

SALMON TECHNICAL TEAM REPORT 1

Excerpts from the Review of 2024 Ocean Salmon Fisheries and 2025 Preseason 1 Report

2024 Review: TABLE II-6. Chinook stock status relative to overfished and overfishing criteria. A stock is overfished if the 3-year geometric mean spawning escapement is less than the minimum stock size threshold (MSST); a stock experiences overfishing if the total annual exploitation rate exceeds the maximum fishing mortality threshold (MFMT).

Chinook Stock	Spawning Escapement						3-yr Geo			Exploitation Rate						
	2019	2020	2021	2022	2023	2024	Mean	MSST	S _{MSY}	2019	2020	2021	2022	2023	2024	MFMT
	Sacramento Fall	163,767	138,091	105,584	61,862	133,783	99,274	93,660	91,500	122,000	0.68	0.61	0.68	0.76	0.04	NA
Klamath River Fall	20,022	26,185	29,942	21,956	41,370	24,032	27,947	30,525	40,700	0.43	0.30	0.38	0.46	0.04	NA	0.71
Southern Oregon	18,436	29,387	48,979	17,609	29,555	53,342	30,279	20,500	34,992	NA	NA	NA	NA	NA	NA	0.54
Central and Northern OR ^{a/}	65	137	85	105	118	123	115	30 fish/mile	150k-200k	0.39	0.38	0.44	0.49	NA	NA	0.78
Upper River Bright - Fall ^{a/}	77,880	98,401	86,644	53,961	64,450	57,580	58,505	19,812	39,625	0.42	0.37	0.46	0.44	NA	NA	0.86
Upper River - Summer ^{a/}	41,090	70,654	52,076	64,497	49,410	41,142	50,802	6,071	12,143	0.34	0.31	0.42	0.52	NA	NA	0.75
Willapa Bay - Fall ^{b/}	2,894	3,585	2,966	2,351	2,095	NA	2,445	1,697	3,393	0.66	0.57	0.70	0.63	NA	NA	0.78
Grays Harbor Fall ^{a/b/}	14,880	20,879	13,207	14,259	10,943	NA	12,726	6,663	13,326	0.63	0.59	0.68	0.61	NA	NA	0.63
Grays Harbor Spring	983	2,828	2,573	1,348	2,175	NA	1,961	700	1,400	NA	NA	NA	NA	NA	NA	0.78
Queets - Fall ^{a/}	2,663	3,622	3,364	1,784	2,246	NA	2,380	1,250	2,500	0.73	0.74	0.76	0.86	NA	NA	0.87
Queets - Sp/Su	322	342	280	434	540	NA	403	350	700	NA	NA	NA	NA	NA	NA	0.78
Hoh - Fall ^{a/b/}	1,552	2,273	2,622	1,866	2,323	NA	2,248	600	1,200	0.73	0.70	0.74	0.65	NA	NA	0.90
Hoh Sp/Su	766	1,248	817	1,055	980	NA	945	450	900	NA	NA	NA	NA	NA	NA	0.78
Quillayute - Fall ^{a/b/}	7,765	8,672	5,568	8,369	6,682	5,378	6,700	1,500	3,000	0.65	0.61	0.68	0.63	NA	NA	0.87
Quillayute - Sp/Su	1,442	942	1,082	1,574	2,087	1,275	1,612	600	1,200	NA	NA	NA	NA	NA	NA	0.78
Hoko -Su/Fa ^{a/}	1,838	2,102	1,165	1,386	4,393	NA	1,921	425	850	0.33	0.34	0.14	0.21	NA	NA	0.78

a/ CWT based exploitation rates from PSC-CTC 2024 Exploitation Rate Analysis (TCCHINOOK (25)-01).

b/ Queets River fall Chinook coded-wire-tag (CWT) exploitation rates used as a proxy. Adjustments made to terminal fishery impacts to account for differential harvest rates.

c/ Sacramento Fall MFMT updated for use starting in 2025. Prior to 2025, MFMT of 0.78 was in place.

2024 Review: TABLE III-7. Coho stock status relative to overfished and overfishing criteria. A stock is overfished if the 3-year geometric mean spawning escapement is less than the minimum stock size threshold (MSST); a stock experiences overfishing if the total annual exploitation rate exceeds the maximum fishing mortality threshold (MFMT).

Coho Stock	Spawning Escapement							3-yr Geo Mean	MSST	S _{MSY}	Exploitation Rate					
	2019	2020	2021	2022	2023	2024	2019				2020	2021	2022	2023	2024	MFMT
Willapa Bay	15,115	16,476	31,369	24,197	18,693	NA	24,209	8,600	17,200	0.39	0.33	0.24	0.31	NA	NA	0.74
Grays Harbor	30,468	23,814	62,789	61,057	49,877	NA	57,611	18,320	24,426	0.39	0.29	0.23	0.29	NA	NA	0.65
Queets	1,700	4,181	5,752	12,083	4,375	NA	6,724	4,350	5,800	0.57	0.22	0.10	0.32	NA	NA	0.65
Hoh	2,445	2,840	6,396	8,224	3,879	NA	5,887	1,890	2,520	0.57	0.49	0.18	0.30	NA	NA	0.65
Quillayute Fall	6,852	7,695	9,938	16,643	7,734	NA	10,855	4,725	6,300	0.37	0.16	0.04	0.22	NA	NA	0.59
Juan de Fuca	4,625	8,548	20,837	16,977	13,887	NA	16,999	7,000	11,000	0.12	0.07	0.07	0.08	NA	NA	0.60
Hood Canal	7,884	16,832	34,388	9,192	32,934	NA	21,835	10,750	14,350	0.46	0.29	0.25	0.54	NA	NA	0.65
Skagit	14,246	23,808	75,532	92,306	54,443	NA	72,405	14,857	25,000	0.48	0.43	0.33	0.26	NA	NA	0.60
Stillaguamish	12,887	21,555	38,176	53,828	37,962	NA	42,728	6,100	10,000	0.20	0.13	0.11	0.10	NA	NA	0.50
Snohomish	40,314	42,675	97,523	85,692	63,042	NA	80,765	31,000	50,000	0.17	0.11	0.11	0.08	NA	NA	0.60

2025 Preseason I Report: TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 1 of 3)

Production Source and Stock or Stock Group	2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
Sacramento River							
Fall (Sacramento Index)	473.2	271.0	396.5	169.8	213.6	165.7	Log-log regression of the Sacramento Index on jack escapement from the previous year, accounting for lag-1 autocorrelated errors. STT.
Winter (age-3 absent fishing)	3.1	9.1	6.0	4.5	1.1	4.5	Gaussian process model applied to a time series of the SRWC age-3 escapement absent fishing. NMFS.
Klamath River (Ocean Abundance)							
Fall	186.6	181.5	200.1	103.8	180.7	82.7	Linear regression analysis of age-specific ocean abundance estimates on river runs of same cohort. STT.
Oregon Coast							
North and South/Local Migrating	--	--	--	--	--	--	None.
Columbia River (Ocean Escapement)							
Cowlitz Spring	1.4	1.8	4.1	9.0	4.7	13.7	Cowlitz, Kalama, and Lewis: Age-specific linear regressions of cohort returns in previous run years. WDFW.
Kalama Spring	1.0	2.2	2.0	2.4	1.9	3.0	
Lewis Spring	1.4	2.4	2.4	4.7	3.4	3.2	
Sandy Spring	5.2	5.3	5.6	7.8	7.7	7.3	Recent 3-year average. ODFW.
Willamette Spring	40.8	50.1	51.2	71.0	48.7	51.2	Age-specific linear regressions of cohort returns in previous run years. Forecast includes adult fish only. ODFW.
Upriver Spring ^{a/}	81.7	75.2	122.9	198.6	121.0	122.5	Columbia River Upriver Spring and Summer Chinook: Mean Absolute Percent Error (MAPE)-weighted average of age-specific cohort ratios and sibling regression models. Columbia River TAC subgroup and WDFW.
Upriver Summer ^{b/}	38.3	77.6	57.5	84.8	53.0	38.0	
LRW Fall	19.7	20.0	10.8	8.6	10.5	14.2	Columbia River Fall Chinook: Mean Absolute Percent Error (MAPE)-weighted average of age-specific cohort ratios and sibling regression models. Columbia River TAC subgroup and WDFW.
LRH Fall	51.0	73.1	73.0	77.1	85.5	121.5	
SCH Fall	46.2	46.8	91.2	136.1	129.8	184.7	
MCB Fall	79.7	86.2	78.9	52.6	63.4	83.3	
URB Fall	233.4	354.2	230.4	272.4	258.3	313.4	

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 2 of 3)

Production Source and Stock or Stock Group		2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
Washington Coast								
Willapa Bay Fall	Natural	2.9	3.9	3.1	2.8	3.5	2.3	Return/spawner adjusted for recent model performance.
	Hatchery	28.3	30.5	30.1	27.5	27.3	33.4	Return/spawner adjusted for recent model performance.
Grays Harbor Fall	Natural	15.0	15.5	17.9	15.0	14.3	14.2	Combination of geometric mean of recent year returns and linear relationships of sibling recruits per spawner.
	Hatchery	6.9	7.6	8.6	5.9	5.3	3.9	Recent 5-year geometric mean of returns per release.
Quinault Spring/Summer	Natural	NA	NA	NA	NA	NA	NA	
	Hatchery	NA	NA	NA	NA	NA	NA	
Quinault Fall	Natural	4.2	6.0	3.2	4.0	4.3	4.1	Recent 10-year geometric mean for age 3-5 returns and recent 10-year average return for age 6.
	Hatchery	4.5	4.9	5.6	7.6	3.4	4.6	Recent 5-year mean terminal return rates (return/smolt release) for age 3-6 adult returns, adjusted by brood performance.
Queets Spring/Sum	Natural	0.6	0.6	0.6	0.4	0.4	0.6	Recent 3-year (2022-2024) geometric mean terminal run size.
	Queets Fall		4.3	5.3	4.3	2.6	3.3	Recent year mean return/spawner rates.
		4.1						
	Hatchery	0.7	0.6	0.5	0.8	0.4	0.6	Recent year return/smolt release adjusted by brood performance.
Hoh Spring/Summer	Natural	0.8	1.0	0.7	1.0	1.1	1.2	5-year mean recruit/spawner adjusted by previous performance.
Hoh Fall	Natural	2.6	2.6	3.4	2.6	3.5	2.5	5-year mean recruit/spawner adjusted by previous performance.
Quillayute Spring/Summer	Hatchery	2.4	2.6	3.0	2.8	2.5	2.4	Recent 5-year mean return/spawner, adjusted by previous year brood performance.
Quillayute Sum/Fall	Natural	9.8	9.6	8.8	11.3	10.1	8.1	Recent 5-year mean return/spawner, adjusted by previous year brood performance.
Hoko ^{cl}	Natural	2.6	1.3	0.9	2.8	3.9	1.9	Escapement without fishing, includes supplemental. Sibling regressions using data from return years 1988-2023.
North Coast Totals								
Spring/Summer	Natural	1.4	1.5	1.3	1.4	1.5	1.8	
Fall	Natural	20.6	22.5	20.7	22.1	20.5	18.0	
Spring/Summer	Hatchery	2.4	2.6	3.0	2.8	2.5	2.4	
Fall	Hatchery	5.2	5.5	6.1	8.4	3.8	5.1	

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 3 of 3)

Production Source and Stock or Stock Group		2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
Puget Sound summer/fall^{d/}								
Nooksack/Samish	Hatchery	18.2	18.9	28.1	41.2	40.9	53.7	Three year average return rate
East Sound Bay	Hatchery	0.3	0.6	0.4	0.2	0.2	1.0	Three year average return rate
Skagit	Natural	12.9	10.5	12.5	12.2	10.4	9.7	Natural: Hierarchical Bayesian model to estimate the spawner-recruit dynamics. Hatchery: One year ahead forecasts generated using Chinook run sizes and GAM and ARIMA models.
	Hatchery	0.5	0.5	0.5	0.5	0.6	0.5	
Stillaguamish	Natural	0.9	0.9	0.9	1.2	0.9	1.1	Age-specific return rates predicted by linear regressions and generalized linear models that incorporate environmental variables (SCODEN model).
Snohomish	Natural	3.0	2.9	2.4	3.4	2.7	2.9	Age specific forecast models.
	Hatchery	6.8	6.1	6.0	7.5	8.4	11.4	Average return at age by lifestage.
Tulalip	Hatchery	6.0	5.8	7.7	5.5	5.9	4.9	Suite of naïve and sibling regression models for individual age components.
South Puget Sound	Natural	5.8	7.0	6.9	7.0	7.3	8.5	Natural: Lake Washington; 2-yr avg recruit per spawner for age 3, 3-yr avg sibling ratios for ages 4 & 5. Green; 5-yr average return rate for age 3 and 3-yr average return rates for ages 4 and 5. Puyallup; NPGO climate prediction for age 3 RPS, SAR sibling relationship for age 4, and 5 year average for age 5. Nisqually; 5-yr average recruit per spawner for ages 3 and 5, sibling relationships for age 4. Hatchery: Variety of recent year average return rates or sibling relationships.
	Hatchery	100.7	78.8	90.3	90.4	90.5	94.4	
Hood Canal	Natural	4.6	5.7	5.4	3.2	4.3	5.2	Includes hatchery strays to spawning grounds in Skokomish River. Proportioned using Hood Canal terminal run reconstruction-based relative contribution of the individual management units for 2019-2023 return years. Area 12B derived by 5-year average return (2020-2024).
	Hatchery	67.6	64.1	51.9	53.6	56.3	54.5	Brood 2020 fingerling lbs released from WDFW facilities in 2021, multiplied by the average of post-season estimated terminal area return rates for the last 5 years (2020-2024).
Strait of Juan de Fuca Including Dungeness spring run	Natural	5.0	5.5	5.0	3.7	4.3	5.2	Natural and hatchery. Elwha: recent 5-yr mean return rates adjusted by previous brood performance for hatchery, 13-yr average hatchery/wild proportion for wild. Dungeness: recent 5-yr mean return rates adjusted by previous brood performance .

a/ Since 2005, the upriver spring Chinook run includes Snake River summer Chinook.

b/ Since 2005, the upriver summer Chinook run includes only upper Columbia summer Chinook, and not Snake River summer Chinook.

c/ Expected spawning escapement without fishing.

d/ Unless otherwise noted, Puget Sounds forecasts are in units of terminal run size.

2025 Preseason I Report: TABLE I-2. Preseason adult coho salmon stock forecasts in thousands of fish. (Page 1 of 2)

Production Source and Stock or Stock Group		2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
OPI Area Total Abundance (California, Oregon Coasts, and Columbia River)		268.7	1,732.9	1,225.9	1,135.7	636.3	601.6	Abundance of all OPI components based on post-season coho FRAM runs; prior to 2008 only fishery impacts south of Leadbetter Point were used (traditional OPI accounting). OPITT, see Chapter III for details.
OPI Public	Hatchery	185.7	1607.9	1003.5	896.9	403.1	312.6	OPIH: ARIMA-based MAPE weighted ensemble forecast. Columbia early/late and Coastal proportions based on jacks; Coastal N/S proportions based on smolts.
Columbia River Early		130.7	1014.0	592.5	481.8	227.5	214.1	
Columbia River Late		50.3	576.0	404.7	404.3	173.6	89.7	
Coastal N. of Cape Blanco		2.4	6.4	1.9	3.0	0.6	3.3	
Coastal S. of Cape Blanco		2.3	11.5	4.4	7.8	1.4	5.5	
Lower Columbia River (LCN)	Natural	24.8	39.2	65.7	45.5	87.8	72.0	Oregon: recent three year average return; Washington: natural smolt production multiplied by 2022 brood marine survival rate. Abundance is subset of early/late hatchery abundance above.
Oregon Coast (OCN)	Natural	83.0	125.0	222.4	238.8	233.2	289.0	Rivers: Generalized additive model (GAM) relating ocean recruits to parental spawners and marine environmental variables. See text in Chapter III for details. Lakes: recent three year average abundance.
Washington Coast								
Willapa	Natural	17.9	19.0	35.8	42.7	29.5	28.0	Washington Coast stocks: A variety of methods were used, primarily based on smolt production and survival. See text in Chapter III for details.
	Hatchery	51.8	61.6	74.7	111.0	91.5	93.7	
Grays Harbor	Natural	50.0	44.8	120.8	103.2	74.9	62.2	
	Hatchery	42.3	31.7	78.3	111.4	68.2	87.8	
Quinault	Natural	17.5	15.0	19.4	23.6	25.3	21.1	
	Hatchery	27.0	24.6	42.7	30.6	34.7	37.3	
Queets	Natural	7.8	3.9	18.3	12.5	12.8	9.0	
	Hatchery	10.9	11.8	22.2	14.9	18.9	9.7	
Hoh	Natural	4.2	3.0	4.7	6.6	4.9	5.4	

TABLE I-2. Preseason adult coho salmon stock forecasts in thousands of fish. (Page 2 of 2)

Production Source and Stock or Stock Group		2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source	
Quillayute Fall	Natural	9.2	7.5	12.5	13.5	10.2	10.9	For all Washington Coast stocks: A variety of methods were used, primarily based on smolt production and survival. See text in Chapter III for details.	
	Hatchery	13.0	15.1	20.3	19.1	10.3	13.4		
Quillayute Summer	Natural	0.8	0.3	0.9	1.6	0.4	0.3		
	Hatchery	3.4	3.4	4.6	3.9	2.3	2.9		
North Coast Independent Tributaries	Natural	5.1	4.7	18.0	13.5	4.9	9.4		
	Hatchery	1.3	0.1	0.1	11.8	9.0	3.3		
<i>WA Coast Total</i>	<i>Natural</i>	<i>112.4</i>	<i>98.4</i>	<i>230.5</i>	<i>217.2</i>	<i>162.8</i>	<i>146.4</i>		
	<i>Hatchery</i>	<i>149.6</i>	<i>148.2</i>	<i>243.0</i>	<i>302.7</i>	<i>234.9</i>	<i>248.1</i>		
Puget Sound									
Strait of Juan de Fuca	Natural	7.5	6.7	7.3	15.6	19.7	14.0		For all Puget Sound stocks: A variety of methods were used, primarily based on smolt production and survival. See text in Chapter III and Joint WDFW and tribal annual reports on Puget Sound Coho Salmon Forecast Methodology for details.
	Hatchery	20.6	12.5	12.7	21.8	22.6	18.3		
Nooksack-Samish	Natural	15.4	35.3	36.0	29.5	35.1	29.5		
	Hatchery	42.5	54.6	73.8	66.6	72.3	58.9		
Skagit	Natural	31.0	58.4	80.4	43.1	63.4	66.3		
	Hatchery	18.2	22.0	21.3	21.1	27.3	37.2		
Stillaguamish	Natural	19.5	26.8	24.9	30.2	30.8	27.5		
	Hatchery	2.3	4.0	1.9	1.7	0.9	1.2		
Snohomish	Natural	39.0	60.0	64.2	76.5	71.6	59.0		
	Hatchery	26.6	29.9	22.6	64.0	34.7	76.2		
South Sound	Natural	7.3	27.5	31.0	58.3	38.1	41.6		
	Hatchery	164.0	192.7	208.5	218.8	201.9	213.8		
Hood Canal	Natural	35.0	28.8	20.2	37.9	36.5	19.0		
	Hatchery	72.2	55.7	61.4	74.8	67.2	63.8		
<i>Puget Sound Total</i>	<i>Natural</i>	<i>154.6</i>	<i>243.5</i>	<i>264.0</i>	<i>291.2</i>	<i>295.3</i>	<i>256.9</i>		
	<i>Hatchery</i>	<i>346.3</i>	<i>371.4</i>	<i>402.3</i>	<i>468.8</i>	<i>426.9</i>	<i>469.5</i>		

2025 Preseason I Report: TABLE V-4. Stock status relative to overfished and overfishing criteria. A stock is approaching an overfished condition if the 3-year geometric mean of the most recent two years and the forecast spawning escapement is less than the minimum stock size threshold (MSST); a stock would experience overfishing if the total annual exploitation rate exceeds the maximum fishing mortality threshold (MFMT). Occurrences of stocks *at risk* of approaching an overfished condition or experiencing overfishing are indicated in **bold**. 2025 spawning escapement and exploitation rate estimates are based on preliminary 2025 preseason abundance forecasts and 2024 Council regulations.

	Estimated Adult Spawning Escapement						3-yr Geo Mean	MSST	S _{MSY}	Total Exploitation Rate						
	2020	2021	2022	2023 ^{a/}	2024 ^{b/}	Forecast 2025 ^{b/}				2020	2021	2022 ^{a/}	2023 ^{b/}	2024 ^{b/}	2025 ^{b/}	MFMT
Chinook																
Sacramento Fall	138,091	105,584	61,862	133,783	99,274	133,281	120,967	91,500	122,000	0.61	0.68	0.76	0.04	0.00	0.20	0.58 ^{g/}
Klamath River Fall	26,185	29,942	21,956	41,370	24,032	12,080	22,901	30,525	40,700	0.30	0.38	0.46	0.04	0.23	0.42	0.71
Southern Oregon ^{c/}	29,387	48,979	17,609	29,555	53,342	NA	30,279	20,500	34,992	NA	NA	NA	NA	NA	NA	0.54
Central and Northern OR ^{d/}	137	85	105	118	123	NA	115	30 fish/mi	60 fish/mi	0.38	0.44	0.49	NA	NA	NA	0.78
Upper River Bright - Fall ^{d/}	98,401	86,644	53,961	64,450	57,580	101,666	72,259	19,812	39,625	0.37	0.46	0.44	NA	NA	NA	0.86
Upper River - Summer ^{d/}	70,654	52,076	64,497	49,410	41,142	42,428	44,183	6,071	12,143	0.31	0.42	0.52	NA	NA	NA	0.75
Willapa Bay - Fall ^{e/}	3,585	2,966	2,351	2,095	NA	NA	2,445	1,697	3,393	0.57	0.70	0.63	NA	NA	NA	0.78
Grays Harbor Fall ^{d/e/}	20,879	13,207	14,259	10,943	NA	NA	12,726	6,663	13,326	0.59	0.68	0.61	NA	NA	NA	0.63
Grays Harbor Spring	2,828	2,573	1,348	2,175	NA	NA	1,961	700	1,400	NA	NA	NA	NA	NA	NA	0.78
Queets - Fall ^{d/}	3,622	3,364	1,784	2,246	NA	NA	2,380	1,250	2,500	0.74	0.76	0.86	NA	NA	NA	0.87
Queets - Sp/Su	342	280	434	540	NA	NA	403	350	700	NA	NA	NA	NA	NA	NA	0.78
Hoh - Fall ^{d/e/}	2,273	2,622	1,866	2,323	NA	NA	2,248	600	1,200	0.70	0.74	0.65	NA	NA	NA	0.90
Hoh Sp/Su	1,248	817	1,055	980	NA	NA	945	450	900	NA	NA	NA	NA	NA	NA	0.78
Quillayute - Fall ^{d/e/}	8,672	5,568	8,369	6,682	5,378	NA	6,700	1,500	3,000	0.61	0.68	0.63	NA	NA	NA	0.87
Quillayute - Sp/Su	942	1,082	1,574	2,087	1,275	NA	1,612	600	1,200	NA	NA	NA	NA	NA	NA	0.78
Hoko -Su/Fa ^{d/}	2,102	1,165	1,386	4,393	NA	NA	1,921	425	850	0.34	0.14	0.21	NA	NA	NA	0.78
Coho																
Willapa Bay ^{f/}	16,476	31,369	24,197	18,693	NA	18,412	20,270	8,600	17,200	0.33	0.24	0.31	0.27	NA	0.55	0.74
Grays Harbor ^{h/}	23,814	62,789	61,057	49,877	NA	31,947	45,993	18,320	24,426	0.29	0.23	0.29	0.26	NA	0.55	0.65
Queets	4,181	5,752	12,083	4,375	NA	5,958	6,804	4,350	5,800	0.22	0.10	0.32	0.41	NA	0.35	0.65
Hoh	2,840	6,396	8,224	3,879	NA	2,516	4,313	1,890	2,520	0.49	0.18	0.30	0.41	NA	0.53	0.65
Quillayute Fall	7,695	9,938	16,643	7,734	NA	8,036	10,113	4,725	6,300	0.16	0.04	0.22	0.29	NA	0.26	0.59
Juan de Fuca	8,548	20,837	16,977	13,887	NA	12,307	14,263	7,000	11,000	0.07	0.07	0.08	0.07	NA	0.13	0.60
Hood Canal	16,832	34,388	9,192	32,934	NA	9,659	14,300	10,750	14,350	0.29	0.25	0.54	0.34	NA	0.49	0.65
Skagit	23,808	75,532	92,306	54,443	NA	36,516	56,826	14,857	25,000	0.43	0.33	0.26	0.27	NA	0.45	0.60
Stillaguamish	21,555	38,176	53,828	37,962	NA	19,250	34,009	6,100	10,000	0.13	0.11	0.10	0.18	NA	0.30	0.50
Snohomish	42,675	97,523	85,692	63,042	NA	40,660	60,336	31,000	50,000	0.11	0.11	0.08	0.21	NA	0.31	0.60

a/ Preliminary.

b/ Preliminary approximations based on preseason forecasts and the previous year fishing regulations.

c/ MSST 18,440 (20,500 as measured at Huntley Park).

d/ CWT based exploitation rates from PSC-CTC 2024 Exploitation Rate Analysis (TCCHINOOK (25)-01).

e/ Queets River fall Chinook coded-wire-tag (CWT) exploitation rates used as a proxy. Adjustments made to terminal fishery impacts to account for differential harvest rates.

f/ Willapa Bay and Grays Harbor coho escapement and exploitation rate estimates based on natural area adult spawners.

g/ Sacramento Fall MFMT updated for use starting in 2025. Prior to 2025, MFMT of 0.78 was in place.

h/ 2023 Grays Harbor natural coho postseason return is preliminary

2025 Preseason I Report: TABLE V-5. Postseason S_{ACL} , S_{OFL} , and spawner escapement estimates for Sacramento River fall Chinook (SRFC) and Klamath River fall Chinook (KRFC). For the current year, S_{ACL} , S_{OFL} , and spawner escapements are preseason values based on current abundance forecasts and the previous year fishing regulations.

Year	SRFC			KRFC			Willapa Bay Coho		
	$S_{ACL}^{a/}$	S_{OFL}	Escapement ^{b/}	$S_{ACL}^{a/}$	S_{OFL}	Escapement ^{c/}	$S_{ACL}^{a/}$	S_{OFL}	Escapement ^{c/}
2012	188,378	138,144	285,429	70,922	64,273	121,543	--	--	--
2013	260,798	191,251	406,846	52,032	47,154	59,156	--	--	--
2014	165,355	121,260	212,476	47,674	43,205	95,104	--	--	--
2015	76,485	56,089	113,468	22,202	20,120	28,112	9,440	8,181	17,086
2016	61,595	45,170	89,699	7,056	6,394	13,937	14,839	12,860	30,667
2017	41,119	30,154	44,329	7,113	6,446	19,904	5,180	4,489	11,379
2018	66,110	48,481	105,466	24,468	22,174	52,352	7,903	6,849	17,228
2019	152,115	111,551	163,767	11,314	10,253	20,022	7,458	6,464	15,115
2020	105,737	77,541	138,091	12,013	10,887	26,185	7,399	6,413	16,476
2021	97,137	71,234	105,584	15,608	14,144	30,056	12,432	10,774	31,369
2022	75,825	55,605	61,862	13,066	11,841	21,957	10,505	9,105	24,197
2023	41,806	30,657	133,783	13,732	12,445	41,371	7,640	6,621	18,693
2024	30,890	22,652	99,274	9,996	9,059	24,032	NA	NA	NA
2025	79,514	69,575	133,281	6,644	6,021	12,080	11,982	10,384	18,412

a/ $S_{ACL} = S_{ABC}$.

b/ Hatchery and natural area adult spawners.

c/ Natural area adult spawners.

2025 Preseason I Report: TABLE V-6. Comparison of projected ocean escapements and exploitation rates for critical natural and Columbia River hatchery coho stocks (thousands of fish) resulting from application of 2024 Council-adopted regulations to 2024 and 2025 ocean abundance forecasts.^{a/}

Stock	Ocean Escapement and ER Estimates Under 2024 Regulations ^{b/}				
	2024 Abundance Forecasts		2025 Abundance Forecasts		2025 FMP Conservation Objective ^{c/}
	Ocean Escapement	Exploitation Rate	Ocean Escapement	Exploitation Rate	
Natural Coho Stocks					
Skagit	59.4	45.2%	61.9	45.2%	Exploitation Rate ≤60.0% ^{d/}
Stillaguamish	70.5	38.1%	57.9	30.1%	Exploitation Rate ≤50.0% ^{d/}
Snohomish	68.6	39.5%	56.3	31.3%	Exploitation Rate ≤40.0% ^{d/}
Hood Canal	33.8	44.7%	17.5	49.3%	Exploitation Rate ≤20.0% ^{d/}
Strait of Juan de Fuca	20.5	12.2%	13.1	12.6%	Exploitation Rate ≤40.0% ^{d/}
Quillayute Fall	9.6	26.0%	10.1	26.4%	6.3 - 15.8 Spawners
Hoh	4.1	52.8%	4.5	53.5%	2.0 - 5.0 Spawners
Queets	10.6	33.3%	7.3	34.7%	5.8 - 14.5 Spawners
Grays Harbor ^{f/}	74.4	54.5%	63.2	54.8%	35.4 Spawners
LCN	72.2	23.0%	56.3	27.1%	Exploitation Rate ≤23.0% ^{e/}
OCN	176.2	24.9%	221.4	23.8%	Exploitation Rate ≤30.0% ^{e/}
SONCC					
Trinity Natural	--	15.5%	NA	15.7%	Exploitation Rate ≤16.0% ^{e/}
Klamath Natural	--	7.9%	NA	8.0%	Exploitation Rate ≤15.0% ^{e/}
Rogue Natural	--	6.9%	NA	7.0%	Exploitation Rate ≤15.0% ^{e/}
Other Natural	--	2.0%	NA	2.1%	Exploitation Rate ≤15.0% ^{e/}
Hatchery Coho Stocks					
Columbia Early	148.2	52.8%	124.0	58.5%	6.2 Hatchery Escapement
Columbia Late	102.6	50.5%	46.0	55.0%	14.2 Hatchery Escapement

a/ Quota levels include harvest and hooking mortality estimates used in planning the Council's 2024 ocean fisheries and a coho catch for the Canadian troll fishery off the West Coast of Vancouver Island (WCVI).

b/ 2024 preseason regulations with the following coho quotas: U.S. Canada Border to Cape Falcon: Treaty Indian troll-42,500; non-Indian troll-15,200 selective; recreational--79,800 selective; Cape Falcon to OR/CA border: recreational-45,000 selective; Cape Falcon to Humbug Mountain: recreational-25,000 non-selective; troll-2,500 non-selective. Ocean escapement is generally the estimated number of coho escaping ocean fisheries and entering freshwater. For Puget Sound stocks, ocean escapement is the total abundance minus ocean fisheries (ie outside Puget Sound). For the OCN coho stock, this value represents the estimated spawner escapement in SRS accounting. For Columbia R. hatchery and LCN stocks, ocean escapement represents the number of coho after the Buoy 10 fishery; the LCN exploitation rates shown are total marine and mainstem Columbia R. fishery ERs.

c/ Goals represent FMP conservation objectives, ESA consultation standards, or hatchery escapement needs. Spawning escapement

d/ Assumed exploitation rate based on preliminary abundance forecasts.

e/ Pending confirmation of 2025 ESA consultation standard.

f/ Grays Harbor escapements and exploitation rate estimates based on natural area adult spawners.

2025 Preseason I Report: TABLE V-7. Comparison of Lower Columbia natural (LCN), Oregon coastal natural (OCN), and Southern Oregon/Northern California Coastal (SONCC) coho projected harvest mortality and exploitation rates by fishery under Council-adopted 2024 regulations and preliminary 2025 preseason abundance estimates.

Fishery	Projected Harvest Mortality and Exploitation Rate				Exploitation Rate			
	LCN		OCN		SONCC Natural			
	Number	Percent	Number	Percent	Trinity	Klamath	Rogue	Other
SOUTHEAST ALASKA	0	0	0	0	0.0%	0.0%	0.0%	0.0%
BRITISH COLUMBIA	162	0	1,432	0	0.5%	0.5%	0.5%	0.5%
PUGET SOUND/STRAITS	138	0	84	0.0%	0.0%	0.0%	0.0%	0.0%
NORTH OF CAPE FALCON								
Recreational	5,659	7.8%	4,090	1.4%	0.1%	0.1%	0.1%	0.1%
Treaty Indian Troll	1,574	2.2%	1,478	0.5%	0.0%	0.0%	0.0%	0.0%
Non-Indian Troll	1,325	1.8%	1,180	0.4%	0.0%	0.0%	0.0%	0.0%
SOUTH OF CAPE FALCON								
Recreational:								
Cape Falcon to Humbug Mt.	4,114	0	35,820	12.3%	0.8%	0.8%	0.8%	0.8%
Humbug Mt. to Latitude 40°10' N. (KM)	74	0	1,158	0.4%	0.8%	0.8%	0.8%	0.8%
Fort Bragg	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%
South of Pt. Arena	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%
Troll:								
Cape Falcon to Humbug Mt.	404	0.6%	1,991	0.7%	0.1%	0.1%	0.1%	0.1%
Humbug Mt. to Latitude 40°10' N. (KM)	0	0.0%	1	0.0%	0.0%	0.0%	0.0%	0.0%
Fort Bragg	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0.0%
South of Pt. Arena	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0.0%
BUOY 10	2,868	3.9%	648	0.2%	0.0%	0.0%	0.0%	0.0%
ESTUARY/FRESHWATER	3,359	4.6%	21,390	7.4%	13.5%	5.9%	4.9%	0.0%
TOTAL	19,677	27.1%	69,272	23.8%	15.7%	8.0%	7.0%	2.1%

Review of 2024 Ocean Salmon Fisheries: Stock status determination updates/changes for Chinook and coho stocks:

- Queets River Spring/Summer Chinook now meet the criteria for ‘not overfished-rebuilding’ status
- Klamath River Fall Chinook continue to meet the criteria for overfished status.

Preseason I Report: Documentation of Council adopted changes and technical review

- Appendix D. Updated Sacramento River Fall Chinook F_{MSY} Proxy
- Appendix E. Update to Coho FRAM Base Period and code correction