

SALMON TECHNICAL TEAM REPORT
REVISED PRELIMINARY SALMON MANAGEMENT ALTERNATIVES
FOR 2024 OCEAN FISHERIES

Preseason Report II, TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2024 ocean fishery Alternatives - STT analyzed^{d/} (Page 1 of 2)

Key Stock/Criteria	PROJECTED			2024
	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted ^{b/}
CHINOOK				
Columbia Upriver Brights	259.1	260.5	262.9	74.0 Minimum ocean escapement to attain 40.0 adults over McNary Dam, with normal distribution and no mainstem harvest. The management goal has been increased to 60.0 by Columbia River managers.
Mid-Columbia Brights	63.6	63.9	64.5	14.9 Minimum ocean escapement to attain 7.9 for Little White Salmon egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	85.0	86.1	87.0	25.0 Minimum ocean escapement to attain 14.8 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules ^{c/} (threatened)	40.6%	39.5%	38.5%	≤ 41.0% Total adult equivalent fishery exploitation rate (2024 NMFS ESA guidance).
Columbia Lower River Wild ^{e/} (threatened)	10.5	10.6	10.6	6.9 Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	128.5	131.3	133.3	8.2 Minimum ocean escapement to attain 6.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	52.4	53.5	54.4	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	54.5%	50.0%	46.4%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	37,622	40,298	45,175	≥ 36,511 2024 minimum natural area adult escapement (reflects Council guidance for KRFC ER ≤ 20.0%).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0% Equals 5,995, 3,964, and 349 adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	17.6%	11.7%	1.0%	≤ 20.0% Council guidance
Adult river mouth return	62.1	63.5	66.0	NA Total adults in thousands.
Age-4 ocean harvest rate	9.0%	6.1%	0.4%	≤ 6.0% NMFS guidance.
KMZ sport fishery share	5.2%	5.6%	49.8%	
River recreational fishery share	15.0%	15.0%	15.0%	Equals 899, 595, and 52 adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	2.8%	1.8%	0.0%	≤ 12.3% Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: <u>Recreational</u> - Pt. Arena to Pigeon Pt. between the first Saturday in April and the second Sunday in November; Pigeon Pt. to the U.S./Mexico border between the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. <u>Commercial</u> - Pt. Arena to the U.S./Mexico border between May 1 and September 30, except Pt. Reyes to Pt. San Pedro between October 1 and 15 (Monday-Friday). Minimum size limit ≥ 26 inches total length (NMFS 2024 ESA Guidance).
Sacramento River Fall	184.8	178.1	181.4	≥ 180.000 2024 minimum hatchery and natural area adult escapement (NMFS Guidance).
Sacramento Index Exploitation Rate	13.5%	16.6%	15.1%	≤ 42.9% FMP control rule.
Ocean commercial impacts	20.1	14.8	1.9	Includes fall (Sept-Dec) 2023 impacts (12 SRFC).
Ocean recreational impacts	5.6	4.0	0.8	Includes fall (Sept-Dec) 2023 impacts (141 SRFC).
River recreational impacts	3.1	16.8	29.5	Alt 1 and 2 equal 9.2% and 50% of total harvest (Council guidance), Alt 3 based on historical allocation.
SRKW Prey Abundance				
North of Falcon	797.3	797.3	797.4	≥ 623.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon
Oregon Coast	482.9	483.0	483.3	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Horse Mt.
California Coast	292.9	293.2	293.8	NA Oct 1 starting abundance of age 3+ Chinook south of Horse Mt.
Southwest WCVI	643.3	643.3	643.3	NA Oct 1 starting abundance of age 3+ Chinook off Southwest Vancouver Island
Salish Sea	1,075.4	1,075.4	1,075.4	NA Oct 1 starting abundance of age 3+ Chinook in the Salish Sea

Preseason Report II, TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2023 ocean fishery Alternatives - STT analyzed^{d/} (Page 2 of 3)

Key Stock/Criteria	PROJECTED			2024 Criteria	Spawner Objective or Other Comparative Standard as Noted ^{b/}
	Alt I	Alt II	Alt III		
COHO	COHO			COHO	
Interior Fraser (Thompson River)	9.9%(5.1%)	8.9%(4.1%)	7.9%(3.1%)	≤ 10.0%	2024 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	33.4%(4.5%)	32.7%(3.6%)	32.0%(2.7%)	≤ 60.0%	2024 total exploitation rate ceiling; FMP matrix ^{d/}
Stillaguamish	39.1%(3.2%)	38.6%(2.5%)	38.2%(2.0%)	≤ 50.0%	2024 total exploitation rate ceiling; FMP matrix ^{d/}
Snohomish	43.7%(3.2%)	43.2%(2.6%)	42.7%(2.0%)	≤ 40.0%	2024 total exploitation rate ceiling; FMP matrix ^{d/}
Hood Canal	42.7%(4.7%)	42.0%(3.9%)	41.4%(3.0%)	≤ 45.0%	2024 total exploitation rate ceiling; FMP matrix ^{d/}
Strait of Juan de Fuca	12.7%(4.6%)	11.8%(3.8%)	11.1%(3.0%)	≤ 40.0%	2024 total exploitation rate ceiling; FMP matrix ^{d/}
Quillayute Fall	9.5	9.6	9.7	6.3	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
	42.7%	42.2%	41.8%	≤ 39%	PST total exploitation rate constraint for 2024. ^{d/ff}
Hoh	4.0	4.1	4.2	2.0	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
	51.4%	50.2%	49.3%	≤ 59%	PST total exploitation rate constraint for 2024. ^{d/ff}
Queets Wild	10.4	10.7	10.9	5.8	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
	41.8%	40.3%	39.2%	≤ 55%	PST total exploitation rate constraint for 2024. ^{d/ff}
Grays Harbor	72.8	73.8	74.7	35.4	FMP MSP natural area adult spawner estimate. Value depicted is ocean escapement.
	56.1%	55.5%	54.9%	≤ 57%	PST total exploitation rate constraint for 2024. ^{d/ff}
Willapa Bay	34.1	35.0	35.6	17.2	FMP MSY natural area adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	17.6%	15.0%	13.5%	≤23.0%	Total marine and mainstem Columbia R. fishery exploitation rate (2024 NMFS ESA guidance). Value depicted is marine ER before Buoy 10.
Upper Columbia ^{c/}	58%	60%	61%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	143.1	146.8	147.5	77.2	Minimum ocean escapement to attain hatchery egg-take goal of 21.7 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	95.5	103.1	110.4	9.7	Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural Southern Oregon/Northern California Coast (threatened)	26.7%	24.7%	24.5%	≤ 30.0%	Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Trinity Natural	17.0%	16.2%	15.5%	≤ 16.0%	Total exploitation rate ceiling.
Klamath Natural	9.5%	8.6%	7.8%	≤ 15.0%	Total exploitation rate ceiling.
Rogue Natural	8.4%	7.6%	6.8%	≤ 15.0%	Total exploitation rate ceiling.
Other Natural	3.6%	2.8%	1.9%	≤ 15.0%	Total exploitation rate ceiling.

Preseason Report II, TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2024 ocean fishery Alternatives – STT analyzed^{a/} (Page 3 of 3).

a/ Coho projections in the table are based on 2023 pre-season stock and fishery inputs for Canadian fisheries. Model results for Chinook in this table used 2023 preseason effort scalars for SEAK, NBC, and WCVI AABM fisheries, recent 2-yr average catches for BC ISBM fisheries, and 2023 preseason catches for Puget Sound fisheries. Assumptions for these fisheries will be changed prior to the April meeting as new information becomes available.

b/ Ocean escapement is the number of salmon escaping ocean fisheries and entering freshwater with the following clarifications. Ocean escapement for Puget Sound stocks is the estimated number of salmon entering Area 4B that are available to U.S. net fisheries in Puget Sound and spawner escapement after impacts from the Canadian, U.S. ocean, and Puget Sound troll and recreational fisheries have been deducted. Numbers in parentheses represent Council area ERs for Puget Sound coho stocks. For Columbia River early and late coho stocks, ocean escapement represents the number of coho after the Buoy 10 fishery. Values reported for Klamath River fall Chinook are natural area adult spawners. Values reported for Sacramento River fall Chinook are hatchery and natural area adult spawners.

c/ Includes projected impacts of inriver fisheries that have not yet been shaped.

d/ Annual management objectives may be different than FMP goals, and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders. It is anticipated that fishery management will be adjusted by state and tribal comanagers during the preseason planning process to comply with stock management objectives.

e/ Includes minor contributions from East Fork Lewis River and Sandy River.

f/ Management criteria depicted represent the lower of the FMP and PST Southern Coho Management Plan ER constraints in a given year (see Table III-5 in most recent Preseason Report I). PST ER constraints represent an approximation of the maximum ER associated with achieving the escapement goal. Per the provisions of the PST Southern Coho Management Plan, Parties may request increases to management unit specific ER caps, so long as it occurs prior to March 31 in a given year.

Table A-2. Klamath River fall Chinook ocean impacts in numbers of fish by fishery and Alternative.

Commercial										
Alternative I										
<i>37,622 natural area spawners, 17.6% spawner reduction rate, 9.0% age-4 ocean harvest rate</i>										
Port Area	Fall 2023		Summer 2024						Summer Total	Year Total
	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug		
NO	0	0	12	11	8	20	202		253	253
CO	0	0	70	64	19	332	206		691	691
KO			0	0					0	0
KC						2,046			2,046	2,046
FB						381			381	381
SF						1,223			1,223	1,223
MO						177			177	177
Total	0	0	83	75	27	4,180	408		4,773	4,773

Alternative II										
<i>40,298 natural area spawners, 11.7% spawner reduction rate, 6.1% age-4 ocean harvest rate</i>										
Port Area	Fall 2023		Summer 2024						Summer Total	Year Total
	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug		
NO	0	0	12	11	1	14			38	38
CO	0	0	70	64	3	222			359	359
KO			0	0					0	0
KC						1,462			1,462	1,462
FB						305			305	305
SF						979			979	979
MO						142			142	142
Total	0	0	83	75	5	3,122			3,285	3,285

Alternative III										
<i>45,175 natural area spawners, 0.1% spawner reduction rate, 0.4% age-4 ocean harvest rate</i>										
Port Area	Fall 2023		Summer 2024						Summer Total	Year Total
	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug		
NO	0	0	12						12	0
CO	0	0	70						70	0
KO			0	0					0	0
KC										
FB										
SF										
MO										
Total	0	0	83	0					0	0

Recreational											
Alternative I											
Port Area	Fall 2023			Summer 2024						Summer Total	Year Total
	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug		
NO	35	0	0	0	11	0	0	25	93	129	164
CO	0	0	0	0	0	0	3	7	158	168	168
KO						5	101	9	75	190	190
KC							38	38	11	87	87
FB							6	20	7	33	33
SF							49	103	32	184	184
MO							0	0	0	0	0
Total	35	0	0	0	11	5	198	202	377	793	828

Alternative II											
Port Area	Fall 2023			Summer 2024						Summer Total	Year Total
	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug		
NO	35	0	0	0	11	0	0	25	16	52	87
CO	0	0	0	0	0	0	2	7	21	30	30
KO						2	101	9	44	156	156
KC								31	11	42	42
FB								16	7	23	23
SF								83	32	115	115
MO								0	0	0	0
Total	35	0	0	0	11	2	103	172	132	420	455

Alternative III											
Port Area	Fall 2023			Summer 2024						Summer Total	Year Total
	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug		
NO	35	0	0	0	11	0	0	26	22	59	94
CO	0	0	0	0	0	0	1	7	30	38	38
KO						5	78	10	63	156	156
KC											
FB											
SF											
MO											
Total	35	0	0	0	11	5	79	43	116	254	289

Table A-3. Sacramento River fall Chinook ocean impacts in numbers of fish by fishery and Alternative.

Commercial											Recreational											
Alternative I											Alternative I											
Port Area	Fall 2023		Summer 2024						Summer Total	Year Total	Port Area	Fall 2023			Summer 2024						Summer Total	Year Total
	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug			Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug			
NO	0	0	1,079	952	766	314	902		4,013	4,013	NO	0	0	0	3	0	3	71	220	76	373	373
CO	0	12	783	691	738	588	117		2,917	2,929	CO	141	0	0	0	7	3	36	124	38	208	349
KO			0	0					0	0	KO						13	90	136	60	299	299
KC									1,643	1,643	KC							55	86	78	219	219
FB									2,347	2,347	FB							27	193	123	343	343
SF									6,102	6,102	SF							763	1,582	1,110	3,455	3,455
MO									3,072	3,072	MO							197	285	85	567	567
Total	0	12	1,862	1,643	1,504	14,066	1,019		20,094	20,106	Total	141	0	0	3	7	19	1,241	2,626	1,570	5,466	5,607
Alternative II											Alternative II											
Port Area	Fall 2023		Summer 2024						Summer Total	Year Total	Port Area	Fall 2023			Summer 2024						Summer Total	Year Total
	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug			Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug			
NO	0	0	1,079	952	132	209			2,372	2,372	NO	0	0	0	3	0	3	44	220	10	280	280
CO	0	12	783	691	127	392			1,993	2,005	CO	141	0	0	0	7	3	24	124	4	162	303
KO			0	0					0	0	KO						6	90	136	35	267	267
KC									1,174	1,174	KC								69	78	147	147
FB									1,878	1,878	FB								154	123	277	277
SF									4,882	4,882	SF								1,266	1,110	2,376	2,376
MO									2,457	2,457	MO								228	85	313	313
Total	0	12	1,862	1,643	259	10,992			14,756	14,768	Total	141	0	0	3	7	12	158	2,197	1,443	3,820	3,961
Alternative III											Alternative III											
Port Area	Fall 2023		Summer 2024						Summer Total	Year Total	Port Area	Fall 2023			Summer 2024						Summer Total	Year Total
	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug			Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug			
NO	0	0	1,079						1,079	1,079	NO	0	0	0	3	0	3	17	220	13	256	256
CO	0	12	783						783	795	CO	141	0	0	0	7	3	11	124	5	150	291
KO			0	0					0	0	KO						13	69	136	49	267	267
KC											KC											
FB											FB											
SF											SF											
MO											MO											
Total	0	12	1,862	0					0	1,874	Total	141	0	0	3	7	19	97	480	67	673	814