Northwest **Power** and **Conservation** Council

Quantitative Objectives Report

Report: **Steelhead**

Document: **Washington Lower Columbia Salmon Recovery and Fish and Wildlife Subbasin Plan - Washington Management Plan in Lower Columbia River Recovery Plan for Salmon and Steelhead**

Author: Lower Columbia Fish Recovery Board

Document Year: **2010**

Link: http://media.wix.com/ugd/810197_ed97ad06e02445f5927163b568dccd3c.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Abundance Target	Contribution	Viability Objective	Productivity Improvement Target(%)
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Summer	Washougal	Summer	Threatended	500	Primary	High	40
				Kalama	Summer	Threatended	500	Primary	High	0 (1)
				North Fork Lewis	Summer	Threatended	150	Stabilizing	Very Low	0
				East Fork Lewis	Summer	Threatended	500	Primary	High	>500
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	East Fork Lewis	Winter	Threatended	500	Primary	High	25
				Washougal	Winter	Threatended	350	Contributing	Moderate	15
				North Fork Lewis	Winter	Threatended	400	Contributing	Moderate	>500
				Salmon Creek	Winter	Threatended	50	Stabilizing	Very Low	0
				Cispus	Winter	Threatended	500	Primary	High (2)	>500
				Upper Cowlitz	Winter	Threatended	500	Primary	High (2)	>500
				Tilton	Winter	Threatended	200	Contributing	Low	>500
				South Fork Toutle	Winter	Threatended	600	Primary	High+	35
				North Fork Toutle	Winter	Threatended	600	Primary	High	125
				Lower Cowlitz	Winter	Threatended	400	Contributing	Moderate	5

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Coweeman	Winter	Threatended	500	Primary	High	25
				Kalama	Winter	Threatended	600	Primary	High+	45
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Coast Winter	Mill/Abernathy /Germany	Winter	Threatended	500	Primary	NA	0 (1)
				Grays/Chinook	Winter	Threatended	800	Primary	High	0 (1)
				Elochoman/Skamokawa	Winter	Threatended	600	Contributing	Moderate+	0 (1)
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Wind	Summer	Threatended	1000	Primary	VH	0 (1)
				Upper Gorge	Winter	Threatended	200	Stabilizing	Low	0
				Lower Gorge	Winter	Threatended	300	Primary	High	45

FOOTNOTES:
(1) Improvement increments are based on abundance and productivity; however, this population will require improvements in spatial structure or diversity to meet recovery objectives□

NOTES:□
Designated as a historical core population by the Technical Recovery Team: Washougal (summer), Kalama, Wind, NF Lewis, Cispus, and Upper Cowlitz□

Designated as a historical legacy population by the Technical recovery Team: Washougal (summer), EF Lewis, Cispus, and Upper Cowlitz

Wind population iIncrease relative to Interim Plan

Document: **Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon and Steelhead**

Author: ODFW

Document Year: **2010**

Link: http://www.dfw.state.or.us/fish/CRP/docs/lower-columbia/OR_LCR_Plan%20-%20Aug_6_2010_Final.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Abundance	Overall Risk Class	A&P Gap	Contribution to Delisting

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Clackamas	Winter	Threatened	10671	Low	6774	Primary
				Sandy	Winter	Threatened	1519	Very Low	845	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Hood	Summer	Threatened	2008	Low	1973	Primary
				Hood	Winter	Threatened	2079	Low	952	Primary
				Lower Gorge	Winter	Threatened	881	Moderate (Low)	331	Support WA (Low)
				Upper Gorge	Winter	Threatened	235	Very High (High)	84	Support WA (High)
No Recovery Domain	NA	NA	N/A	Youngs Bay	Winter	Not Listed	4733	Very Low	2247	NA
				Scappoose River	Winter	Not Listed	5169	Very Low	1924	NA
				Clatskanie	Winter	Not Listed	3982	Very Low	1531	NA
				Big Creek	Winter	Not Listed	3182	Very Low	2039	NA

NOTES:
The desired status (overall risk class) for populations which are not part of an ESA-listed ESU are indicated in parenthesis. The overall risk class for the Lower and Upper Gorge (Oregon portion of shared populations and the entire population (in parenthesis, determined by Washington).

Document: **Revised Viability Criteria for Salmon and Steelhead in the Willamette and Lower Columbia Basins**

Author: Willamette/Lower Columbia Technical Recovery Team, ODFW Document Year: **2006**

Link: http://www.fws.gov/pacific//Fisheries/Hatcheryreview/Reports/columbiagorge/EC--032Revised_Viability_CriteriaLC-TRTApril_2006.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Size Category	RFT and QET
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Clackamas	Winter	Threatened	Large	200

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Sandy	Winter	Threatened		Large	200
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Hood	Winter	Threatened		Medium	100
				Lower Gorge	Winter	Threatened		Small	50
				Upper Gorge	Winter	Threatened		Small	50
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge Summer	Hood	Summer	Threatened		Medium	100
Willamette Lower Columbia	Willamette River	Upper Willamette Steelhead	Willamette	Calapooia	Winter	Threatened		Small	50
				Molalla	Winter	Threatened		Large	200
				North Santiam	Winter	Threatened		Medium	100
				South Santiam	Winter	Threatened		Large	200

Document: **ESA Recovery Plan for Lower Columbia River Coho Salmon, Lower Columbia River Chinook Salmon, Columbia River Chum Salmon, and Lower Columbia River Steelhead**

Author: NOAA Fisheries

Document Year: **2013**

Link: http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/willamette_lowercol/lower_columbia/final_plan_documents/final_lcr_plan_june_2013_-corrected.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Target Persistence Probability	Expected level of Contribution	Target Abundance	% Survival Improvement

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Summer	North Fork Lewis	Summer	Threatened	Very Low	Stabalizing	NA	0
				East Fork Lewis	Summer	Threatened	High	Primary	500	>500
				Washougal	Summer	Threatened	High	Primary	500	40
				Kalama	Summer	Threatened	High	Primary	500	0
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Tributaries	Clackamas	Winter	Threatened	High (2)	Primary	500	
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Upper Cowlitz	Winter	Threatened	High	Primary	500	>500 (g)
				Sandy	Winter	Threatened	Very High	Primary	1519	120
				Washougal	Winter	Threatened	Moderate	Contributing	350	10
				Salmon Creek	Winter	Threatened	Very Low	Stabalizing	NA	0
				Cispus	Winter	Threatened	High	Primary	500	>500
				Clackamas	Winter	Threatened	High	Primary	10671	170
				Kalama	Winter	Threatened	High+	Primary	600	50
				East Fork Lewis	Winter	Threatened	High	Primary	500	20
				Tilton	Winter	Threatened	Low	Contributing	200	>500
				South Fork Toutle	Winter	Threatened	High+	Primary	600	40
				North Fork Toutle	Winter	Threatened	High	Primary	600	120
				Lower Cowlitz	Winter	Threatened	Moderate	Contributing	400	10
				Coweeman	Winter	Threatened	High	Primary	500	30
				North Fork Lewis	Winter	Threatened	Moderate	Contributing	400	>500
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Lower Gorge	Winter	Threatened	High	Primary (1)	300	50 (WA), 60 (OR)

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Hood	Summer	Threatened	High (2)	Primary	2008	0
				Upper Gorge	Winter	Threatened	Low	Stabalizing (1)	NA	0 (WA), 50 (OR)
				Wind	Summer	Threatened	Very High	Primary	1000	>500
				Hood	Winter	Threatened	High	Primary	2079	80

FOOTNOTES:
(1) Designation for shared population based on WA objectives, with support to be provided by OR portion of population, since WA has a larger proportion of the population area.
(2) Oregon's analysis indicates a low probability of meeting the delisting objective of high persistence probability for this population.

NOTES:
Survival improvements indicate the percentage improvement (rounded to the nearest 10) in population survival needed to achieve target impacts and are derived from the cumulative values (baseline and target). For most populations this was calculated using the following equation: [(1-CumulativeTarget)-(1-CumulativeBaseline)]/[1-CumulativeBaseline] x 100. For the East Fork Lewis population , this equation yields a different result than that reported by the LCFRB in 2010 because, for populations that have a very low probability of persistence and require very large improvements, the Washington management unit plan limited threat-specific reductions to 50 percent of the current impact as interim targets until the population response to improvements can be accurately gauged. For the East Fork Lewis, the numbers reported in this table are consistent with those from the LCFRB in 2010 rather than with the aforementioned equation. In addition, these cumulative impact numbers are not explicitly reported in ODFW (2010) but are implicit in the modeling approach that Oregon recovery planners used to derive target impacts. For populations where the survival improvement needed is larger than 500 percent, this table does not report the exact value."

Designated as a historical core population by the Technical Recovery Team: Washougal (summer), Kalama, Wind, NF Lewis (winter), Cispus, Clackamas, North Fork Toutle, Hood (winter), and Upper Cowlitz

Designated as a historical legacy population by the Technical recovery Team: Washougal, EF Lewis, Cispus, Hood (winter) and Upper Cowlitz

Document: **Tucannon Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/120068/Entire_Document.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Long-Term Return	Natural Spawning Component

Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	Tucannon	Tucannon	A-Run	Threatened	2200 (1),3400 (2), 1300 (3), 600 naturally produced (8), <62,200 (4), 4656 hatchery produced, 5044 naturally produced for all of SE WA (875 hatchery produced in the Tucannon R and 948 naturally produced in the Tucannon) (5), 2200-3400 (6)(7)	1500 (6) (7)

FOOTNOTES:
(1) Spirit of the Salmon (1996. Columbia River Inter-Tribal Fish Commission. Wy-Kan-Ush-Mi Wa-Kish-Wit: Spirit of the Salmon.)
(2) 1990 Snake Subbasin Salmon and Steelhead Production Plan
(3) 2002. National Marine Fisheries Service Interim Abundance and Productivity Targets for Interior Columbia Basin Salmon and Steelhead Listed Under the http://www.nwppc.org/library/2002/NMFSTargets2002_0404.pdf; Endangered Species Act. Website accessed January 30
(4) Columbia River Fish Management Plan
(5) Lower Snake River Compensation Plan
(6) Nez Perce Tribe Spring Chinook Adult Return Goals for Asotin Subbasin
(7) Goals are derived from various management plans. These numbers do not imply consensus by all management agencies but merely gives direction to managers who must workout the restoration and recovery of each species and population over time through implementation of the plan.
(8) SaSi2004 (WA escapement goal)

Document: **Umatilla Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/120142/EntirePlan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Total Return	Natural Return	Hatchery Return

Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	Umatilla-Walla Walla	Umatilla	A-Run	Threatened	7958 (1), 9670 (2), 9670 (3),5500 (4)	4300 (1), 4000 (2), 4000 (3), 4000 (4), 3610 (5)	3658 (1), 5670 (2), 5670 (3), 1500 (4)

FOOTNOTES:
(1) USvOR = 1987 United States vs Oregon Subbasin Production Reports;
(2) 1990 NPPC Subbasin Plan
(3) CRITFC Spirit of the Salmon (Tribal Restoration Plan)
(4) 2001 NPPC Subbasin Summary;
(5) EDT natural production estimates were derived from the PFC analysis in this this plan in Section 3.6.1.2. Total return objectives using the EDT tool are under development by fisheries managers.

Document: **Okanogan Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/fw/subbasinplanning/okanogan/plan/

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Minimum Natural Spawners for at least 8 years	Replacement Rate for at least 8 years
Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	Wenatchee-Methow	Okanogan	Summer	Threatened	2500 (1)	>1 (1)

FOOTNOTES:
(1) Adapted from NOAA fisheries interm recovery abundance and productivity for Methow

---

Document: **Viability Criteria for Application to Interior Columbia Basin Salmonid ESUs**

Author: Interior Columbia Basin Technical Recovery Team

Document Year: **2007**

Link: http://www.nwfsc.noaa.gov/trt/trt_documents/ictrt_viability_criteria_reviewdraft_2007_complete.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Minimum Abundance Threshold (MAT)	Size Category	Productivity at MAT	Role in Viability Scenario
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Deschutes Eastside	Summer	Threatened	1000	Intermediate	1.35	1 Highly Viable and 3 Viable - Fifteenmile Creek, Deschutes River Westside, Klickitat River, Deschutes River Eastside
				Fifteenmile		Threatened	500	Basic	1.56	1 Highly Viable and 3 Viable - Fifteenmile Creek, Deschutes River Westside, Klickitat River, Deschutes River Eastside
				Klickitat	Summer		1000	Intermediate	1.35	1 Highly Viable and 3 Viable - Fifteenmile Creek, Deschutes River Westside, Klickitat River, Deschutes River Eastside
				Rock Creek	Summer	Threatened	500	Basic	1.56	Maintain
				Crooked River	Summer	Extirpated	2250	Very Large	1.19	
				Deschutes Westside	Summer	Threatened	1000	Large (Intermediate)	1.26	1 Highly Viable and 3 Viable - Fifteenmile Creek, Deschutes River Westside, Klickitat River, Deschutes River Eastside
				White Salmon Summer-Winter	Winter	Extirpated	500	Basic	1.56	

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	John Day	Middle Fork John Day	Summer	Threatened	1000	Intermediate	1.35	1 Highly Viable and 2 Viable - North Fork John Day River, Lower John Day River, Middle Fork John Day or Upper John Day
				Lower Mainstem John Day	Summer	Threatened	2250	Very Large	1.19	Maintain
				Upper Mainstem John Day	Summer	Threatened	1000	Intermediate	1.35	1 Highly Viable and 2 Viable - North Fork John Day River, Lower John Day River, Middle Fork John Day or Upper John Day
				South Fork John Day	Summer	Threatened	500	Basic	1.56	Maintained
				North Fork John Day	Summer	Threatened	1500	Large	1.26	1 Highly Viable and 2 Viable - North Fork John Day River, Lower John Day River, Middle Fork John Day or Upper John Day
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Umatilla/Walla Walla	Touchet	Summer	Threatened	1000	Intermediate	1.35	1 Highly Viable and 1 Viable - Umatilla River, Walla Walla River or Touchet River
				Walla Walla Mainstem	Summer	Threatened	1000	Intermediate	1.35	1 Highly Viable and 1 Viable - Umatilla River, Walla Walla River or Touchet River
				Willow Creek	Summer	Extirpated	1000	Intermediate	1.35	
				Umatilla	Summer	Threatened	1500	Large	1.26	1 Highly Viable and 1 Viable - Umatilla River, Walla Walla River or Touchet River
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Naches	Summer	Threatened	1500	Large	1.26	1 Highly Viable and 1 Viable - Naches River or Upper Yakima, one of the remaining three populations

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Satus	Summer	Threatened	1000	Intermediate	1.35	Viable, Highly Viable, Maintained
				Toppenish	Summer	Threatened	500	Basic	1.56	Viable, Highly Viable, Maintained
				Upper Yakima	Summer	Threatened	1500	Large	1.26	1 Highly Viable and 1 Viable - Naches River or Upper Yakima, one of the remaining three populations
Interior Columbia	Snake River	Snake River Basin Steelhead	Clearwater	Lochsa	Summer	Threatened	1000	Intermediate	1.14	1 Highly Viable and 3 Viable - Lower Clearwater, Lolo Creek, 2 of Delway River, Lochsa River, South Fork Clearwater
				South Fork Clearwater	Summer	Threatened	1000	Intermediate	1.14	Maintained
				Selway	Summer	Threatened	1000	Intermediate	1.14	1 Highly Viable and 3 Viable - Lower Clearwater, Lolo Creek, 2 of Delway River, Lochsa River, South Fork Clearwater
				Lolo	Summer	Threatened	500	Basic	1.27	1 Highly Viable and 3 Viable - Lower Clearwater, Lolo Creek, 2 of Delway River, Lochsa River, South Fork Clearwater
				North Fork Clearwater	Summer	Extirpated	N/A	Large	N/A	Maintained
				Lower Mainstem Clearwater	Summer	Threatened	1500	Large	1.1	1 Highly Viable and 3 Viable - Lower Clearwater, Lolo Creek, 2 of Delway River, Lochsa River, South Fork Clearwater
Interior Columbia	Snake River	Snake River Basin Steelhead	Grande Ronde	Wallowa	Summer	Threatened	1000	Intermediate	1.14	Maintained

Interior Columbia	Snake River	Snake River Basin Steelhead	Grande Ronde	Upper Grande Ronde	Summer	Threatened	1500	Large	1.1	1 Highly Viable and 1 Viable - Upper Grande Ronde, Joseph Creek or Lower Grande Ronde
				Lower Grande Ronde	Summer	Threatened	1000	Intermediate	1.14	1 Highly Viable and 1 Viable - Upper Grande Ronde, Joseph Creek or Lower Grande Ronde
				Joseph	Summer	Threatened	500	Basic	1.27	1 Highly Viable and 1 Viable - Upper Grande Ronde, Joseph Creek or Lower Grande Ronde
Interior Columbia	Snake River	Snake River Basin Steelhead	Imnaha	Imnaha	Summer	Threatened	1000	Intermediate	1.14	Highly Viable
Interior Columbia	Snake River	Snake River Basin Steelhead	Lower Snake River	Tucannon	Summer	Threatened	1000	Intermediate	1.14	1 Highly Viable and 1 Viable - Tucannon River and Asotin Creek
				Asotin	Summer	Threatened	500	Basic	1.27	1 Highly Viable and 1 Viable - Tucannon River and Asotin Creek
Interior Columbia	Snake River	Snake River Basin Steelhead	Salmon	Chamberlain	Summer	Threatened	500	Basic	1.27	1 Highly Viable and 5 Viable - Upper Middle Fork, Chamberlin, South Fork Salmon, 2 additional Intermediate or Large populations, 1 1 additional population of any size
				Upper Salmon Mainstem	Summer	Threatened	1000	Intermediate	1.14	Viable, Highly Viable, or Maintained
				Secesch	Summer	Threatened	500	Basic	1.27	Viable or Maintained
				Lower Middle Fork	Summer	Threatened	1000	Intermed	1.14	Viable, Highly Viable, or Maintained

Interior Columbia	Snake River	Snake River Basin Steelhead	Salmon	Upper Middle Fork	Summer	Threatened	1000	Intermed	1.14	1 Highly Viable and 5 Viable - Upper Middle Fork, Chamberlin, South Fork Salmon, 2 additional Intermediate or Large populations, 1 1 additional population of any size
				Panther Creek	Summer	Threatened	500	Basic	1.27	Viable or Maintained
				North Fork Salmon	Summer	Threatened	500	Basic	1.27	Viable or Maintained
				Little Salmon	Summer	Threatened	500	Basic	1.27	Viable, Highly Viable, or Maintained
				Lemhi	Summer	Threatened	1000	Intermediate	1.14	Viable, Highly Viable, or Maintained
				Pahsimeroi	Summer	Threatened	1000	Intermediate	1.14	Viable, Highly Viable, or Maintained
				Upper Salmon East Fork	Summer	Threatened	1000	Intermediate (Basic)	1.14	Viable, Highly Viable, or Maintained
				South Fork Salmon	Summer	Threatened	1000	Intermed	1.14	1 Highly Viable and 5 Viable - Upper Middle Fork, Chamberlin, South Fork Salmon, 2 additional Intermediate or Large populations, 1 1 additional population of any size
Interior Columbia	Snake River	Snake River Basin Steelhead	Snake Hells Canyon	South Santiam	Summer	Threatened	N/A	N/A	N/A	
Interior Columbia	Upper Columbia River	Upper Willamette Steelhead	Cascade Eastern Slope Tributaries	Okanogan	Summer	Threatened	1000/500	Intermediate		2 Highly Viable and 1 Viable - Wenatchee River, Methow River, Entiat River, Okanogan River

Interior Columbia	Upper Columbia River	Upper Willamette Steelhead	Cascade Eastern Slope Tributaries	Entiat	Summer	Threatened	500	Basic	2 Highly Viable and 1 Viable - Wenatchee River, Methow River, Entiat River, Okanogan River
				Crab Creek	Summer	Extirpated	500	Intermediate	resident component maintained/reconsider as recovery efforts progress
				Methow	Summer	Threatened	1000	Intermediate	2 Highly Viable and 1 Viable - Wenatchee River, Methow River, Entiat River, Okanogan River
				Wenatchee	Summer	Threatened	1000	Intermediate	2 Highly Viable and 1 Viable - Wenatchee River, Methow River, Entiat River, Okanogan River

Document: **Salmon Subbasin Management Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2014**

Link: http://www.nwcouncil.org/media/119926/Salmon_Subbasin_Management_Plan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Long-Term Return	Natural Spawning Component
Interior Columbia	Snake River	Snake River Basin Steelhead	Salmon	Tucannon	Summer	Threatened	145-192900 (1)	21600 (2)

FOOTNOTES:
(1) Long-term return objectives are derived from management plans as described in Appendix D, Appendix Table 4. This table does not necessarily imply consensus by all management agencies but merely gives direction to managers who must work out the rehabilitation and recovery of each species and population over time through implementation of the plan.

(2) NMFS interim abundance delisting criteria (spring and summer chinook salmon combined; A and B run steelhead combined).

Document: **Nez Perce Tribe Department of Fisheries Resources Management Management Plan 2013-2018**

Author: Nez Perce Tribe

Document Year: **2013**

Link: http://www.nptfisheries.org/portals/0/images/dfrm/home/fisheries-management-plan-final-sm.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Designated Stronghold	Viability Threshold	Sustainable Escapement	Ecological Escapement
Interior Columbia	Snake River	Snake River Basin Steelhead	Clearwater	Lochsa	Summer	Threatened	Yes	1500	21900	37000
				Selway	Summer	Threatened	Yes	1500	32700	55000
				South Fork Clearwater	Summer	Threatened	Yes	1000	14800	25000
				Lolo	Summer	Threatened	Yes	500	4200	7000
				North Fork Clearwater	Summer	Threatened	Yes			
				Lower Mainstem Clearwater	Summer	Threatened	Yes	1500	26400	45000
Interior Columbia	Snake River	Snake River Basin Steelhead	Grande Ronde	Upper Grande Ronde	Summer	Threatened		1500	12100	81000
				Joseph	Summer	Threatened	Yes	1000	3600	24000
				Lower Grande Ronde	Summer	Threatened		1000	5700	38000
				Wallowa	Summer	Threatened	Yes	1500	6200	41000

Interior Columbia	Snake River	Snake River Basin Steelhead	Imnaha	Imnaha	Summer	Threatened	Yes	1000	4300	21000
Interior Columbia	Snake River	Snake River Basin Steelhead	Lower Snake River	Asotin	Summer	Threatened	Yes	1000	3400	15000
Interior Columbia	Snake River	Snake River Basin Steelhead	Salmon	Lemhi	Summer	Threatened		1000	19400	22000
				South Fork Salmon	Summer	Threatened	Yes	1000	17700	20000
				Secesch	Summer	Threatened	Yes	500	5500	6000
				Chamberlain	Summer	Threatened		1000	11300	13000
				Lower Middle Fork	Summer	Threatened		1500	28000	31000
				Upper Middle Fork	Summer	Threatened		1500	25000	28000
				Panther Creek	Summer	Threatened		1000	12000	13000
				North Fork Salmon	Summer	Threatened		500	5200	6000
				Pahsimeroi	Summer	Threatened		1000	16300	18000
				Upper Salmon East Fork	Summer	Threatened		1000	16900	19000
				Upper Salmon Mainstem	Summer	Threatened		1000	21200	24000
				Little Salmon	Summer	Threatened	Yes	1000	14000	16000
Interior Columbia	Snake River	Snake River Basin Steelhead	Snake Hells Canyon	Weiser River	Summer	Extirpated	Extirpated	Extirpated	Extirpated	Extirpated
				Hells Canyon	Summer	Extirpated	Extirpated	Extirpated	Extirpated	Extirpated
				Burnt River	Summer	Extirpated	Extirpated	Extirpated	Extirpated	Extirpated
				Powder River	Summer	Extirpated	Extirpated	Extirpated	Extirpated	Extirpated

Interior Columbia	Snake River	Snake River Basin Steelhead	Tucannon	Tucannon	Summer	Threatened	Yes	1000	3400	15000

Document: **Imnaha Subbasin Management Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/20692/Imnaha_Plan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Long-Term Return	Natural Spawning Component
Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	Imnaha	Imnaha	A-Run	Threatened	4315	2100

NOTES:
Goals are derived from various management plans as described in Appendix A, Appendix Table 1. This table does not necessarily imply consensus by all management agencies but merely gives direction to managers who must workout the restoration and recovery of each species and population over time through implementation of the plan.

Document: **Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan**

Author: Upper Columbia Salmon Recovery Board

Document Year: **2007**

Link: http://www.ucsrb.org/library/plans/

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Threshold Abundance	Minimum Productivity

Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	Wenatchee-Methow	Entiat	Summer	Threatened	500	1.2
				Methow	Summer	Threatened	1000	1.1
				Wenatchee	Summer	Threatened	1000	1.1
				Okanogan	Summer	Threatened	500	1.2

NOTES:□
These values represent the minimum growth rates associated with the minimum number of spawners of a viable population.

The ICBTRT has determined that 500 naturally produced steelhead adults for the Okanogan population will meet the minimum abundance recovery criteria within the U.S. portion of the Okanogan subbasin. If the Canadian portion of the Okanogan subbasin was included, the minimum abundance recovery criteria would be 1,000 naturally produced steelhead adults. Voluntary and bilateral efforts are underway to coordinate actions to meet this goal.

Document: **Draft Clearwater Subbasin Management Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/19923/managementplan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Long-Term Return	Natural Spawning Component
Interior Columbia	Snake River	Snake River Basin Steelhead	Clearwater	Tucannon	A-Run		5900-10000 (1)(2)	4900 (3)
				Tucannon	B-Run		42000-91000 (3)	12000 (3)

FOOTNOTES:
(1) Managers do not agree on the future population size; they do agree on a range estimate of 5,900 to 10,000 untilbetter information is obtained on actual population size potentials. NPT Fisheries staff estimate is higher based onprofessional opinion after inventories from streams in 1980's.

(2) Clearwater River Subbasin Production Plan 1990. Appendix A, Table 8 of this plan provides the opinions of various management documents as to what the long-term return goal should be. Most values displayed here are from the Tribal Recovery Plan.

(3) NOAA Interim abundance goal; dependent on which tributaries are included in the estimate

NOTES:
There is agency concern regarding the accuracy of this future management and harvest goal; the current artificial adult goal is 34,000 for Dworshak and Clearwater hatcheries combined; TAC (1985) estimated wild B-run escapement at 10,000 with 80% designated for the Clearwater River; therefore the future B-run escapement goal for both hatchery and wild may range from 42,000 upwards to 91,000. Harvest goal estimates differ similarly ranging from 25,000-74,000. Infinite detail as to how this difference will be achieved is not explained in this plan but must be worked out after implementation of the plan

Future Goals: Goals are derived from various management plans. This plan and do not imply consensus by all management agencies. This table merely gives direction to managers who must workout the restoration and recovery of each specie and population over time through implementation of the plan.Long-term Goals: Clearwater River Subbasin Production Plan 1990. Appendix A, Table 8 of this plan provides the opinions of various management documents as to what the long-term return goal should be. Most values displayed here were derived from the Tribal Recovery Plan

Document: **Snake River Salmon Recovery Plan for SE Washington**

Author: Snake River Salmon Recovery Board

Document Year: **2011**

Link: http://snakeriverboard.org/wpi/wp-content/uploads/2013/01/Full-Version-SE-WA-recovery-plan-121211.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Minimum Abundance Threshold (MAT)	Population Size	Productivity Threshold	Restoration Goal
Interior Columbia	Snake River	Snake River Basin Steelhead	Grande Ronde	Lower Grande Ronde	Summer	Threatened	1000	Intermediate	1.14	1855-5101 (5)
				Joseph	Summer	Threatened	500	Basic	1.27	2149-5909 (6)
Interior Columbia	Snake River	Snake River Basin Steelhead	Lower Snake River	Tucannon	Summer	Threatened	1000	Intermediate	1.2	1823-3400 (3)
				Asotin	Summer	Threatened	500	Basic	1.2	2776-3114 (4)

Interior Columbia	Snake River	Snake River Basin Steelhead	Umatilla-Walla Walla	Walla Walla	Summer	Threatened	1000	Intermediate	1.35	1875-3395 (1)
				Touchet	Summer	Threatened	1000	Basic	1.35	1563-2205 (2)

FOOTNOTES:
(1) CTUIR goal to mouth of the Walla Walla R is 5,500, but 3,850 in the Walla Walla River, excluding Touchet and Mill Creek
(2) LSRCP goals and CTUIR goal
(3) LSRCP goals and NPT goal
(4) LSRCP , NPT goal, etc., and spring Chinook = NPT/CRITFC goal
(5) NMFS 2002 goal and proportion in Lower Grande Ronde and CRITFC
(6) NMFS Grande Ronde goal and proportion of basin in Joseph Creek
(7) The Lower Grande Ronde River population includes the Wenaha River and tributaries, Mud, Courtney, Grossman, Menatchee, Bear, and other lower Grande Ronde tributaries, and Elbow creeks.

Document: **Lower Snake River Fish and Wildlife Compensation Plan**

Author: U.S. Army Corps of Engineers

Document Year: **1975**

Link: http://www.fws.gov/lsnakecomplan/Reports/LSRCP/Special%20Report%20June%201975/Special%20Report.PDF

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Adult Escapement
Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	N/A	NA			55100

Document: **Asotin Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/116948/Entire_Plan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Long-Term Return	Natural Spawning Component
Interior Columbia	Upper Columbia River	Upper Columbia River Steelhead	Lower Snake River	Asotin	A-Run	Threatened	356 (2), 8677 (3), 2000 (4)(5), 4,656 hatchery plus 5044 naturally produced for all of SE WA (none specifically identified for Asotin Creek) (6), <62200 (9), 160 (10)	206 (1), 356 (2), 8677 (3), 1500 (4)(5), >800 (7), 400 (8), 1662 (11)

FOOTNOTES:
(1) EDT Model Current -Washington Department of Fish and Wildlife. 2004. Asotin Subbasin Aquatic Assessment.
(2) EDT Model PFC - Washington Department of Fish and Wildlife. 2004. Asotin Subbasin Aquatic Assessment.
(3) EDT Model Holistic - Washington Department of Fish and Wildlife. 2004. Asotin Subbasin Aquatic Assessment.
(4) Nez Perce Tribe Spring Chinook Adult Return Goals for Asotin Subbasin
(5) Goals are derived from various management plans. These numbers do not imply consensus by all management agencies but merely gives direction to managers who must workout the restoration and recovery of each species and population over time through implementation of the plan.
(6) LSRCP- Lower/Mid Snake River and tributaries
(7) ACCD 1995
(8) NMFS 2002 Interim Abundance Goal-Lower Mainstem Tributaries
(9) Columbia River Fish Management Plan (at Lower Granite Dam)
(10) SaSI 2004 - WDFW escapement goal
(11) WDFW 2001 - WDFW Potential Parr Production Model, current potential carrying capacity estimate

Document: **Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead**

Author: ODFW, NOAA Fisheries

Document Year: **2011**

Link: http://www.dfw.state.or.us/fish/CRP/docs/upper_willamette/UWR%20FRN2%20Mainbody%20final.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Size Category	RFT and QET

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Clackamas	Winter	Threatened	Large	200
				Sandy	Winter	Threatened	Large	200
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Hood	Winter	Threatened	Medium	100
				Lower Gorge	Winter	Threatened	Small	50
				Upper Gorge	Winter	Threatened	Small	50
				Hood	Summer	Threatened	Medium	100
Willamette Lower Columbia	Willamette River	Upper Willamette Steelhead	Willamette	South Santiam	Winter	Threatened	Large	200
				North Santiam	Winter	Threatened	Medium	100
				Molalla	Winter	Threatened	Large	200
				Calapooia	Winter	Threatened	Small	50

Document: **Middle Columbia Steelhead ESA Recovery Plan**

Author: NOAA Fisheries

Document Year: **2009**

Link: http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/interior_columbia/middle_columbia/mid-c-plan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Minimum Abundance Threshold (MAT)	Size Category	Minimum Productivity	Role in Viability Scenario
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Deschutes Westside	Summer	Threatened	1500	Large (1)	1.26	Need for viable status

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Crooked River	Summer	Extirpated	2250	Very Large	1.19	
				Rock Creek	Summer	Threatened	500	Basic	1.56	Maintain
				Klickitat	Summer	Threatened	1000	Intermediate	1.35	Need for viable status
				White Salmon Summer-Winter	Summer	Threatened	500	Basic	1.56	
				Fifteenmile	Summer	Threatened	500	Basic	1.56	Need for viable status
				Deschutes Eastside	Summer	Threatened	1000	Intermediate	1.35	Need for viable status
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	John Day	Lower Mainstem John Day	Summer	Threatened	2250	Very Large	1.19	Need for viable status
				Upper Mainstem John Day	Summer	Threatened	1000	Intermediate	1.35	Option
				South Fork John Day	Summer	Threatened	500	Basic	1.56	Maintained
				Middle Fork John Day	Summer	Threatened	1000	Intermediate	1.35	Option
				North Fork John Day	Summer	Threatened	1500	Large	1.26	Need for viable status
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Umatilla/Walla Walla	Willow Creek	Summer	Extirpated	1000	Intermediate	1.35	
				Umatilla	Summer	Threatened	1500	Large	1.26	Need for viable status
				Walla Walla Mainstem	Summer	Threatened	1000	Intermediate	1.35	Option
				Touchet	Summer	Threatened	1000	Intermediate	1.35	Option
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Upper Yakima	Summer	Threatened	1500	Large	1.26	Option
				Toppenish	Summer	Threatened	500	Basic	1.56	Maintain
				Satus	Summer	Threatened	1000	Intermediate	1.35	Option

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Naches	Summer	Threatened	1500	Large	1.26	Option

FOOTNOTES:
(1) This population is treated as Intermediate in size with respect to abundance and productivity criteria because of constrants on currently accessible habitat (e.e., Pelton Dam)□
(2) For the historical population analysis, the ICTRT included the mainstem Yakima habitat below the confluence of Satus Creek in the Satus Creek population, making it Intermediate in size. However, if the mainstem component is lumped instead with mainstem Yakima River habitat upstream of Satus, the Satus Creek population would drop to Basic size. The Yakima Steelhead Recovery Plan discusses this question in more detail.

Document: **Conservation and Recovery Plan for Oregon Steelhead Populations in the Middle Columbia River Steelhead Distinct Population Segment**

Author: ODFW

Document Year: **2010**

Link: http://www.dfw.state.or.us/fish/CRP/docs/mid_columbia_river/Oregon_Mid-C_Recovery_Plan_Feb2010.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Minimum Abundance Threshold (MAT)	Size Category	Minimum Productivity
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Deschutes Eastside	Summer	Threatened	1000	Intermediate	1.35
				Deschutes Westside	Summer	Threatened	1500	Large (1)	1.35
				Crooked River	Summer	Extirpated	2250	Very Large	1.19
				Fifteenmile	Winter	Threatened	500	Basic	1.56
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	John Day	Middle Fork John Day	Summer	Threatened	1000	Intermediate	1.35
				Upper Mainstem John Day	Summer	Threatened	1000	Intermediate	1.35
				North Fork John Day	Summer	Threatened	1500	Large	1.26

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	John Day	Lower Mainstem John Day	Summer	Threatened	2250	Very Large	1.19
				South Fork John Day	Summer	Threatened	500	Basic	1.56
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Umatilla/Walla Walla	Umatilla	Summer	Threatened	1500	Large	1.26
				Walla Walla Mainstem	Summer	Threatened	1000	Intermediate	1.35
				Willow Creek	Summer	Extirpated	1000	Intermediate	1.35

FOOTNOTES:
(1) Large size category is for historically accessible area; intermediate size category is for currently accessible area.

Document: **2009 Yakima Steelhead Recovery Plan**

Author: Yakima Basin Fish and Wildlife Recovery Board

Document Year: **2009**

Link: http://www.ybfwrb.org/Assets/Documents/Plans/YakimaSteelheadPlan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Minimum Average Abundance	Minimum Productivity	Role in Viability Scenario
							Delisting Criteria		
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Satus	Summer	Threatened	500	2	Highly Variable
				Satus Mainstem Block	Summer	Threatened	500	1.56	Variable
				Naches	Summer	Threatened	1500	1.26	Viable
				Upper Yakima	Summer	Threatened	500	1.2	Maintained+
				Toppenish	Summer	Threatened	250	1.2	Maintained+
							Long-term recovery		

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Naches	Summer	Threatened	5400		1.2	
				Satus	Summer	Threatened	2000		1.2	
				Toppenish	Summer	Threatened	1500		1.2	
				Upper Yakima	Summer	Threatened	7700		1.2	
				Satus Mainstem Block	Summer	Threatened	2000		1.2	
							Short-term Recovery			
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Yakima	Naches	Summer	Threatened	1500		1.26	Viable
				Satus Mainstem Block	Summer	Threatened	500		1.56	Viable
				Upper Yakima	Summer	Threatened	1500		1.26	Viable
				Satus	Summer	Threatened	500		1.56	Viable
				Toppenish	Summer	Threatened	500		1.56	Viable

Document: **Recovery Plan for the Rock Creek Population of the Middle Columbia River Steelhead Distinct Population Segment**

Author: NOAA Fisheries

Document Year: **2009**

Link: http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/interior_columbia/middle_columbia/mid-c-rock-crk.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Threshold Abundance	Size Category	Minimum Productivity	Role in Viability Scenario
							ESA De-listing Goals for 95% Probability of Persistence over 100 years			

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Rock Creek	Summer	Threatened	500	Basic	1.56	Maintain

Document: **ESA Recovery Plan for the White Salmon River Watershed**

Author: NOAA Fisheries

Document Year: **2013**

Link: http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/willamette_lowercol/lower_columbia/final_plan_documents/white_salmon_recovery_plan__june_2013.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Threshold Abundance	Size Category	Minimum Productivity	Role in Viability Scenario
							ESA De-listing Goals for 95% Probability of Persistence over 100 years			
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	White Salmon	Summer	Threatened	500	Basic	1.56	NA

Document: **Recovery Plan for the Klickitat River Population of the Middle Columbia River Steelhead Distinct Population**

Author: NOAA Fisheries

Document Year: **2009**

Link: http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/interior_columbia/middle_columbia/mid-c-klickitat.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Threshold Abundance	Size Category	Minimum Productivity	Role in Viability Scenario
							ESA De-listing Goals for 95% Probability of Persistence over 100 years			

Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Klickitat	Summer	Threatened	100	Intermediate	1.35	Need for viable status

Document: **John Day Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/fw/subbasinplanning/johnday/plan

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	NOAA Recovery Target	Target to allow Sport Fishing	Adult and Jack Returns	Smolts per Spawner
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	John Day	South Fork John Day	Summer	Threatened	600	NA	NA	25 year interim objective: 140; 50 year interim objective: 233
				John Day (Mouth)	Summer	Threatened	9800	10294	25 year interim objective: 29400; 50 year interim objective: 49000;	25 year interim objective: 136; 50 year interim objective: 226
				Upper Mainstem John Day	Summer	Threatened	2000	NA	NA	25 year interim objective: 126; 50 year interim objective: 209
				North Fork John Day	Summer	Threatened	2700	NA	NA	25 year interim objective: 132; 50 year interim objective: 221
				Lower Mainstem John Day	Summer	Threatened	3200	NA	NA	25 year interim objective: 155; 50 year interim objective: 259
				Middle Fork John Day	Summer	Threatened	1300	NA	NA	25 year interim objective: 125; 50 year interim objective: 208

Document: **Lower Columbia Salmon Recovery and Fish and Wildlife Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/6865748/RP.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Abundance Goal	Viability Goal	Scenerio Contribution
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Summer	Kalama	Summer	Threatened	700	High	Primary
				North Fork Lewis	Summer	Threatened	75	Very Low	Stabalizing
				East Fork Lewis	Summer	Threatened	200	High	Primary
				Washougal	Summer	Threatened	700	High+	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Tributaries	Clackamas	Winter	Threatened	500	High (2)	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	North Fork Lewis	Winter	Threatened	300	Medium	Contributing
				Sandy	Winter	Threatened	NA	High	Primary
				Washougal	Winter	Threatened	500	Medium	Contributing
				Salmon Creek	Winter	Threatened	300	Low	Stabalizing
				Cispus	Winter	Threatened	300	Medium	Contributing
				Kalama	Winter	Threatened	650	High+	Primary
				Upper Cowlitz	Winter	Threatened	300	Medium	Contributing

Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Tilton	Winter	Threatened	150	Low	Contributing
				South Fork Toutle	Winter	Threatened	1600	High+	Primary
				North Fork Toutle	Winter	Threatened	700	High	Primary
				Lower Cowlitz	Winter	Threatened	300	Medium	Contributing
				Coweeman	Winter	Threatened	800	High	Primary
				East Fork Lewis	Winter	Threatened	600	High	Primary
				Clackamas	Winter	Threatened	NA	High	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Coast Winter	Elochoman/Skamokawa	Winter	Not LIsted	400	Medium	Contributing
				Grays/Chinook	Winter	Not Listed	600	High	Primary
				Mill/Abernathy/Germany	Winter	Not Listed	600	High	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Upper Gorge	Winter	Threatened	50	Low+	Stabalizing
				Hood	Summer	Threatened	NA	High	Primary
				Lower Gorge	Winter	Threatened	200	High	Primary
				Wind	Summer	Threatened	1600	High+	Primary
				Hood	Winter	Threatened	NA	High	Primary

Document: **Grays Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/21265/Vol_II_C__Grays.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Coast Winter	Grays/Chinook	Winter	Threatened	600	High

NOTES:
Primary population in recovery scenario

Document: **Elochoman, Skamakowa, Mill, Abernathy, and Germany Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/119235/Vol_II_D__Eloch_MAG.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Coast Winter	Elochoman/Skamokawa	Winter	Threatened	150-600	Medium

NOTES:
Contributing population in recovery scenario

Document: **Cowlitz, Coweeman, and Toutle Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/119238/Vol_II_E__Cowlitz.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Cowlitz	Winter	Threatened	300	Medium

NOTES:
Contributing population in recovery scenario

Document: **Kalama Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/21268/Vol_II_F__Kalama.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Summer	Kalama	Summer	Threatened	700	High
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Kalama	Winter	Threatened	600-700	High

NOTES:
Priority population in recovery scenario

Document: **NF and EF Lewis Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/119241/Vol_II_G__Lewis.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Summer	East Fork Lewis	Summer	Threatened	200	High
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	East Fork Lewis	Winter	Threatened	600	High

NOTES:
Primary populations in recovery scenario

Document: **Lower Columbia Tributaries: Bonneville and Salmon Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/21271/Vol_II_H__L_Columbia_Tribs.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Lower Gorge	Winter	Threatened	200	High

NOTES:
Primary population in recovery scenario

Document: **Washougal Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/21274/Vol_II_I__Washougal.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Summer	Washougal	Summer	Threatened	500-900	High
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Cascade Winter	Washougal	Winter	Threatened	400-600	Medium

NOTES:
Winter - Contributing populaiton in recovery scenario
Summer - Primary populaiton in recovery scenario

Document: **Wind Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/21277/Vol_II_J__Wind.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge	Wind	Winter	Threatened	100	Low+
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	Gorge Summer	Wind	Summer	Threatened	1200-1900	High+

NOTES:
Winter - Stabilizing population in recovery scenario
Summer - Primary population in recovery scenario

Document: **Upper Gorge Tributaries Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/21283/Vol_II_L__Gorge_Tribs.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Number Objective	Viability Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia Steelhead	N/A	Upper Gorge	Winter	Threatened	100	Low+

NOTES:
Includes Wind River and upper Gorge tributaries
Stabilizing population in recovery scenario

Document: **Deschutes River Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/118290/EntirePlan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Abundance	Productivity	Diversity Index %	Spawner Escapement
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Deschutes Eastside	Summer	Threatened	2400-2900	2.3	0.5	NA
				Deschutes Westside	Summer	Threatened	4500-5500	6	70	NA
				Crooked River	Summer	Threatened	NA	4.4	NA	700-1000
				Deschutes Middle	Summer	Threatened	NA	NA	NA	1600-1850

NOTES:
Abundance represents annual natural-origin adults returning in 25 years

Lower Eastside escapement (natural adults) distribution includes 800-900 to Buck Hollow Creek, 600-800 to Bakeoven Creek, and 1000-1200 to Trout Creek

Spawner escapement of natural fish

Middle Deschutes escapement (natural adults) distribution includes 600-700 to Metolius River, 700-800 to Squaw Creek, and 300-350 to Middle Deschutes River when passage is established at the Pelton Round Butte and Squaw Creek dams

Document: **Fifteenmile Creek Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/20241/MgmtPlan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Estimated Spawners	Restoration Scenerio at 100%	Juv Outmigrant Abundance
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Eastern Slope Tributaries	Fifteenmile	Winter	Threatened	268-2274	311-2638	9939-22899
				Mill Creek and tributaries	Winter	Threatened	54-455	62-528	NA

NOTES:
Mill Creek values are Fifteenmile estimate divided by 5
Juvenile outmigrant value dependednt on 100% habitat restoration, all environmental parameters, all reaches

Document: **White Salmon Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/116777/EntirePlan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Abundance	Productivity	Diversity Index %	Capacity
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Cascade Winter	White Salmon	Winter	Threatened	Short-Term: 301; Long-Term: 544	Short-Term: 3.3; Long-Term: 7.1	Short-Term: 78; Long-Term: 95	Short-Term: 429; Long-Term: 633

NOTES:
WDFW objectives
Short-term biological objective under Condit Dam removal
Long-term biological objective under Condit Dam removal and PFC

Document: **Walla Walla Subbasin Plan**

Author: Northwest Power and Conservation Council and Partners

Document Year: **2004**

Link: http://www.nwcouncil.org/media/120337/EntirePlan.pdf

Steelhead

Recovery Domain	Recovery Sub Domain	ESU/DPS	MPG	Population	Run	ESA Listed	Total Return	Natural Return	Hatchery Return
Interior Columbia	Middle Columbia River	Middle Columbia Steelhead	Umatilla/Walla Walla	Walla Walla	Summer	Threatened	11000(1)(2), 4600-5600(3)(4)	3000 (1)(2)(3)	8000 (1)(2), 1600-2600 (3)

FOOTNOTES:
1. 1990 NPPC Subbasin Plan
2. 1996 CRITFC Spirit of the Salmon
3. 2001 NPPC Subbasin Summary
4. Reflects only CTUIR goals