

Management Framework

Coast wide:
Pacific
Salmon
Commission

Coastal: **Pacific Fishery** Management Council

Inside: WDFW, ODFW, Tribes

Constraints

- 1. Boldt Decision
- 2. Endangered Species Act
- 3. Pacific Salmon Treaty
- 4. Forecasted run size/Escapement Goals

North of Falcon Process

- 1. Forecast the abundance of each stock.
- 2. Determine if there is a harvestable surplus.
- 3. Propose fisheries predict what we will catch.
- 4. Model fisheries to determine which stocks are of conservation concern, constraining fisheries.
- 5. Negotiate with tribes and other states for fair sharing of catch and stocks that are constraining.
- 6. Final agreed-to State and Tribal salmon fisheries (ocean, Puget Sound) are described in the "List of Agreed Fisheries" document.

Puget Sound Chinook Forecast Comparisons

Basin		7 6 7 1 1	
DdSIII	2017	2018	Comparison
Hoko	606	1,071	1.77
Dungeness	77	89	1.16
Elwha	153	238	1.56
Nooksack springs	225	202	0.90
Skagit springs	2,785	2,317	0.83
Skagit summer/falls	15,837	13,340	0.84
Stillaguamish	438	487	1.11
Snohomish	3,412	3,460	1.01
Lake Washington	948	1,461	1.54
Green	2,374	2,110	0.89
Puyallup	945	672	0.71
White River springs	593	528	0.89
Nisqually	478	586	1.23
Skokomish	1,956	3,532	1.81
Mid Hood Canal	326	358	1.10
Total (others included)	31,330	29,380	0.94

Puget Sound Chinook Forecast Comparisons

Basin		Hatchery	
Dasiii	2017	2018	Comparison
Hoko	820	398	0.49
Dungeness	256	707	2.76
Elwha	3,016	4,931	1.63
Nooksack/Samish	21,225	24,558	1.16
Snohomish	4,780	6,508	1.36
Lake Washington	3,722	4,761	1.28
Green	13,988	21,321	1.52
Puyallup	3,804	11,778	3.10
Nisqually	22,191	28,514	1.28
Hood Canal	48,305	57,558	1.19
Total (others included)	177,001	227,417	1.28

Puget Sound Coho Forecast Comparisons

Basin	ishedie.	Wild	
Dasiii	2017	2018	Comparison
Dungeness	918	505	0.55
Elwha	513	718	1.40
other Strait	13,058	7,168	0.55
Nooksack/Samish	13,235	20,574	1.55
Skagit	11,160	59,196	5.30
Stillaguamish	7,622	18,950	2.49
Snohomish	107,325	65,925	0.61
Lake Washington	2,160	2,018	0.93
Green	3,852	3,320	0.86
Puyallup	7,560	4,964	0.66
Nisqually	3,290	1,268	0.39
Deschutes	67	59	0.88
Skokomish	24,277	1,334	0.06
other Hood Canal	96,020	59,770	0.62
Total (others included)	294,360	249,174	0.85

Puget Sound Coho Forecast Comparisons

Basin	Hatchery									
Dasili	2017	2018	Comparison							
Dungeness	10,203	9,087	0.89							
Nooksack/Samish	45,609	61,256	1.34							
Skagit	7,551	13,101	1.74							
Snohomish	61,958	38,303	0.62							
Lake Washington	18,218	12,984	0.71							
Green	39,924	48,032	1.20							
Puyallup	19,951	17,985	0.90							
Nisqually	871	952	1.09							
Port Gamble	12,070	12,680	1.05							
Quilcene	36,261	49,605	1.37							
other Hood Canal	43,724	41,380	0.95							
Total (others included)	300,713	307,975	1.02							

Chinook Management Objectives

Management Unit	Co-Manager Proposal	NOAA Guidance
Nooksack Spring	10.5% SUS ER	10.5% SUS ER
Skagit Summer/Fall	47% Total/ 15% SUS	45% Total
Skagit Spring-run	38% Total / 18% SUS	23% Total
Stillaguamish River	24% Total / 13% SUS max	24% Total / 13% SUS max
Snohomish River	21% Total	18% Total
Lake Washington	500 Escapement (13% PT SUS)	18% SUS
Green River	2,013 Escapement (13 PT SUS)	31% Total
White River Spring-run	22% SUS	22% SUS
Puyallup	797 Escapement (13% PT SUS)	44% Total
Nisqually	49% Total (47% + 2% exp selective fishery)	49% Total (47% + 2% exp selective fishery)
Skokomish fall-run	50% total	44% Total
Mid Hood Canal	12% PT SUS	12% PT SUS
Dungeness	10% SUS	10% SUS
Elwha	10% SUS	10% SUS

Coho Management Objectives 2018

Puget Sound Wild Management Units	2018 Adult Forecast Ocean Age 3	2018 Assigned FMP Status	Total ER Ceiling
Strait of Juan de Fuca	7168	Critical	20%
Hood Canal	59530	Normal	65%
Skagit	59196	Low	35%
Stillaguamish	18950	Low	35%
Snohomish	65925	Low	40%

Recreational Challenges-2018

- Timely agreement (1yr ESA coverage)
- Chinook management objectives
- Constraining stocks
- Chinook: Nooksack early, Mid Hood Canal, Lake Washington
- Coho: Queets, Straits Tribs, Snohomish
- In-season action (primarily winter seasons)
- Meaningful angler opportunity
 - Coho
 - Catch-and-release seasons
- Skokomish
- Additional Orca protection?

Ideas that have already been presented

- North Hood Canal MSF for Chinook
- Return of Coho seasons to 2015 levels.
- Return of Catch and Release June Area 10 (Coho?).
- Later start or additional Chinook time in Area 10 in the summer.
- Skagit River Coho

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Southern Resident Killer Whales



Dave Ellifrit, Center for Whale Research





A Population in Trouble



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Why Do We Love Them?



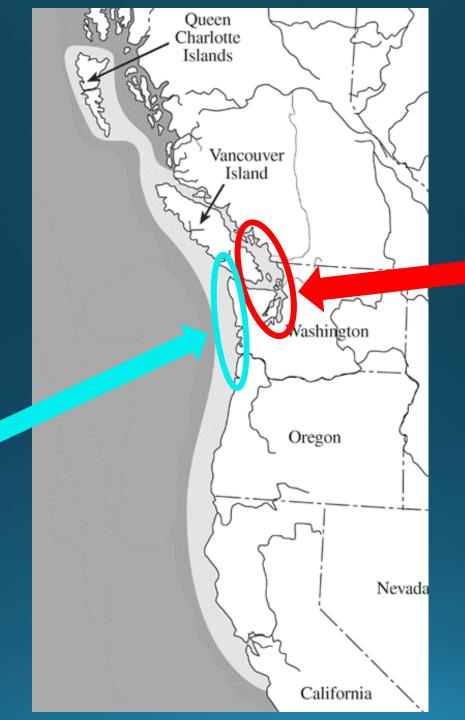
Top: Astrid van Ginneken, Bottom: Center for Whale Research

- Our heritage
- Economics
- We can relate
- Healthy whales, healthy waters



Southern Resident Range

K & L Pod Winter



Summer & J Pod Winter

Major Threats

- Reduced abundance of salmon
- Vessel interactions and sound- prey availability
- Chemical contaminants and potential oil spills





What Is Being Done? What More Can Be Done?



Vessels and Noise

Boating/Whale Watching

- Enforcement & outreach
- Potential additional regs, measures

Shipping/Large Vessels

- Canada pilot go-slow times & areas
- Vessel innovations/retrofits



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Contaminants & Potential Oil Spills

- Reductions in inputs of contaminants from stormwater, wastewater, other sources
- Technology and hazing preparations to keep whales away from oil spill areas







Prey Abundance

<u>Hatchery</u>

- Recent decreases
- Prioritizing stocks and

hatcheries for increases

Habitat

- Protection
- Restoration





Prey Abundance

<u>Hydropower</u>

- Improved infrastructure
- Increased water spill

Predation

- Lower Columbia pinniped/bird management
- Protect and restore forage fish
- Research/feasibility assessment





<u>Harvest</u>

- Harvest has already declined significantly
- Pacific Salmon Treaty
- Canada's proposal for area/time adjustments

We Need Your Input And Ideas During the NOF Process

Questions? Ideas?



Clint Rivers, Eagle Wing Tours

- Part of a 3-Year Project to simplify regulations
 - ✓ 2017 Gamefish
 - 2018 Salmon
 - 2019 Marine Fish and Shellfish
- Introduction at NOF Forecast meetings
 - Basic Tenets
 - Broad Proposals
 - Brainstorming with Public
- Based on brainstorming, refine broad proposals and develop waterbody specific proposals

- Share specific proposals at future meetings.
- Likely:
 - March 19 Columbia River
 - March 20 NOF #1
 - March 27 Columbia/Snake
 - March 27 South Puget Sound
 - March 28 Mill Creek
 - April 3 Lynwood NOF #2
- Concepts are unrefined at this time
- Will develop quickly as NOF progresses
- Public will need to continue to track

Basic Tenets

- Consider implications at a population level versus individual fish level
- Stop adding complexity
- Reduce the number of stream reaches
- Standardize opening and closing dates
- Standardize the daily limit (recognizing conservation needs)
- Decouple salmon and steelhead limits
- Eliminate layered gear restrictions

Constraints

- Tribal co-manager agreement
- Columbia River requires discussion with Oregon and needs to accommodate their process
 - They are targeting January 1, 2019

- Broad Proposals
 - Daily limit
 - 6 fish, no more than 2 adults
 - 6 fish, no more than 2 adults. Bonus fish where needed.
 - Combine jacks and adults with a limit of 2, 3, or 4 per day
 - 2 adults, no limit on jacks
 - Gear Restrictions
 - One gear restriction for all salmon fisheries?
 - Boat Limit/Party Fishing
 - Allow everywhere?
 - 2-Pole
 - Allow everywhere except quota fisheries and most marine areas?
 - Fish Handling Rules
 - Eliminate?

Public Comment

On-line commenting – March-April http://wdfw.wa.gov/fishing/northfalcon/

Puget Sound Recreational Fishing Advisory Group http://wdfw.wa.gov/about/advisory/pssfag/

Public Meetings

March 9-14 - PFMC #1, DoubleTree, Sonoma, CA

March 15 - Sequim Trinity Methodist Church, 7pm

March 20 - North of Falcon #1, Olympia, 9am

March 27 - SS-HC, Lacey Com Center, 6pm

March 28 - NPS, WDFW Office Mill Creek, 6pm

April 3 –North of Falcon #2, Lynnwood Embassy Sts, 9:30 am

April 6-11 – PFMC #2, Sheraton Portland Airport Hotel

		Alt 1 (Cł	in1018)			Alt 2 (Cl	hin1118)			Alt 3 (Cl	nin1218)	
Stock	Tot. ER	SUS ER	SUS PT ER	Natural Escape- ment	Tot. ER	SUS ER	SUS PT ER	Natural Escape- ment	Tot. ER	SUS ER	SUS PT ER	Natural Escape- ment
Spring/Early:												
Nooksack (n) - Total	51.0%	15.3%	11.7%	193	50.5%	14.5%	10.9%	194	50.0%	13.8%	10.1%	195
North Fork				171				172				173
South Fork				22				22				22
Skagit (n) - Total	31.1%	20.3%	5.8%	1,918	30.9%	20.1%	5.5%	1,920	<u>30.7%</u>	19.9%	5.3%	1,922
Upper Sauk				1,082				1,083				1,085
Upper Cascade				254				254				255
Suiattle				581				582				582
White	28.4%	20.5%	9.5%	1,929	27.8%	<u> 19.9%</u>	8.8%	1,936	27.7%	<u> 19.7%</u>	8.6%	1,939
Dungeness	14.3%	<u>4.7%</u>	4.6%	777	14.2%	4.6%	4.5%	778	14.0%	4.4%	4.3%	778
Summer/Fall: Skagit - Total	37.3%	14.9%	4.9%	12,138	<u>37.2%</u>	14.8%	4.7%	12,160	<u>37.0%</u>	14.6%	4.5%	12,181
Upper Skagit	37.070	211370	11370	9,047	4.1.1.1		,-	9,063	<u> </u>			9,079
Sauk				603				604				605
Lower Skagit				2,212				2,216				2,220
Stillaguamish (n) - Total	21.2%	11.8%	7.4%	452	21.1%	11.7%	7.3%	452	20.9%	<u>11.5%</u>	7.1%	453
North Fork Summer South Fork Fall												
Snohomish (n) - Total	20.4%	10.1%	8.7%	3,322	20.1%	9.8%	8.3%	3,331	<u>19.7%</u>	9.4%	7.9%	3,339
Skykomish				2,588				2,595				2,602
Snoqualmie				734				736				737
Lake Wa. (Cedar R.)	32.2%	21.3%	13.8%	1,736	30.9%	20.0%	12.4%	1,758	29.9%	18.8%	11.3%	1,776
Green	39.0%	28.1%	13.8%	6,112	37.8%	26.8%	12.4%	6,202	36.8%	25.7%	11.3%	6,275
Puyallup	52.0%	41.1%	13.8%	1,988	51.1%	40.1%	12.4%	2,013	50.4%	39.3%	11.3%	2,035
Nisqually	47.2%	38.2%	12.5%	1,357	46.1%	37.0%	10.8%	1,381	45.2%	36.0%	9.4%	1,401
Western Strait-Hoko	20.4%	2.4%	2.4%	1,269	20.1%	2.0%	2.0%	1,270	19.9%	1.7%	1.7%	1,272
Elwha	15.0%	5.1%	5.0%	4,551	14.9%	5.0%	4.9%	4,552	14.7%	4.7%	4.7%	4,556
Mid-Hood Canal tribs. (n)	24.0%	13.7%	13.5%	357	22.6%	12.3%	12.0%	361	21.2%	10.7%	10.5%	365
Skokomish	49.0%	38.7%	13.8%	2,361	48.1%	37.7%	12.3%	2,389	47.1%	36.7%	10.8%	2,420

Lower Col Nat Tule ER Cap = 38%

Lower Col Nat Tule ER = 41.0 FRAM Description: 65K NT; 50K T

2017 Puget Sound Fisheries

Lower Col Nat Tule ER = 39.3 FRAM Description: 55K NT; 40K T

2017 Puget Sound Fisheries

Lower Col Nat Tule ER = 37.4

FRAM Description: 45K NT; 30K T

2017 Puget Sound Fisheries

Chinook and coho harvest quotas for March PFMC 2018 proposed ocean salmon fishery management options.

	Chino	ok TACs for Op	tion		Coho TACs for Optio	n
Fishery or Quota Designation	I - High	II - Mid	III ~ Low	I - High	II - Mid	III - Low
Model Run:	Chin1018	Chin1118	Chin1218	Coho1811	Coho1812	Coho1813
TREATY INDIAN OCEAN TROLL	50,000	40,000	30,000	40,000	22,000	12,500
May-June quota:	25,000	20,000	15,000			
July-Sept quota:	25,000	20,000	15,000			
NON-INDIAN COMMERCIAL TROLL (coho MSF)	32,500	27,500	22,500	5,600	5,600	3,200
RECREATIONAL (coho MSF)	32,500	27,500	22,500	42,000	29,400	16,800
NON-INDIAN TOTAL	65,000	55,000	45,000	47,600	35,000	20,000
TOTAL NORTH OF CAPE FALCON	115,000	95,000	75,000	87,600	57,000	32,500

STT FRAM models contain the March 2018 PFMC ocean options combined with last year's Puget Sound 2017 fishery inputs.

	Coho Updated Option I (Ocean ER) Option II (Ocean ER) Option III (Ocean ER) Option III (Ocean ER) Floor 2 13-Mar-18 US ER 10.2% 5.0% 8.2% 3.0% 6.9% 1.7% < 10% US EI Total ER 14.8% 13.3% 12.7% 11.1% 14.9% 13.3% 15% Total E Total ER 15.8% 11.1% 15.0% 9.5% 11.6% 5.9% 18% Total E Ocean Escapement 39,429 40,225 40,724 35,400														
Incomplete List of 2018									Escapement						
Coho Potential 'Driver Stocks'	Coho Updated		Option I	(Ocean ER)	Option II	(Ocean ER)	Option III	(Ocean ER)	Floor 2						
Interior Fraser River (IFR), "Thompson"	13-Mar-18	US ER	10.2%	5.0%	8.2%	3.0%	6.9%	1.7%	< 10% US ER						
Oregon Coastal Natural (OCN)		Total ER	14.8%	13.3%	12.7%	11.1%	14.9%	13.3%	15% Total ER						
Lower Columbia River Natural (LCN)		Total ER	15.8%	11.1%	15.0%	9.5%	11.6%	5.9%	18% Total ER						
Grays Harbor Natural	Ocean Escapement		39,429		40,225		40,724		35,400						
Queets River Natural	Ocean	Escapement	5,882		6,107		6,314		5,800						
Hoh River Natural	Ocear	Escapement	4,968		5,215		5,397		2,000						
Quillayute River Fall Natural	Ocear	Escapement	9,960		10,135		10,293		6,300						
Strait of Juan De Fuca Natural		SUS ER	7.0%	4.1%	5.3%	2.4%	4.7%	1.8%	< 10% SUS ER						
Hood Canal Natural		Total ER	43.1%	5.0%	41.9%	3.0%	41.1%	1.7%	< 65% Total ER						
Skagit River Natural		SUS ER	10.6%	4.8%	8.7%	2.8%	7.5%	1.6%	< 35% SUS ER						
Stillaguamish River Natural		SUS ER	9.6%	3.3%	8.4%	2.0%	7.5%	1.1%	< 35% SUS ER						
Snohomish River Natural		SUS ER	21.0%	3.3%	19.7%	2.0%	18.9%	1.1%	< 40% SUS ER						

² DRAFT: Co-manager discussions are on-going and have not reached agreement on 2018 objectives....

		Releva	nt Chinook	Modeling Outputs:	Chinook	
2018 Chinook Council DriverStocks		Option I	Option II	Option III	Updated	ER Cap
Lower Columbia River Natural Tules	Total ER	41.0%	39.3%	37.4%	13-Mar-18	38.0%
Puget Sound natural production stocks		See Puges	t Sound TAI	MM Table 2 handout		-

Puget Sound Freshwater Ro	ecreational Chinook Se	easons 2018-19 F	Proposal			
Nooksack Samish NS Elliot Bay SAF Duwamish NS	Skykomish Skagit/Cascade Sinclair Inlet	M	Sammamish Puyallup Tulalip Bubble	NR M NS	Nisqually Skokomish Year-round piers	M NS
3/27/2018						
Puget Sound Freshwater Ro	ecreational Coho Seas	ons 2018-19 Pro	posal			
Dungeness M Nook/Samish NS Skagit NS	Cascade NS Stillaguamish Snohomish NS Lake WA NS	Lk Sammamish Green Puyallup	NS Quilcene	NS TBD	Year-round piers Tulalip	NS NS
NR Non-Re	etention NS	non-sel	M	Mark sele	ctive	Closed

Area	М	ay	Jı	ın	J	ul	A	ug	S	ер	0	ct	N	ov	D	ec	Ja	an	F	eb	M	lar	Α	pr
5					М	М	M	NR	NR	NR										М	М	М	М	N
6					М	М	M	М	NR	NR			M	М	M	M	М	М	M	M	М	М	M	
7					М	M	NS	NS	NS	NS					M	M	M	M	M	M	M	M	М	١
81							NR	NR	NR	NR					M	M	M	M	M	М	M	М	М	1
82							NR	NR	NR	NR					M	M	М	М	M	M	M	М	М	
9					NR	М	M	NR	NR	NR					М	M	M	М	M	M	M	М	М	
10			NR	NR	NR	М	M	M	NR	NR	NR	NR	M	М	М	M	M	М	М	M	M	M		•
11			М	M	M	M	M	M	M	М	M	M	М	М	М	M	M	М	M	M	M	М	М	
12 NoA					NR	NR	NR	NR	NR	NR	M	M	M	М	M	М	M	М	M	М	M	М	М	I
12 SoA					М	М	M	М	M	M	М	M	M	М	M	M	М	M	M	M	М	М	M	
13	M	М	М	М	M	М	М	M	М	М	М	М	M	М	M	M	М	М	M	М	M	М	М	
uget So	ound	Recr	eatio	nal C	oho	Seas	ons 2	2018-	19 Pr	opos	al													
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7					NS	NS	NS	NS	NS	NS					NR	NR	N							
81							NS	NS	NS	NS					NR	NR	N							
82							NS	NS	NS	NS					NR	NR	N							
9					M	M	M	М	М	M					M	M	M	М	M	M	M	M	M	
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	NO																							
11	NO				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N