

2019 Puget Sound Summer/Fall Chinook Preseason Forecasts (excludes age 2 fish)

Region	Watershed	Notes	Forecast Type	Hatchery	Supplmt	Wild	Total
Strait	Hoko		Escape w/o fishing	896		1,734	2,630
	Dungeness		Terminal	657		282	939
	Eliwha		Terminal	7,066		333	7,399
	Morse Creek		0	0		0	0
	Region total			8,619	0	2,349	10,968
North Sound	Glenwood Springs		Terminal	321			321
	Nooksack/Samish		Terminal	21,300			21,300
	Skagit		Terminal	309		13,825	14,134
	Stillaguamish		Terminal run w/ fishing	566		378	944
	Snohomish		Escapement w/o fishing	7,225		3,696	10,921
	Tulalip		Escapement w/o fishing	12,745			12,745
	Region total			42,466	0	17,899	60,365
Upper South Sound	Lake Washington						
	Issaquah		Terminal	4,266			4,266
	Cedar		Terminal			955	955
	Sammamish		Terminal			108	108
	Subregion total			4,266	0	1,063	5,329
	Green River						
	Soos Creek Hatchery		Terminal	20,423			20,423
Icy Creek		Terminal	537			537	
Mainstem/Newaukum		Terminal			4,833	4,833	
Subregion total			20,961	0	4,833	25,794	
Grovers							
			Terminal	2,880			2,880
			Terminal	7,705			7,705
Subregion total			10,585	0	0	10,585	
Puyallup River							
			Terminal	13,007		1,724	14,731
Upper South Sound Total			48,819	0	7,620	56,439	

2018 Puget Sound Summer/Fall Chinook Preseason Forecasts (continued)

Region	Watershed	Notes	Hatchery	Supplmt	Wild	Total
Lower South Sound	Carr Inlet	Terminal	13,693			13,693
	Deschutes	Terminal	16,730			16,730
	Nisqually	Terminal	20,223		824	21,047
	Chambers	Terminal	421			421
	Lower South Sound Total		51,067		824	51,891
	South Sound Total		99,886	0	8,444	108,330
Hood Canal	Skokomish w/George Adams	Terminal	37,160		520	37,680
	12B Naturals	Terminal			285	285
	12C/12H/12D	Terminal	28,911		298	29,209
	Hood Canal Total		66,071	0	1,103	67,174
Puget Sound Total			217,042	0	29,796	246,837

Puget Sound Spring Chinook 2018 Preseason Forecasts

Notes	Forecast Type	Hatchery	Supplmt	Wild	Total
Nooksack River					
North Fork	Terminal	2,674	1,260	171	4,105
South Fork	Terminal	3,134		77	3,211
Skagit River	Terminal	4,113		2,003	6,116
White River					
Minter Creek	Terminal	1,469			1,469
White River Hatchery	Terminal	154			154
Buckley Trap	Terminal		1,553	573	2,126
Total White River Springs					
Total		11,544	2,813	2,824	17,181

1. Supplemental number is hatchery-origin acclimated fish expected to spawn in the wild.
2. Forecast of SF Nooksack stock origin chinook.
3. Forecast of returns to the hatchery rack only.
4. Includes naturally produced spring and fall chinook returns and acclimation pond production.

Washington Coast 2018 Chinook Preseason Forecasts

	Hatchery		Wild	Totals	Natural Escapement Goal
North Coast					
Quillayute River					
Spring		2,091		2,091	200
Summer			1,301	1,301	1,200
Fall			6,645	6,645	> of 3,000 or 60% of run
Hoh					
Spring/Summer			1,023	1,023	>of 900 or 69% of RS
Fall			2,536	2,536	>of 1,200 or 60% of RS
Queets					
Spring/Summer			-	-	>of 700 or 70% of RS
Fall	484	2,292		2,776	>of 2,500 or 60% of RS
Quinault					
Fall	2,713	3,700		6,413	
North Coast totals Summer/Falls:	3,197	16,474		19,671	
Spring/Summers:	2,091	1,023		3,114	22,785
Grays Harbor					
Chehalis springs		581		581	1,400
Chehalis falls	2,390		17,781	20,171	9,753
Humtulsips falls	2,467		6,207	8,674	3,573
Subregion Falls Total	4,857	23,988		28,845	
Willapa Bay - Fall Chinook	23,806	4,309		28,115	
Coast total	33,951	46,375		80,326	

2018 and 2019 Washington Coho Forecast Summary¹

Last updated: 02/22/19

Production unit	2018 Hatchery	2019 Hatchery	2018 Wild	2019 Wild	2018 Total	2019 Total
Dungeness R	9,087	9,760	505	2,290	9,592	12,050
Elwha R	242	3,433	718	1,363	960	4,796
Eastern Strait (excl. Dung, Elwha)			800	2,301	800	2,301
Western Strait			6,368	6,499	6,368	6,499
West/East sub-total excl. Dung, Elwha			7,168	8,800	7,168	8,800
West/East Strait sub-total	9,329	13,193	8,391	12,453	17,720	25,646
Nooksack R	50,797	57,686	18,629	18,308	69,426	75,994
Lummi Ponds	10,459	2,104			10,459	2,104
7B net pens	0	0			0	0
Indian Slough Hatchery	0	0			0	0
Samish R			1,162	4,857	1,162	4,857
Misc 7&7A (incl. San Juans CoOps)			783	1,968	783	1,968
Nook/Samish R sub-total	61,256	59,790	20,574	25,133	81,830	84,923
Skagit R sub-total	13,101	9,917	59,196	57,933	72,297	67,850
Stillaguamish R sub-total	0	2,234	18,950	23,820	18,950	26,054
Snohomish R	7,092	7,709	65,925	62,600	73,017	70,309
Tulalip Bay	31,211	35,043			31,211	35,043
Area 8A Misc. Hatchery		899			0	899
Snohomish R sub-total	38,303	43,651	65,925	62,600	104,228	106,251
Lake Washington	12,984	10,790	2,018	2,770	15,002	13,560
Green River	48,032	68,680	3,320	3,001	51,352	71,681
Elliot Bay Net Pens		23,797			0	23,797
Misc. Area 10,11,10E		14,637	1,429	3,136	1,429	17,773
Puyallup R	17,985	32,220	4,964	9,349	22,949	41,569
Mid-Sound sub-total	79,001	150,124	11,731	18,256	90,732	168,380
Area 13A-K wild, exc. Deschutes			1,976	6,776	1,976	6,776
Area 13A Hatchery (Minter CR)	7,340	7,543			7,340	7,543
Nisqually R	952	10,298	1,268	4,816	2,220	15,114
Deschutes R			59	574	59	574
Area 13D net pens (Squaxin Island)	15,718	33,039			15,718	33,039
Deep South Sound sub-total	24,010	50,880	3,303	12,166	27,313	63,046
Mid+Deep South Sound sub-total	103,011	201,004	15,034	30,422	118,045	231,426
Area 9A (Port Gamble)	12,680	13,783	579	539	13,259	14,322
Area 12A - Quilcene R	49,605	52,237	995	800	50,600	53,037
Area 12A - Quilcene Net Pens		-		-	0	0
Area 12/12B		-	27,693	13,860	27,693	13,860
Area 12C/12D (exc. Skokomish R)		-	30,503	15,265	30,503	15,265
Skokomish R	20,690	20,510	1,334	11,015	22,024	31,525
Area 12/12B-12D/Skok. R sub-total	20,690	27,347	59,530	40,140	80,220	67,487
Hood Canal sub-total	82,975	86,530	120,634	81,619	144,079	128,009
Puget Sound Total	307,975	416,319	308,704	293,980	557,149	670,159
Willapa Bay	44,542	94,019	20,645	63,448	65,187	157,467
Grays Harbor	51,414	64,345	42,379	71,527	93,793	135,872
Quinalt R	29,622	26,904	25,442	13,888	55,064	40,792
Queets R	10,814	13,175	6,964	11,100	17,778	24,275
North Coast Indept. Tribes					0	0
Hoh R			5,816	6,963	5,816	6,963
Quillayute R summer	3,313	3,428	2,743	1,181	6,056	4,609
Quillayute R fall	16,505	16,953	10,557	14,607	27,062	31,560
Coast total	156,210	218,824	114,546	182,714	270,756	401,538

Production unit	2018 Hatchery	2019 Hatchery	2018 Wild	2019 Wild	2018 Total	2019 Total
Columbia Hatch/WA Wild Early ²	152,523	527,976	4,519	9,846	157,042	537,822
Columbia Hatch/WA Wild Late ²	111,774	340,897	8,393	18,286	120,167	359,183
Columbia Oregon Wild ³	-	-	8,990	8,814	8,990	8,814
Columbia total	264,297	868,873	21,902	36,946	286,199	905,819
Grand Total	728,482	1,504,016	445,152	513,640	1,114,104	1,977,516

Notes:

1) Ocean Age 3 (OA3) abundance

2) Columbia Early and Late Production Unit hatchery forecast categories include hatchery production from all states, Columbia Early and Late Wild Production Unit forecasts contain Washington-origin stocks only.

3) Oregon Wild Production Unit category is summarized separately from Columbia Early and Late categories because it is considered by ODFW to account for entire fall coho return on Oregon side of river.

**CHUM, PINK, AND SOCKEYE SALMON
CO-MANAGER RUNSIZE FORECASTS FOR THE 2019 RETURN YEAR**

CHUM - SUMMER

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Central Sound		1,381	1,381	R/S
South Sound		27,039	27,039	R/S
Hood Canal*		10,315	10,315	Ocean indicator regression
Strait of Juan de Fuca		1,684	1,684	Ocean indicator regression
Puget Sound Total		40,419	40,419	

* Wild forecast includes supplementation returns.

CHUM - FALL

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Nooksack/Samish	21,840	74,896	96,736	R/S
Skagit	282	11,454	11,736	Fry based
Stillaguamish	435	4,758	5,193	Fry based
Snohomish	7,487	4,583	12,070	Fry based
Central Sound	51,504	75,933	127,437	R/S
South Sound	30,217	232,954	263,171	R/S
Hood Canal	349,412	169,233	518,645	R/S
Strait of Juan de Fuca	481	366	847	PDO regression
Puget Sound Total	461,658	574,177	1,035,835	

CHUM - WINTER

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
South Sound	10,199	25,653	35,852	R/S Runsize>40K
Puget Sound Total	10,199	25,653	35,852	

CHUM - FALL

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Coastal				
Grays Harbor		66,816	66,816	PDO model harvest adjustment
Willapa	822	51,383	52,205	R/S and PDO adjustment
Coastal Total	822	118,199	119,021	

PINK

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Nooksack		24,476	24,476	Fry based
Skagit		114,769	114,769	Fry based
Stillaguamish		47,919	47,919	Fry based
Snohomish		128,362	128,362	Fry based
Green		141,130	141,130	Fry based
Puyallup		47,905	47,905	Fry based
Nisqually		25,380	25,380	Fry based
South Sound Misc.		143	143	R/S
Hood Canal	4,200	66,475	70,675	Fry and R/S Avg
Strait of Juan de Fuca	42	7,587	7,629	Ocean indicator regression
Puget Sound Total	4,242	604,146	608,388	

SOCKEYE

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Puget Sound				
Baker River*		33,737	33,737	NPGO and sibling relationship
Lake Washington	9,340	5,813	15,153	Sibling relationships
Puget Sound Total			48,890	

* Forecast contains hatchery and wild production

SOCKEYE

	HATCHERY	WILD	TOTAL	FORECAST METHOD
Columbia River				
Wenatchee River		18,300	18,300	Adult-cohort relationships
Okanogan River		74,500	74,500	Adult-cohort relationships
Columbia River Total		92,800	92,800	

Fraser River Forecasts (from Fisheries and Oceans Canada)

Sockeye Salmon	4,795,000	p50
Pink Salmon	5,018,600	Fry based and salinity



Recreational Discussion – 2/27/2019

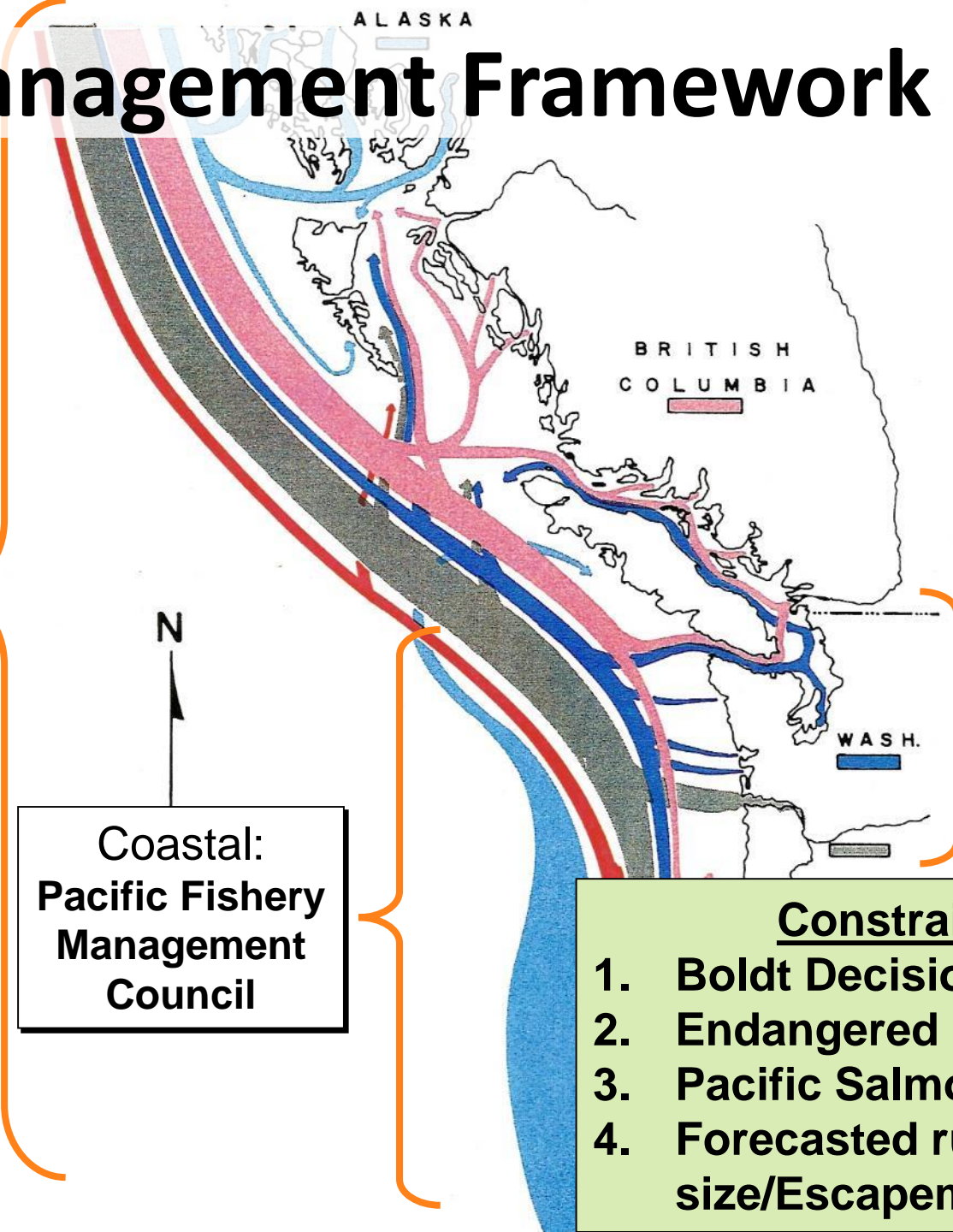


Outline of Presentation

The background of the slide is a photograph of a fishing net on a boat. The net is made of dark mesh and is suspended over the water. A large salmon is visible inside the net, partially obscured by the mesh. The boat's edge and a person's hand are visible on the right side. The sky is overcast, and the water is dark.

- **Salmon Management Framework**
 - North of Falcon
- **Forecast Comparisons**
- **Issues List**
- **Public Comment**

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	Wild		
	2018	2019	Comparison
Hoko	1,071	1,438	1.34
Dungeness	89	282	3.17
Elwha	238	333	1.40
Nooksack springs	202	248	1.23
Skagit springs	2,317	2,003	0.86
Skagit summer/falls	13,340	13,825	1.04
Stillaguamish	487	378	0.78
Snohomish	3,460	3,744	1.08
Lake Washington	1,461	1,063	0.73
Green	2,110	4,833	2.29
Puyallup	672	1,724	2.57
White River springs	528	573	1.09
Nisqually	586	824	1.41
Skokomish	3,338	520	0.16
Mid Hood Canal	358	285	0.80
Total (others included)	30,451	32,372	1.06

Puget Sound Chinook Forecast Comparisons

Basin	Hatchery		
	2018	2019	Comparison
Hoko	398	1,233	3.10
Dungeness	707	657	0.93
Elwha	4,931	7,066	1.43
Nooksack springs	4,782	5,808	1.21
Skagit springs	4,262	4,113	0.97
Skagit summer/falls	303	309	1.02
Stillaguamish	1,063	566	0.53
Snohomish	6,508	7,225	1.11
Lake Washington	4,761	4,266	0.90
Green	21,321	20,961	0.98
Puyallup	11,778	13,007	1.10
White River springs	3,301	1,623	0.49
Nisqually	28,514	20,223	0.71
Skokomish	31,250	37,160	1.19
Total (others included)	242,230	231,736	0.96

Puget Sound Coho Forecast Comparisons

Basin	Wild		
	2018	2019	Comparison
Dungeness	505	2,821	5.59
Elwha	718	1,679	2.34
other Strait	7,168	10,839	1.51
Nooksack/Samish	20,574	25,133	1.22
Skagit	59,196	57,933	0.98
Stillaguamish	18,950	23,820	1.26
Snohomish	65,925	62,600	0.95
Lake Washington	2,018	2,770	1.37
Green	3,320	3,001	0.90
Puyallup	4,964	988	0.20
Nisqually	1,268	4,816	3.80
Deschutes	59	574	9.73
Skokomish	1,334	14,686	11.01
other Hood Canal	59,770	40,616	0.68
Total (others included)	308,704	293,980	0.95

Puget Sound Coho Forecast Comparisons

Basin	Hatchery		
	2018	2019	Comparison
Dungeness	9,087	11,790	1.30
Elwha	242	4,230	17.48
Nooksack/Samish	61,256	59,790	0.98
Skagit	13,101	9,917	0.76
Stillaguamish	0	2,234	-
Snohomish	7,092	5,749	0.81
Lake Washington	12,984	10,790	0.83
Green	48,032	44,883	0.93
Puyallup	17,985	32,221	1.79
Nisqually	952	7,397	7.77
SS Hatchery	23,058	40,582	1.76
Skokomish	20,690	27,347	1.32
other Hood Canal	62,285	88,026	1.41
Total (others included)	307,975	416,319	1.35

Puget Sound Pink Forecast Comparisons

Basin			
	2017	2019	Comparison
Nooksack	96,218	24,476	0.25
Skagit	85,600	114,769	1.34
Stillaguamish	40,205	47,919	1.19
Snohomish	171,632	128,362	0.75
Green	118,689	141,130	1.19
Puyallup	382,301	47,905	0.13
Nisqually	21,463	25,380	1.18
Hood Canal	229,440	70,675	0.31
Strait of Juan de Fuca	3,655	7,629	2.09
Total (others included)	1,150,522	608,388	0.53

2017 actual return was 510,857 or 44% of what was forecasted

Recreational Issues

- Timely agreement
- Stillaguamish and Mid HC Chinook
- Southern Resident Killer Whales
- Meaningful angler opportunity
 - Coho
 - Pink
 - Catch-and-release seasons
- Skokomish
- Baker Sockeye management

A person wearing a white cap and a blue jacket is seen from the side, leaning over the edge of a boat. They are holding a fishing rod and reeling in a large, silvery fish, likely a salmon, which is partially visible in the water. The background shows the blue water of the sea.

Public Comment

On-line commenting – March-April

<http://wdfw.wa.gov/fishing/northfalcon/>

Puget Sound Sport Fishing Advisory Group

<http://wdfw.wa.gov/about/advisory/pssfag/>

Public Meetings

March 6-12 PFMC (Ocean Options) Vancouver, WA

March 19 – NOF #1, OB2 Olympia 9:00 am

March 21 – Sequim Trinity Church, 6:30 pm

March 27 – Mill Creek WDFW, 6 pm

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

April 11-15 – PFMC #2, Rohnert Park, CA