream.	55.8	5.4	Actions from WLC3 apply. Steelhead denominator is 36.3 miles, resulting in 5.4% uplift. Included Trout Creek: 1.9 miles. Panel prorated for steelhead juvenile use (25%).						55.8	55.8	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	4.1: Riparian Condition: Riparian Vegetation	12.30%	15.00%	40.4	40.4		45	40.4	60			40.43	0.03	Based on Chinook.						40.43	40.43	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	5.2: Peripheral and Transitional Habitats: Floodplain Condition	12.30%	20.00%	40.4	40.4		65	40.4	80			41.2	0.8	Six Ranch project: 0.38 mile treated. Panel prorated improvement to 75% based on influence of project elements on floodplain conditions, yielding 0.8% uplift.						41.2	41.2	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	12.30%	25.00%	40.3	40.3		65	40.3	80			40.8	0.5	Six Ranch project: 0.38 mile treated. Same proration as for Chinook, yielding 0.5% uplift.						40.8	40.8	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	12.30%	25.00%	50	50		60	50	75			50.7	0.7	Same projects as for Chinook. Denominator for steelhead is 36.3 miles, resulting in 0.7% uplift.						50.7	50.7	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	8.2: Water Quality: Oxygen	12.30%	5.00%	70	70		80	70	85			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS13	Upper Wallowa River (Upstream of Lostine River) and Small Tributaries	9.2: Water Quantity: Decreased Water Quantity	12.30%	5.00%	80	81		85	81	90			80.5	0.5	See calc table: Trout Creek Alpine Meadows project, as with Chinook. Same denominator. Yields 0.5% uplift. Water right is held by city, so not subject to forfeiture.						80.5	80.5	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS2	Lower Wallowa Tributaries - Howard, Wise, and Fisher Creeks	6.2: Channel Structure and Form: Instream Structural Complexity	4.20%	33.40%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS2	Lower Wallowa Tributaries - Howard, Wise, and Fisher Creeks	7.2: Sediment Conditions: Increased Sediment Quantity	4.20%	33.30%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS2	Lower Wallowa Tributaries - Howard, Wise, and Fisher Creeks	8.1: Water Quality: Temperature	4.20%	33.30%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS3	Wallowa River Canyon - Minam River to Dry Creek - and Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	9.80%	5.00%	90	95		100	95	100		all natural steelhead passed above to spawn but significant juvenile barrier; few small barriers in headwaters above Sage	90	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						90	90	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS3	Wallowa River Canyon - Minam River to Dry Creek - and Tributaries	4.1: Riparian Condition: Riparian Vegetation	9.80%	20.00%	80	80		82	80	85			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS3	Wallowa River Canyon - Minam River to Dry Creek - and Tributaries	5.2: Peripheral and Transitional Habitats: Floodplain Condition	9.80%	15.00%	95	95		95	95	95			95	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						95	95	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS3	Wallowa River Canyon - Minam River to Dry Creek - and Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	9.80%	20.00%	80	80		85	80	85			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS3	Wallowa River Canyon - Minam River to Dry Creek - and Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	9.80%	30.00%	70	70		72	70	85			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS3	Wallowa River Canyon - Minam River to Dry Creek - and Tributaries	8.2: Water Quality: Oxygen	9.80%	10.00%	90	90		92	90	95			90	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						90	90	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS4	Lower Minam River (downstream of Cougar Creek) and Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	4.70%	33.40%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS4	Lower Minam River (downstream of Cougar Creek) and Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	4.70%	33.30%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Wallowa River	WRS4	Lower Minam River (downstream of Cougar Creek) and Tributaries	8.1: Water Quality: Temperature	4.70%	33.30%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS5	Upper Minam River and Tributaries (Cougar, Trout, Murphy, and Elk Creeks, Little Minam and North Minam Rivers	6.2: Channel Structure and Form: Instream Structural Complexity	20.10%	100.00%									0	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						0	0	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS6	Mid-Wallowa River - Dry Creek to Lostine River	4.1: Riparian Condition: Riparian Vegetation	2.80%	25.00%	40	40		45	40	60			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40.13	0.13	Denominator is 7.4 steelhead miles. Calc table includes Wallowa-Baker and Tamkaliks projects, as with equivalent Chinook assessment unit. Yields 0.13% expected uplift.
		WRS6	Mid-Wallowa River - Dry Creek to Lostine River	5.1: Peripheral and Transitional Habitats: Side Channel and Wetland Conditions											0				20	Panel added limiting factor 5.1 on 5/4/2016 and reweighted.	40	As per Chinook.	40	48.7	8.7	Same rationale as per Chinook (WLC3).
Snake River Steelhead	Wallowa River	WRS6	Mid-Wallowa River - Dry Creek to Lostine River	6.1: Channel Structure and Form: Bed and Channel Form	2.80%	50.00%	40	40		60	40	75			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.		30	Panel added limiting factor 5.1 on 5/4/2016 and reweighted. Reduced weight of limiting factor 6.1 to 30%.			40	48.7	8.7	Same rationale as per Chinook (WLC3). Denominator is 7.4 steelhead miles. Yields 8.7% uplift.
Snake River Steelhead	Wallowa River	WRS6	Mid-Wallowa River - Dry Creek to Lostine River	6.2: Channel Structure and Form: Instream Structural Complexity	2.80%	15.00%	40	40		60	40	75			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	56.2	16.2	Same rationale as per Chinook (WLC3).
Snake River Steelhead	Wallowa River	WRS6	Mid-Wallowa River - Dry Creek to Lostine River	8.1: Water Quality: Temperature	2.80%	10.00%	75	75		85	75	90			75	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						75	75.14	0.14	Based on Chinook flow project for equivalent assessment unit (there is no limiting factor 9.2 for steelhead). Summed limiting factors 4.1 and 9.2 from Chinook. Yields 0.14% uplift.
Snake River Steelhead	Wallowa River	WRS7	Dry Creek and Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	8.20%	5.00%	80	80		90	80	90	Steelhead spawning & rearing habitat; some culverts with passage issues may exist; no diversions identified at this time		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS7	Dry Creek and Tributaries	4.1: Riparian Condition: Riparian Vegetation	8.20%	40.00%	40	40		60	40	65	Reagan Gulch Promise road		40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS7	Dry Creek and Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	8.20%	20.00%	40	40		60	40	65			40	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						40	40	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS7	Dry Creek and Tributaries	8.1: Water Quality: Temperature	8.20%	25.00%	50	50		70	50	75			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS7	Dry Creek and Tributaries	9.2: Water Quantity: Decreased Water Quantity	8.20%	10.00%	70	70		75	70	80	no diversions known; tied more to poor riparian condition, logging in headwaters, etc. Ag ground - Dry Ck. charged in lower reaches from Wallowa River diversions		70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	1.1: Habitat Quantity: Anthropogenic Barriers	9.70%	10.00%	55	65		90	65	90	culverts in headwaters; Little Bear, diversion, fish screen.		55	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						55	55	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	4.1: Riparian Condition: Riparian Vegetation	9.70%	10.00%	80	80		85	80	90	lower portion in good shape; some road issues; abt. 1/2 of reaches in wilderness		80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	6.2: Channel Structure and Form: Instream Structural Complexity	9.70%	20.00%	60	60		70	60	80			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.

ESU	Population	Code	Assessment Unit	2012 Standardized Limiting Factor	2012 AU Weight	2012 LF Weight	2012 Low Bookend	Original 2018 Estimate	Updated 2018 Estimate	High 2018 Bookend	Original 2033 Estimate	High 2033 Bookend	LF Weight and Bookends Comments	Estimates Comments	2012-15 Look Back Function (Updated 2018 Estimate)	2012-15 Look Back % Change	2012-15 Look Back Estimate Comments and Rationale	Revised AU Weight (Look Forward Meeting)	Revised LF Weight (Look Forward Meeting 2016)	2016-2018 LF Weighting Comments/ Rationale	Revised 2016-18 Low Bookend (Look Forward Meeting)	2016-18 Bookend Comments/Rationale	2015 Low Bookend	2016-18 Look Forward Function (Updated 2018 Estimate)	2016-18 Look Forward % Change	2016-18 Look Forward Estimate Comments and Rationale
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	7.2: Sediment Conditions: Increased Sediment Quantity	9.70%	4.00%	70	70		75	70	80			70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	8.1: Water Quality: Temperature	9.70%	10.00%	60	60		70	60	80	Little Bear temps are good;		60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	8.2: Water Quality: Oxygen	9.70%	1.00%	80	80		80	80	80			80	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						80	80	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS8	Bear Creek and Tributaries	9.2: Water Quantity: Decreased Water Quantity	9.70%	45.00%	45	45		70	45	70	Little Bear diversion; flow not limiting upstream adults but does limit juvenile rearing		45	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						45	45	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	1.1: Habitat Quantity: Anthropogenic Barriers	6.60%	25.00%	60	70		80	70	80		2 culvert removals, total of 15 miles improved access	60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	4.1: Riparian Condition: Riparian Vegetation	6.60%	20.00%	50	50		60	50	65	uplands have a lot of fencing;		50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	5.2: Peripheral and Transitional Habitats: Floodplain Condition	6.60%	10.00%	60	60		70	60	75	road goes up main Whisky; area is confined		60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	6.1: Channel Structure and Form: Bed and Channel Form	6.60%	10.00%	60	60		70	60	75			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	6.2: Channel Structure and Form: Instream Structural Complexity	6.60%	10.00%	60	60		70	60	75			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	7.2: Sediment Conditions: Increased Sediment Quantity	6.60%	5.00%	50	50		60	50	65			50	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						50	50	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	8.1: Water Quality: Temperature	6.60%	10.00%	60	60		70	60	75			60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	8.2: Water Quality: Oxygen	6.60%	5.00%	70	70		80	70	85	winter feeding areas		70	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						70	70	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.
Snake River Steelhead	Wallowa River	WRS9	Whisky Creek	9.2: Water Quantity: Decreased Water Quantity	6.60%	5.00%	60	60		65	60	70	unsure about irrigation diversions		60	0	No actions applicable to this limiting factor were performed within 2012-2015 period in this assessment unit. Therefore, there is no change in function percentage.						60	60	0	No actions applicable to this limiting factor are expected within 2013-2018 period in this assessment unit. No change expected in function percentage.