

# Quantitative Objectives Report

Report: Coho

#### 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 Document Year: 2010 Author: Lower Columbia Fish Recovery Board Link: http://media.wix.com/uad/810197 ed97ad06e02445f5927163b568dccd3c.pdf Coho Productivity Recovery Recovery ESA Abundance Viability Improvement ESU/DPS MPG Sub Domain Listed Domain Population Run Target Objective Target(%) Contribution Contributing Early-run (Type-500 50 Willamette Lower Lower Cascade NF Lewis Threatened Low Lower Columbia Columbia S)and Late-**River** Coho River run (Type-N) Columbia Contributing 1500 >500 Washougal Late-run (Type-Threatened Moderate + N) Primary Early-run (Type-2000 High >500 EF Lewis Threatened S)and Laterun (Type-N) Contributing Late-run (Type-Threatened 500 >500 Kalama Low N) Primary Coweeman Late-run (Type-Threatened 1200 Hiah 170 N) 1900 Primary 180 Toutle NF Early-run (Type-High Threatened S)and Laterun (Type-N) Primary Toutle SF Early-run (Type-1900 High 180 Threatened S)and Laterun (Type-N) Stabilizing (2) Tilton Early-run (Type-Threatened NA Very Low (2) 0 S)and Laterun (Type-N) Primary (1) Upper Cowlitz Late-run (Type-Threatened 2000 High (1) >500 N)

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Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Lower Cowlitz	Late-run (Type- N)	Threatened	3700	Primary	High	100
				Cispus	Early-run (Type- S)and Late- run (Type-N)	Threatened	2000	Primary (1)	High (1)	>500
				Salmon	Late-run (Type- N)	Threatened	NA	Stabilizing	Very Low	0
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Mill/Abernathy /Germany	Late-run (Type- N)	Threatened	1800	Contributing	Moderate	>500
				Elochoman/Sk amokawa	Late-run (Type- N)	Threatened	2400	Primary	High	170
				Grays/Chinoo	Late-run (Type- N)	Threatened	2400	Primary	High	370
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Upper Gorge	Late-run (Type- N)	Threatened	1900	Primary (1)	High	400
				Lower Gorge	Late-run (Type- N)	Threatened	1900	Primary	High	400
FOOTUOTEO										

FOOTNOTES:

(1) Increase relative to Interim Plan

(2) Reduction relative to the 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

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

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Clackamas	Early and Late	Threatened	11232	Very Low	4684	Primary
				Big Creek	Late	Threatened	12	Very High	4	Stabalizing
				Youngs Bay	Late	Threatened	7	Very High	3	Stabalizing
				Scappoose River	Late	Threatened	3208	Very Low	1266	Primary
				Clatskanie	Late (Type N)	Threatened	3201	Very Low	1838	Primary
				Sandy River	Early and Late	Threatened	5685	Low	4063	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Lower Gorge Tributaries	Late (Type N)	Threatened	962	High (Low)	940	Support WA (L)
				Upper Gorge/Hood River	Early (Type N)	Threatened	5203	Low	5162	Primary
								Broad Se	ense	
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	N/A	Scappoose River			4184	Very Low+	2242	NA
				Upper Gorge/Hood River			5486	Very Low	5445	NA
				Big Creek			6321	Very Low	6313	NA
				Youngs Bay			11913	Very Low	11909	NA
				Clatskanie			3201	Very Low	1838	NA
				Sandy River			6514	Very Low	4892	NA
				Clackamas			17674	Very Low+	11126	NA
				Lower Gorge			3102	Very Low	3080	NA

#### NOTES:

Oregon recognizes the ESU as a State Management Unit - Lower Columbia River Coho Oregon State Status - Endangered Oregon identified the Gorge populations as a single population Oregon identified the Bonneville populaitons as a single population

The desired status (Overall Risk Class) for population which are not part of an ESA-listed ESU are indicated in parentheses

### 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.nwfsc.noaa.gov/trt/wlc/viability\_report\_revised.cfm

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<u>Recovery</u> Domain	<u>Recovery</u> <u>Sub Domain</u>	<u>esu/dps</u>	MPG	<u>Population</u>	<u>Run</u>	<u>ESA</u> <u>Listed</u>	<u>Minimum</u> <u>Abundance</u> <u>Threshold (MAT)</u>	<u>Size</u> Category		
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Clackamas	Early and Late	Threatened	0- 2000(Category 0), 2000- 2300(Category 1), 2300- 3400(Category 2), 3400- 6800(Category 3), >6800(Category 4)	Large		
				Sandy River	Eraly and Late	Threatened	0- 2000(Category 0), 2000- 2300(Category 1), 2300- 3400(Category 2), 3400- 6800(Category 3), >6800(Category 4)	Large		

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Scappoose River	Late	Threatened	0- 1300(Category 0), 1300- 1500(Category 1), 1500- 2200(Category 2), 2200- 4400(Category 3), >4400(Category 3)	Medium
				Youngs Bay	Late	Threatened	0-700(Category 0), 700- 800(Category 1), 800- 1100(Category 2), 1100- 2200(Category 3), >2200(Category 4)	Small
				Big Creek	Late	Threatened	0-700(Category 0), 700- 800(Category 1), 800- 1100(Category 2), 1100- 2200(Category 3), >2200(Category 4)	Small
				Clatskanie	Late Type-N	Threatened	0- 1300(Category 0), 1300- 1500(Category 1), 1500- 2200(Category 2), 2200- 4400(Category 3), >4400(Category 3)	Medium

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Lower Gorge Tributaries	Late Type-N	Threatened	0-700(Category 0), 700- 800(Category 1), 800- 1100(Category 2), 1100- 2200(Category 3), >2200(Category 4)	Small
				Hood River	Early Type-S	Threatened	0- 1300(Category 0), 1300- 1500(Category 1), 1500- 2200(Category 2), 2200- 4400(Category 3), >4400(Category 3)	Medium

### 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:	NMFS							Do	ocument Year: 2013
Link:	<u>http://www.v</u> olumbia/fina	<u>vestcoast.fish</u> I_plan_docur	eries.noaa.g ments/final_l	ov/publicati cr plan june	ons/recovery 2013 -correc	planning/so ted.pdf	almon steelhec	ad/domains/willan	nette lowercol/lower c
					Coho	•			
<u>Recovery</u> Domain	<u>Recovery</u> <u>Sub Domain</u>	<u>ESU/DPS</u>	MPG	<u>Population</u>	Run	<u>ESA</u> <u>Listed</u>	<u>Abundance</u> <u>Target</u>	<u>Contribution</u>	<u>Target</u> <u>Persistence</u> <u>Probability</u>
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Sandy River	Early and Late	Threatened	5685	Primary	High

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### Quantitative

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Cispus	Early and Late Type S and N	Threatened	2000	Primary	High
				Upper Cowlitz	Late - Type N	Threatened	2000	Primary	High
				Lower Cowlitz	Early and Late Type S and N	Threatened	3700	Primary	High
				Toutle NF	Late - Type N	Threatened	1900	Primary	High
				Coweeman	Late - Type N	Threatened	1200	Primary	High
				Tilton	Early and Late Type S and N	Threatened	NA	Stabalizing	Very Low
				Kalama	Late - Type N	Threatened	500	Contributing	Low
				NF Lewis	Early - Type S and N	Threatened	500	Contributing	Low
				EF Lewis	Early - Type S and N	Threatened	2000	Primary	High
				Toutle SF	Early – Type S	Threatened	1900	Primary	High
				Clackamas	Early and Late	Threatened	11232	Primary	Very High
				Salmon Creek		Threatened	NA	Stabilizing	Very Low
				Washougal	Late - Type N	Threatened	1500	Contributing	Moderate +
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Youngs Bay	Late	Threatened	7	Stabalizing	Very Low
				Big Creek	Late	Threatened	12	Stabalizing	Very Low
				Scappoose River	Late	Threatened	3208	Primary	Very High

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### Quantitative

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Clatskanie	Late – Type N	Threatened	3201	Primary	Very High
				Elochoman/Sk amokawa	Late – Type-N	Threatened	2400	Primary	High
				Grays/Chinoo	Late – Type-N	Threatened	2400	Primary	High
				Mill/Abernathy /Germany	Type-N	Threatened	1800	Contributing	Moderate
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Upper Gorge/White Salmon	Late - Type N	Threatened	1900	Primary	High
				Upper Gorge/Hood River	Early Type S	Threatened	5162	Primary	High (2)
				Lower Gorge	Late - Type N	Threatened	1900	Primary	High

#### FOOTNOTES:

(1) 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 some Washington populations (Mill/Abernathy/Germany, Lower Cowlitz, Kalama, Upper Gorge), this equation yields a different result than that reported in 2010 by the LCFRB. 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 those populations, the numbers reported in this table are consistent with the LCFRB's recommendations rather than with the aforementioned equation. In addition, these cumulative impact numbers are not explicitly reported by ODFW in 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, for the reasons explained in Section 6.5. For Oregon populations designated as stabilizing (Youngs Bay and Big Creek), a survival improvement is shown because of improvements that are expected in tributary habitat, estuary conditions, and predation.

(2) Oregon's analysis indicates a low probability of meeting the delisting or objective of High persistence probability for this population.

#### 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

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<u>Recovery</u> Domain	<u>Recovery</u> <u>Sub Domain</u>	<u>ESU/DPS</u>	MPG	<u>Population</u>	Run	<u>ESA</u> Listed	Long-Term <u>Return</u>	<u>Natural</u> <u>Spawning</u> <u>Component</u>	
No Recovery Domain	NA	NA	N/A	Tucannon		Not Listed	Undefined	Undefined	
FOOTNOTES:									

(1) Nez Perce Tribe Coho Adult Return Goals -Goals are derived from various management plans as described in Appendix A. 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 specie and population over time through implementation of the plan.

#### Document: Umatilla Subbasin Plan

Author: Northwest Power and Conservation Council and Partners

Document Year: 2004

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

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<u>Recovery</u> Domain	<u>Recovery</u> <u>Sub Domain</u>	<u>ESU/DPS</u>	MPG	<u>Population</u>	<u>Run</u>	<u>ESA</u> <u>Listed</u>	<u>Total</u> <u>Return</u>	<u>Natural</u> <u>Return</u>	<u>Hatchery</u> <u>Return</u>	
No Recovery Domain	NA	NA	N/A	Umatilla		Not Listed	6000	1568	6000	
FOOTNOTES: (1) 1987 Unite	ed States vs Orego	on Subbasin Pro	duction Report	s;						

(2) 1990 NPPC Subbasin Plan

(3) 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: Nez Perce Tribe Department of Fisheries Resources 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

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	<u>Run</u>	<u>ESA</u> Listed	<u>Escapement</u> <u>Goals</u>	
No Recovery Domain	NA	NA	Grande- Ronde-Imnaha	Salmon			20000	
				Grande Ronde			3500	
No Recovery Domain	NA	NA	N/A	Tucannon			Undefined	
				Clearwater			14000	

FOOTNOTES:

(1) Summary of escapement goals from NPCC subbain plans presented in the NPT 2013 Management Plan

### Document: Draft Clearwater Subbasin Management Plan

Author: Northwest Power and Conservation Council and Partners

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

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	<u>Run</u>	<u>ESA</u> <u>Listed</u>	Long-Term <u>Return</u>	<u>Natural</u> Spawning Component	
No Recovery Domain	NA	NA	N/A	Clearwater			14000	Undefined	

### 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

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	Population	Run	<u>ESA</u> Listed	<u>Abundance</u> <u>Goal</u>	<u>Viability Goal</u>	Scenerio Contribution					
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	NF Lewis	Early - Type S and N	Threatened	600	High	Contributing					
				Lower Cowlitz	Early and Late Type S and N	Threatened	600	High	Primary					
				Upper Cowlitz	Late - Type N	Threatened	300	Medium	Contributing					
				Cispus	Early and Late Type S and N	Threatened	300	Medium	Contributing					
				Tilton	Early and Late Type S and N	Threatened	150	Low	Contributing					
				Toutle SF	Early - Type S	Threatened	600	High	Primary					
				Toutle NF	Late - Type N	Threatened	600	High	Primary					
				Kalama	Late - Type N	Threatened	300	Medium	Contributing					
				Sandy River	Early and Late	Threatened	NA	High+	Primary					
				EF Lewis	Early - Type S and N	Threatened	600	High	Primary					
				Coweeman	Late - Type N	Threatened	600	High	Primary					

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Washougal	Late - Type N	Threatened	300	Medium	Contributing
				Salmon		Threatened	75	Very Low	Stabilizing
				Clackamas	Early and Late	Threatened	NA	High+	Primary
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Big Creek	Late	Threatened	NA	High	Primary
				Scappoose River	Late	Threatened	NA	High	Primary
				Clatskanie	Late - Type N	Threatened	NA	Low	Stabilizing
				Elochoman/Sk amokawa	Late - Type-N	Threatened	600	High	Primary
				Grays/Chinoo	Late - Type-N	Threatened	600	High	Primary
				Mill/Abernathy /Germany	Type-N	Threatened	300	Medium	Contributing
				Youngs	Late	Threatened	NA	Low	Stabilizing
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	White Salmon		Threatened	150	Low	Contributing
				Lower Gorge (Hamilton)	Late - Type N	Threatened	600	High	Primary
				Hood River	Early Type S	Threatened	NA	Medium	Contributing
				Upper Gorge (Wind)	Late - Type N	Threatened	600	High	Primary

### Document: Grays Subbasin Plan

Author: Northwest Power and Conservation Council and Partners

Document Year: 2004

Document Year: 2004

Link: http://www.nwcouncil.org/media/21265/Vol II C Grays.pdf

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	Run	<u>ESA</u> <u>Listed</u>	<u>Number</u> Objective	<u>Viability</u> Objective	
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Grays/Chinoo	Late-run (Type- N)	Threatened	600	High	
NOTES: Primary popu	ulation in recover	y scenario							

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

Author: Northwest Power and Conservation Council and Partners

Link: http://www.nwcouncil.org/media/119235/Vol II D Eloch MAG.pdf

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	Population	Run	<u>ESA</u> Listed	<u>Number</u> Objective	<u>Viability</u> Objective	
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Elochoman/Sk amokawa	Late-run (Type- N)	Threatened	600	High	
NOTES: Primary pop	ulation in recover	y scenario							

Document:	Cowlitz, Cov	veeman, and	d Toutle Su	bbasin Plan					
Author:	Northwest Po	wer and Con	servation C	ouncil and Po	artners			Document Year:	2004
Link:	http://www.n	wcouncil.org	<u>/media/119</u>	238/Vol_II_E_	<u>Cowlitz.pdf</u>				
					Coho				
<u>Recovery</u> Domain	<u>Recovery</u> <u>Sub Domain</u>	<u>ESU/DPS</u>	MPG	Population	<u>Run</u>	ESA <u>Listed</u>	<u>Number</u> Objective	<u>Viability</u> Objective	
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Lower Cowlitz	Late-run (Type- N)	Threatened	600	High	
NOTES: Primary pop	ulation 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

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	Run	<u>ESA</u> Listed	Number_ Objective	<u>Viability</u> Objective	
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Kalama	Late-run (Type- N)	Threatened	300	Medium	
NOTES: Contributing	population in rec	covery scenario							

### Document: NF and EF Lewis Subbasin Plan

Author: Northwest Power and Conservation Council and Partners

Link: http://www.nwcouncil.org/media/119241/Vol\_II\_G\_Lewis.pdf

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	Run	<u>ESA</u> Listed	Number Viability Objective Objective							
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	EF Lewis	Early-run (Type- S)and Late- run (Type-N)	Threatened	600 High							
				NF Lewis (Lower)	Early-run (Type- S)and Late- run (Type-N)	Threatened	300 Medium							
				NF Lewis (Upper)	Early-run (Type- S)and Late- run (Type-N)	Threatened	300 Medium							
NOTES: Primary popu	ulation in recover	y scenario												

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

Author:	Northwest Pov	wer and Cons	ervation C	ouncil and Par	tners			Document Year: 2004				
Link:	http://www.ny	wcouncil.org/	media/212	71/Vol II H L	<u>Columbia</u>	<u>Tribs.pdf</u>						
	Coho											
<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	<u>Run</u>	<u>ESA</u> Listed	<u>Number</u> Objective	<u>Viability</u> Objective				

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Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Lower Gorge Tributaries	Late-run (Type- N)	Threatened	600	High
NOTES: Primary pop	ulation in recover	y scenario						
Document:	Washougal	Subbasin Ple	an					
Author:	Northwest Po	ower and Cor	nservation C	ouncil and P	artners			Document Year: 2004
Link:	http://www.r	nwcouncil.org	g/media/212	274/Vol_II_I	<u>Washougal.pc</u>	<u>lf</u>		
					Coho			
<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	<u>Run</u>	ESA Listed	<u>Number</u> Objective	<u>Viability</u> Objective
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Washougal	Late-run (Type- N)	Threatened	300	Medium
NOTES: Contributing	population in rea	covery scenario						

#### Document: Wind Subbasin Plan

Author: Northwest Power and Conservation Council and Partners

Link: http://www.nwcouncil.org/media/21277/Vol\_II\_J\_Wind.pdf

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<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	ESU/DPS	MPG	Population	<u>Run</u>	<u>ESA</u> Listed	<u>Number</u> Objective	<u>Viability</u> <u>Objective</u>	

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Wind	Late-run (Type- N)	Threatened	600	High		
NOTES: Primary population in recovery scenario										
Document: Upper Gorge Tributaries Subbasin Plan										
Author:	Northwest Pc	Document Year: 2004								
Link:	Link: http://www.nwcouncil.org/media/21283/Vol II L Gorge Tribs.pdf									
	Coho									
<u>Recovery</u> Domain	<u>Recovery</u> Sub Domain	<u>ESU/DPS</u>	MPG	<u>Population</u>	<u>Run</u>	<u>ESA</u> <u>Listed</u>	<u>Number</u> Objective	<u>Viability</u> Objective		
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	Upper Gorge	Late-run (Type- N)		600	High		
NOTES: Primary population in recovery										

#### Document: White Salmon Subbasin Plan

Author: Northwest Power and Conservation Council and Partners

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

 Recovery
 Recovery
 Recovery
 ESA

 Domain
 Sub Domain
 ESU/DPS
 MPG
 Population
 Run
 Listed
 Abundance
 Productivity
 Diversity Index %
 Capacity

Quai	manve								Page 19 of 2
Willamette Lower	Lower Columbia	Lower Columbia	Gorge	White Salmon	Late - Type N	Threatened Short-Term: 952,	Short-Term: 2, Long-Term: 3	Short-Term: 15, Long-Term: 57	Short-Term: 1898,

Long-Term: 1227

Document Year: 2009

Long-Term: 1828

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

**River** Coho

River

#### Document: CBFWA Fish and Wildlife Program Recommendation 2009 Amendment

#### Author: CBFWA

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Columbia

Link: http://www.nwcouncil.org/uploads/2008amend/uploadedfiles/111/2 Recommendation.pdf

Coho Minimum Adult Returns: Recovery Recovery <u>ESA</u> Abundance Adult Returns Spawner to Population MPG Domain Sub Domain ESU/DPS Population Run **Listed** Threshold (MAT) (Natural Viability Status Spawner Spawners) NA:600(10) High Willamette Lower Cascade East Fork Lewis Threatened 600 Lower Early NA Columbia Columbia Lower River River Coho River Columbia NA:600(10) High Lower Cowlitz Late Threatened 600 NA River 3150(9):NA NA Cowlitz Late Threatened NA NA NA:300(10) Medium Washougal Late Threatened 600 NA NA:300(10) Medium 600 Kalama Late Threatened NA NA:600(10) High Coweeman Late Threatened 600 NA NA:300(10) Medium Upper Cowlitz Threatened Late 600 NA NA:600(10) High North Fork Late Threatened 600 NA Toutle

Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Cascade	Cispus River	Late	Threatened	600	NA:300(10)	NA	Medium
				South Fork Toutle	Late	Threatened	600	NA:600(10)	NA	High
				Lewis	Early	Threatened	NA	1200(9):NA	NA	NA
				North Fork Lewis River	Early	Threatened	600	NA:600(19)	NA	High
				Sandy	Early and Late	Threatened	NA		NA	High
				Tilton River	Late	Threatened	600	NA:150(10)	NA	Low
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Coast	Grays	Late	Threatened	600	NA:600(10)	NA	High
				Elochoman	Late	Threatened	600	NA:600(10)	NA	High
Willamette Lower Columbia	Lower Columbia River	Lower Columbia River Coho	Gorge	White Salmon	Late	Threatened	NA	470(9):NA	NA	NA
No Recovery Domain	NA	NA	N/A	Methow	NA	NA	NA	NA:1500 (8,10)	NA	NA
				Grande Ronde	NA	NA	NA	3500:1000(4,10)	NA	NA
				Clearwater	NA	NA	NA	14000 (1,4,9):NA	NA	NA
				Umatilla	NA	NA	NA	6000 (1,9):1568(10)	NA	NA
				Wenatchee	NA	NA	NA	NA:1500 (8,9)	NA	NA

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#### FOOTNOTES:

- 1 Includes hatchery fish
- 2 ODFW and CTUIR objective
- 3 Yakama Indian Nation project proposal 199506325
- 4 Nez Perce Tribe objective
- 5 Draft Recovery Plan
- 6 WDFW objective
- 7 Past Wells Dam
- 8 Yakama Nation Master Plan
- 9 CBFWA 2009 F&W Program Amendment
- 10 Subbain plan unless otherwise noted as described in CBFWA recommendation
- 11 Minimum delisting criteria from draft recovery plan of technical plan as described in CBFWA recommendation