

PRESEASON REPORT II

PROPOSED ALTERNATIVES

AND

ENVIRONMENTAL ASSESSMENT PART 2

FOR 2024 OCEAN SALMON FISHERY

REGULATIONS

REGULATION IDENTIFIER NUMBER 0648- BM47



Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384
(503) 820-2280
www.pcouncil.org

MARCH 2024

PUBLIC HEARINGS ON SALMON ALTERNATIVES

2024 Schedule of Salmon Fishery Management Alternative Hearings		
<u>WASHINGTON</u>	<u>CALIFORNIA</u>	<u>OREGON</u>
<p>7 p.m. Monday March 25</p> <p>Chateau Westport</p> <p>Beach Room 710 West Hancock</p> <p>Westport, WA 98595 360-268-9101</p>	<p>7 p.m. Monday March 25</p> <p>Courtyard by Marriot Santa Rosa</p> <p>Sonoma Ballroom 175 Railroad St</p> <p>Santa Rosa, CA 95401 707-573-9000</p>	<p>7 p.m. Tuesday March 26</p> <p>On-line</p> <p>Ring Central meeting platform Meeting ID: 239 811 112</p> <p>Listen only phone line 1 (650) 419-1505</p>

Written public comment on the Alternatives may be submitted to the PFMC (www.pcouncil.org) Public Comment Electronic Portal ([E-Portal](#)). The public comment deadline is 5:00 p.m. Pacific Time, April 2, 2024.

Verbal and written public comment on the Alternatives will also be accepted in person or online at the [April Council meeting](#) on April 6, 2024 during the public comment period for Salmon Agenda Item E.2.

ACKNOWLEDGMENTS

SALMON TECHNICAL TEAM

DR. MICHAEL O'FARRELL, CHAIR

National Marine Fisheries Service, Santa Cruz, California

MR. JON CAREY, VICE CHAIR

National Marine Fisheries Service, Lacey, Washington

DR. STEVE HAESEKER

U.S. Fish and Wildlife Service, Vancouver, Washington

MS. CASSANDRA LEEMAN

Oregon Department of Fish and Wildlife, Salem, Oregon

MS. KANDICE MORGENSTERN

California Department of Fish and Wildlife, Santa Rosa, California

DR. ALEXANDREA SAFIQ

Washington Department of Fish and Wildlife, Olympia, Washington

MR. BRYAN VAN ORMAN

Northwest Indian Fisheries Commission, Forks, Washington

DR. RICH ZABEL

National Marine Fisheries Service, Seattle, Washington

PACIFIC FISHERY MANAGEMENT COUNCIL STAFF

MS. ROBIN EHLKE

DR. JIM SEGER

The Salmon Technical Team and the Council staff express their thanks for the expert assistance provided by Ms. Erica Weyland, Ms. Danielle Williams, and Mr. Kyle Van de Graaf, Washington Department of Fish and Wildlife; Ms. Nadine Hurtado, and Mr. Eric Schindler, Oregon Department of Fish and Wildlife; Mr. Ian Pritchard, California Department of Fish and Wildlife and numerous other tribal and agency personnel in completing this report.

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LIST OF ACRONYMS AND ABBREVIATIONS

AABM	Aggregate Abundance Based Management
ABC	acceptable biological catch
ACL	annual catch limit
BO	biological opinion
BC	British Columbia
CCC	California coastal Chinook
CCIEA	California Current Integrated Ecosystem Assessment
CDFW	California Department of Fish and Wildlife
CFGC	California Fish and Game Commission
CO	central Oregon (South end of Heceta Bank to Humbug Mountain.)
Council	Pacific Fishery Management Council
CPUE	catch per unit effort
CYER	Calendar year exploitation rate
DPS	Distinct Population Segment
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ENSO	El Niño/Southern Oscillation
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FB	Fort Bragg (southern boundary of California KMZ to Point Arena)
FRAM	Fishery Regulation Assessment Model
FMA	fishery management area
FMP	fishery management plan
FONSI	finding of no significant impact
GSI	genetic stock identification
IPHC	International Pacific Halibut Commission
ISBM	Individual Stock Based Management
KC	California KMZ (OR/CA border to latitude 40°10'N.)
KO	Oregon KMZ (Humbug Mountain to the OR/CA border)
KMZ	Klamath Management Zone
KRFC	Klamath River fall Chinook
LCN	Lower Columbia Natural (wild Columbia River coho below Bonneville Dam)
LCR	Lower Columbia River (wild Col. River tule fall Chinook below Bonneville Dam)
LRH	Lower River Hatchery (hatchery Col. River tule fall Chinook below Bonneville Dam)
LRW	Lower River Wild (Columbia River bright fall wild Chinook below Bonneville Dam)
MSST	minimum stock size threshold
MO	Monterey (Pigeon Point to the U.S./Mexico border)
NEPA	National Environmental Policy Act
MSA	Magnuson-Stevens Act
MSY	maximum sustainable yield
NMFS	National Marine Fisheries Service
NO	northern Oregon (Cape Falcon to south end of Heceta Bank)
NAO	National Oceanic and Atmospheric Administration Administrative Order
NOAA	National Oceanic and Atmospheric Administration

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

ODFW	Oregon Department of Fish and Wildlife
OCN	Oregon coastal natural (coho)
OFL	overfishing limit
OLE	Office of Law Enforcement (NOAA)
OPI	Oregon Production Index
OSP	Oregon State Police
PDO	Pacific (inter) Decadal Oscillation
PFMC	Pacific Fishery Management Council
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
S _{ABC}	spawning escapement associated with ABC
S _{ACL}	spawning escapement associated with ACL (= S _{ABC})
SCH	Spring Creek Hatchery (Col. R. tule fall Chinook returning to Spring Creek Hatchery [above Bonneville Dam])
SEAK	Southeast Alaska
S _{MSY}	MSY spawning escapement
SF	San Francisco (Point Arena to Pigeon Point)
SONCC	Southern Oregon/Northern California Coast (coho ESU)
SRFC	Sacramento River fall Chinook
SRFI	Snake River fall (Chinook) Index
SRKW	Southern Resident Killer Whale
SRW	Snake River wild (fall Chinook)
SRWC	Sacramento River winter Chinook
STT	Salmon Technical Team
SWO	State Waters Only (fisheries off Oregon south of Cape Falcon)
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
WCVI	West Coast Vancouver Island
WDFW	Washington Department of Fish and Wildlife

1.0 INTRODUCTION

This report, referred to as Preseason Report II, is the third in an annual series of four reports prepared by the Salmon Technical Team (STT) of the Pacific Fishery Management Council (Council) to document and help guide ocean salmon fishery management off the coasts of Washington, Oregon, and California. This report describes the Council's proposed ocean salmon management alternatives for 2024¹ (Alternatives) and characterizes the expected impacts on ocean salmon fisheries and the stocks that support them. The Council solicits public comments on the proposed Alternatives in preparation for adopting final management recommendations at its annual April meeting. Three public hearings are scheduled to provide opportunity for public comments on the proposed Alternatives (information is displayed on the inside front cover of this report). In addition, opportunity for public comments will be provided at the April Council meeting. Written public comments can be submitted to the PFMC Public Comment Electronic Portal ([E-Portal](#)). The deadline for submitting written comments is 5:00 p.m. Pacific Time, April 2, 2024. Verbal public comment on the Alternatives will also be accepted in person or online at the [April Council meeting](#) on April 6 during the public comment period for Agenda Item E.2.

This report constitutes the second part of an Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements for the 2024 ocean salmon management measures. The first part of this EA (Preseason Report I; PFMC 2024a, incorporated herein by reference), includes a statement of the purpose and need for the proposed action, a description of the affected environment, a description of the No-Action Alternative, and an evaluation of the No-Action Alternative's effects on the salmon stocks included in the Council's Fishery Management Plan (FMP). This second part of the EA includes an additional description of the affected environment relevant to the Council's proposed Alternatives, a description of the Alternatives, and an analysis of the environmental consequences of the Alternatives, including short term and long-term impacts of the Alternatives.

2.0 SELECTION OF FINAL MANAGEMENT MEASURES

The Council's final ocean salmon season recommendations will be based on the range of Alternatives presented in this report and guidance received from deliberations at management fora such as the north of Cape Falcon planning process (sponsored by the States of Washington and Oregon and the treaty Indian tribes in that area), Pacific Salmon Commission (PSC), and from public hearings sponsored by the Council and the States of Washington, Oregon, and California. Final recommendations concerning season dates, catch quotas, and exploitation rates may vary from the Alternatives presented in this report depending upon determination of allocations, allowable harvest levels, public comment, and/or the final impact analyses completed by the STT. For example, elements of the Alternatives may be recombined to alter season patterns and quotas, or measures such as bag limits, days of fishing per week, special landing restrictions, and other specific regulatory details may also change. In addition, inseason modification of management measures may be used to ensure achievement of the Council's management objectives.

Specific details pertaining to season structure and special management measures for the treaty Indian troll fishery north of Cape Falcon are established in tribal regulations. Chinook and coho quota levels for the treaty Indian troll fishery may be adjusted if substantial changes in incidental fishing mortality result from tribal regulations, preseason or inseason.

The impact analyses presented in this document reflect uncertainties and limitations of information available at the time of the March 2024 Council meeting. At this point in the planning cycle, the STT's

¹ The fishery management measures under consideration would cover the period May 16, 2024 through May 15, 2025 (86 FR 26426). For ease of reference, we refer to this time period as 2024.

impact assessments reflect five key assumptions relative to stocks impacted by Canadian and Alaskan fisheries:

- 1) abundance levels for Canadian Chinook and coho stocks identical to 2023 forecasts;
- 2) for Chinook fisheries managed under the aggregate abundance-based management (AABM) provisions of the 2019 Pacific Salmon Treaty (PST) Agreement, including Southeast Alaska (SEAK), Northern British Columbia (NBC), and West Coast Vancouver Island (WCVI), 2024 fisheries were modeled using fishing effort scalars from the final 2023 preseason model run;
- 3) for Canadian Chinook fisheries managed under individual stock-based management (ISBM) regimes, the 2024 fishery inputs were modeled using recent two-year average catches to reflect anticipated fishing levels consistent with the 2019 PST Agreement;
- 4) for Canadian coho fisheries, all fisheries were modeled using 2023 final preseason fishery inputs;
- 5) for Southern U.S. inside fisheries for Chinook and inside and coastal terminal fisheries for coho, the 2023 final preseason modeled fisheries were used.

In mid-March, U.S. and Canadian fishery managers exchange information regarding preseason expectations for fisheries and the status of Chinook and coho stocks. In addition, the PSC's Chinook Model will be calibrated by the PSC Chinook Technical Committee to determine the annual catch limits for each of the AABM fisheries under the 2019 PST Agreement. Abundances and fishery expectations will be adjusted in the Council's fishery planning models prior to the April Council meeting, and inside fisheries will be shaped by state and tribal co-managers both prior to and during the April Council meeting.

Any Alternative considered for adoption that deviates from Salmon FMP objectives or other applicable laws will require implementation by emergency rule. If an emergency rule appears to be necessary, the Council must clearly identify and justify the need for such an action consistent with emergency criteria established by the Council and the National Marine Fisheries Service (NMFS).

3.0 SALMON FISHERY MANAGEMENT PLAN REQUIREMENTS

The Council's Salmon FMP includes objectives for setting annual management measures to regulate ocean salmon fisheries between the U.S./Canada border and the U.S./Mexico border. The objectives include biological, administrative, and allocation requirements. In recommending final management measures, the Council attempts to meet all objectives in a fair and balanced manner, while maintaining established priorities.

Biological objectives for stocks originating in the Council area and impacted by Council area ocean fisheries are listed in Table 3-1 of the Salmon FMP. The objectives generally consist of meeting spawning escapement numbers associated with maximum sustainable yield (S_{MSY}), overfishing limits (OFL), acceptable biological catch (ABC), and annual catch limits (ACL), or exploitation rate limits designed to support recovery of depressed stocks or to rebuild overfished stocks, while encompassing a long-term average harvest approximating maximum sustainable yield (MSY).

Administrative objectives are requirements for meeting other applicable law outside of the Salmon FMP. These requirements include the Endangered Species Act (ESA), international treaties, and tribal trust responsibilities. The Salmon FMP defers to measures needed to protect ESA listed species analyzed in or required by biological opinions issued by NMFS under ESA section 7(a)(2) (referred to in the Salmon FMP as "consultation standards"). Section 5.0 of this document provides greater detail on ESA listed species, while impacts of the proposed Alternatives on ESA listed species are included in Table 5.

The Salmon FMP requires compliance with relevant terms of the PST. Section 6.0 of this document provides greater detail on PST provisions and stocks, while impacts of the Council adopted proposed Alternatives on those stocks are included in Table 5.

Treaty trust responsibilities of the Salmon FMP require the Council to abide by Court orders in the *U.S. v. Washington* (Puget Sound), *Hoh v. Baldrige* (Washington coast), and *U.S. v. Oregon* (Columbia River) cases, and the Solicitor General opinion (Klamath River) governing allocation and management of shared salmon resources. Much of the North of Falcon forum is dedicated to annual negotiations establishing allocation among the tribes, non-Indian fishing sectors, and ocean and inside interests. The results of these negotiations allow the Council to complete final management measure recommendations while meeting its biological, administrative, and allocation objectives.

The Columbia River Treaty Tribes establish periodic management agreements with the state co-managers and Federal agencies. These agreements are approved pursuant to provisions of *U.S. v. Oregon* procedures. Recent agreements have included an entitlement for the treaty tribes of 50 percent of the coho return destined for areas upstream from Bonneville Dam. Council area fisheries are shaped in order to meet this requirement in some years.

The Yurok and Hoopa Valley Tribes are entitled to 50 percent of the total Klamath River fall Chinook (KRFC) harvest, which is calculated as a harvest of KRFC equal to that taken in all non-Indian fisheries. The Council must account for all harvest impacts when assessing the achievement of KRFC conservation objectives.

4.0 SALMON SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

Since 1989, NMFS has listed the following 17 Evolutionarily Significant Units (ESUs) of salmon under the ESA:

Species	ESU	Status	Federal Register Notice			
			Most Recent		Original Listing	
Chinook						
Chinook Salmon (<i>O. tshawytscha</i>)	Sacramento River Winter	Endangered	81 FR 33468	5/26/2016	54 FR 32085	8/1/1989
	Snake River Fall	Threatened	81 FR 33468	5/26/2016	57 FR 14653	4/22/1992
	Snake River Spring/Summer	Threatened	81 FR 33468	5/26/2016	57 FR 14653	4/22/1992
	Puget Sound	Threatened	81 FR 33468	5/26/2016	64 FR 14308	3/24/1999
	Lower Columbia River	Threatened	81 FR 33468	5/26/2016	64 FR 14308	3/24/1999
	Upper Willamette River	Threatened	81 FR 33468	5/26/2016	64 FR 14308	3/24/1999
	Upper Columbia River	Threatened	81 FR 33468	5/26/2016	64 FR 14308	3/24/1999
	Spring	Endangered	81 FR 33468	5/26/2016	64 FR 14308	3/24/1999
	Central Valley Spring	Threatened	81 FR 33468	5/26/2016	64 FR 50394	9/16/1999
	California Coast	Threatened	81 FR 33468	5/26/2016	64 FR 50394	9/16/1999
Chum						
Chum Salmon (<i>O. keta</i>)	Hood Canal Summer-Run	Threatened	81 FR 33468	5/26/2016	64 FR 14508	3/25/1999
	Columbia River	Threatened	81 FR 33468	5/26/2016	64 FR 14508	3/25/1999
Coho						
Coho Salmon (<i>O. kisutch</i>)	Central California Coast	Endangered	81 FR 33468	5/26/2016	61 FR 56138	10/31/1996
	S. Oregon/ N. California Coast	Threatened	81 FR 33468	5/26/2016	62 FR 24588	6/5/1997
	Oregon Coast	Threatened	81 FR 33468	5/26/2016	63 FR 42587	8/10/1998
	Lower Columbia River	Threatened	81 FR 33468	5/26/2016	70 FR 37160	6/28/2005
Sockeye						
Sockeye Salmon (<i>O. nerka</i>)	Snake River	Endangered	81 FR 33468	5/26/2016	56 FR 58619	11/20/1991
	Ozette Lake	Threatened	81 FR 33468	5/26/2016	64 FR 14528	3/25/1999

As the listings have occurred, NMFS has initiated formal consultations and issued biological opinions (BOs) that consider the impacts resulting from implementation of the Salmon FMP and annual management measures to listed salmonid species. NMFS has also reinitiated consultation on certain ESUs when required

due to pertinent new information becoming available on the status of the stocks or on the impacts of the Salmon FMP on the stocks. The consultation standards referred to in this document are derived from those consultations and include: (1) reasonable and prudent alternatives and/or reasonable and prudent measures, (2) conservation objectives that were included as part of the proposed action subject to Section 7 consultations, and (3) NMFS requirements under ESA Section 4(d) determinations.

A list of current BOs in effect, the species they apply to, and their duration follows:

Date	Evolutionarily Significant Unit covered and effective period
3/8/1996	Snake River spring/summer and fall Chinook and sockeye (until reinitiated)
4/28/1999	Oregon Coastal natural coho, Southern Oregon/ Northern California coastal coho, Central California coastal coho (until reinitiated)
4/28/2000	Central Valley spring Chinook (until reinitiated)
4/27/2001	Hood Canal summer chum 4(d) limit (until reinitiated)
4/30/2001	Upper Willamette Chinook, Upper Columbia spring Chinook, Lake Ozette sockeye, Columbia River chum, and 10 steelhead ESUs (until reinitiated)
4/30/2004	Puget Sound Chinook (until reinitiated)
2/28/2023	California coastal Chinook (until reinitiated)
4/26/2012	Lower Columbia River Chinook (until reinitiated)
4/9/2015	Lower Columbia River natural coho (until reinitiated)
4/26/2018	Sacramento River winter Chinook (until reinitiated)

Amendment 12 to the Salmon FMP added the generic category “species listed under the ESA” to the list of stocks in the salmon management unit and modified respective escapement goals to include “manage consistent with NMFS jeopardy [consultation] standards or recovery plans to meet immediate conservation needs and long-term recovery of the species.” Amendment 14 specified those listed ESUs and clarified which stocks in the FMP management unit were representative of the ESUs.

In a letter received by the Council (dated February 29, 2024), NMFS summarized existing consultation standards and provided guidance on measures needed to protect species listed under the ESA during the 2024 fishing season. The letter summarized the measures analyzed and/or recommended in the relevant NMFS’ BOs on the effects of fisheries managed under the salmon FMP on listed salmon and specified limits applicable for the 2024 fishing season given abundance forecasts and other season-specific information. The letter also provides NMFS’ recommendations for certain non-ESA listed stocks in the fishery.

The ESA consultation standards, exploitation rates, and other criteria in place for the 2024 management season are presented in Table 5. Some listed species are either rarely incidentally caught in Council fisheries (e.g., spring Chinook from the upper Columbia River) or already receive sufficient protection from measures implemented to limit impacts to other stocks (e.g., Central Valley spring Chinook). NMFS has determined that management actions designed to limit catch from these ESUs, beyond what will be provided by harvest constraints for other stocks, are not necessary.

Of the listed Chinook and coho, Council-managed fisheries have substantive impacts on the Sacramento River winter Chinook ESU (SRWC), Central Valley spring Chinook ESU, California coastal Chinook ESU (CCC), the natural component of the Snake River fall Chinook ESU (referred to in the FMP as Snake River wild fall Chinook (SRW), the fall component of the lower Columbia River (LCR) Chinook ESU, and all of the coho ESUs.

Additional listed salmonid ESUs found within the Council area, but not substantively impacted by Council managed fisheries, include:

<u>Chinook</u>	<u>Steelhead</u>
Snake River spring/summer (threatened)	Southern California (endangered)
Upper Willamette (threatened)	South-central California coast (threatened)
Puget Sound (threatened)	Upper Columbia River (endangered)
Upper Columbia River spring (endangered)	Middle Columbia River (threatened)
	Snake River Basin (threatened)
<u>Sockeye</u>	Puget Sound (threatened)
Snake River (endangered)	Central Valley, California (threatened)
Ozette Lake Sockeye (threatened)	Central California coast (threatened)
	Upper Willamette River (threatened)
<u>Chum</u>	Lower Columbia River (threatened)
Columbia River (threatened)	Northern California (threatened)
Hood Canal summer (threatened)	

5.0 OBLIGATIONS UNDER THE PACIFIC SALMON TREATY

In 1985 the PST was signed, setting long-term goals for the benefit of the shared salmon resources of the United States and Canada. The PSC is the body formed by the governments of Canada and the United States to implement the PST.

5.1 Chinook Salmon Management

A new ten-year agreement under the PST was adopted by both the U.S. and Canada and implemented beginning with the 2019 fishing year. The new agreement includes reductions to catch ceilings for the SEAK and WCVI AABM fisheries relative to the prior 2009 Agreement. For SEAK, the reductions range from 1.5 percent in years of high abundance to 7.5 percent in years of low abundance. For WCVI, the reductions range from 2.4 percent in years of high abundance to 12.5 percent in years of low abundance. Additionally, beginning with the 2019 Agreement, while annual catch limits continue to be determined using the AI from the PSC Chinook Model for the NBC and WCVI AABM fisheries, the annual catch limits for SEAK fisheries have been set using a catch-per-unit-effort (CPUE) estimate from the early winter power troll fishery (see Tables 1 and 2 in Chapter 3 of the 2019 Agreement for specifics). For 2023, the PSC approved the use of a new method for setting the annual catch limit in the SEAK AABM fishery, which incorporates both the empirical CPUE information in addition to PSC Chinook Model-based abundance projections in a multivariate approach.

Fisheries not subject to AABM regimes, including Council area fisheries, are subject to a new set of ISBM obligations under the 2019 agreement. These provisions require the calendar year exploitation rate (CYER) by all U.S. fisheries south of the U.S./Canada border on specific indicator stocks to be below some level of the average 2009 – 2015 CYER if they do not achieve their management objectives (see Attachment I in Chapter 3 of the 2019 Agreement for specifics). Similar to previous ISBM obligations, these limits are taken into account during preseason planning processes, however, relative to meeting the provisions of the PST, the CYER limits are evaluated on a postseason basis only. Canadian fisheries that are not included in AABM complexes are managed under ISBM constraints, which, similar to U.S. ISBM fisheries, require the CYER by Canadian ISBM fisheries on specific indicator stocks to be below some level of the average 2009 – 2015 CYER if they do not achieve their management objectives. Expectations for Canadian and Alaskan fisheries harvest and stock abundance forecasts are incorporated into the Chinook FRAM to estimate total exploitation rate impacts from all marine fisheries (Table 5).

Key considerations for Canadian domestic fishery management for Chinook in 2024 are expected to include: (1) meeting domestic conservation obligations for WCVI, Lower Strait of Georgia, Fraser River Spring 4.2 and 5.2, Fraser Summer 5.2, Fraser Summer 4.1 and Fraser Fall 4.1 (Harrison River) stocks; (2) meeting First Nations Food, Social and Ceremonial and treaty obligations for Chinook harvests in native fisheries; and (3) monitoring of incidental impacts during commercial and native fisheries directed at sockeye, and chum salmon. It is anticipated that the details of the fishery regulatory package off WCVI and in the Juan de Fuca-Strait of Georgia areas will be driven by levels of allowable impact on WCVI, Lower Strait of Georgia and Fraser River Chinook stocks, in addition to Interior Fraser (Thompson River) coho, and potentially Thompson and/or Chilcotin River Steelhead. Increasing the availability of Chinook salmon in key foraging areas of Southern Resident Killer Whales in the southern British Columbia (BC) region is an additional consideration which will be supported through conservation actions implemented for Fraser River and other Chinook salmon.

5.2 Coho Salmon Management

In 2002, the PSC adopted a management plan for coho salmon originating in Washington and Southern British Columbia river systems. The plan is directed at the conservation of key management units, four from Southern British Columbia (Interior Fraser, Lower Fraser, Strait of Georgia Mainland, and Strait of Georgia Vancouver Island) and nine from Washington (Skagit, Stillaguamish, Snohomish, Hood Canal, Strait of Juan de Fuca, Quillayute, Hoh, Queets, and Grays Harbor). Exploitation rate limits for intercepting fisheries are established for individual management units through formulas specified in the 2019 PST Southern Coho Management Plan and are based on total allowable fishery exploitation rates.

The categorical status of U.S. coho management units are reported to comply with obligations pursuant to the 2019 PST Southern Coho Management Plan. Categorical status is employed by the PSC under the 2019 PST Southern Coho Management Plan to indicate general ranges of allowable total exploitation rates for U.S. and Canadian coho management units. Three categories are employed: low (total exploitation rate less than 20 percent), moderate (total exploitation rate 20 percent to 40 percent), and abundant (total exploitation rate greater than 40 percent). For the Puget Sound management units, the 2019 PST Southern Coho Management Plan uses the thresholds and stepped harvest rate goals from the Comprehensive Coho Agreement, developed by Washington and the Puget Sound tribes, and adopted by the Council as FMP conservation objectives in November 2009. Actual exploitation rate constraints for Canadian fisheries on U.S. coho management units are determined by formulas that specify sharing of allowable exploitation rates and a “composite rule.” The composite rule adjusts constraints for Canadian fishery exploitation rates based on the number of U.S. management units which fall in a given category. For example, if only one Washington coastal or Puget Sound coho management unit is in low status, Canadian fisheries are constrained to a total exploitation rate on that unit of 12 percent; if two or more Washington coastal management units are in low status, the constraint becomes 10 percent. The most restrictive exploitation rate limit for Canadian fishery impacts on U.S. coho management units is 10 percent.

For several Washington coastal coho management units, management objectives are expressed as a range of spawning escapements expected to produce MSY. Allowable exploitation rates are calculated from the forecast abundance and the lower end of the escapement range and used to classify the categorical status of the management units. This rate is the maximum allowed under the PST when the management unit is in the moderate or abundant status, but exploitation rates up to 20 percent are allowed if the management unit is in the low abundance status. The 2024 Puget Sound and Washington coast coho constraints are provided in Table 9.

Key considerations for Canadian fishery management for coho in 2024 are expected to include: (1) meeting domestic conservation obligations for Interior Fraser (including Thompson River) coho; (2) coho

harvests by First Nations fisheries; (3) incidental impacts during commercial and First Nations fisheries directed at Chinook, chum, and especially Fraser sockeye salmon which will see a dominant late run return in 2024. The Canadian fishery regimes affecting coho are expected to be driven by Canadian domestic allowable impacts on the Thompson River component of the Interior Fraser management unit, Fraser Chinook concerns and Fraser sockeye stocks of concern co-migrating with the late run.

In years prior to 2014, Canadian fisheries were managed so as not to exceed a three percent maximum exploitation rate. In May 2014, Canada decided to permit up to a 16 percent exploitation rate on upper Fraser coho in Canadian fisheries to allow for impacts in fisheries directed at a record Fraser sockeye forecast. Since 2015, upper Fraser coho in Canadian fisheries have been managed per low status limitations. The projected status of Canadian coho management units in 2024 indicates continuing concerns for the condition of Interior Fraser coho. The Interior Fraser coho management unit is anticipated to remain in low abundance status, resulting in a requirement to constrain the total mortality fishery exploitation rate for 2024 Southern U.S. fisheries to a maximum of 10.0 percent.

6.0 DESCRIPTION OF THE ALTERNATIVES

Detailed information on the proposed 2024 ocean salmon management measure Alternatives is presented in Table 1 (non-Indian commercial), Table 2 (recreational), and Table 3 (treaty Indian). Notable changes from recent seasons that are reflected in the action Alternatives are highlighted below. Table 5 and Appendix A also include information on the Alternatives. The 'no action' Alternative (2023 fishery structure) are detailed in Preseason Report I (PFMC 2024a), with some information also included in this report in Appendix A.

Fisheries scheduled to occur prior to May 16, 2024, which were adopted as part of the 2023 management measures, may have been modified by inseason action at the March 2024 Council meeting. Any such modifications are incorporated into the 2024 season proposed Alternatives described below. The Alternatives under consideration by the Council only cover the period beginning May 16, 2024.

6.1 Commercial

Alternatives for the area north of Cape Falcon reflect similar total abundance of Columbia River Chinook and reduced abundance of Columbia River hatchery coho compared to 2023 forecasts. In 2024, allowable catch of Chinook will likely be slightly increased from 2023 due to an increase in the maximum allowable total exploitation rate for Lower Columbia River (LCR) tulle Chinook. Coho quotas will be comparatively lower in 2024 due to lower forecasted abundance of Oregon Production Index Hatchery stocks.

Alternative I north of Cape Falcon assigns 67 percent of the troll Chinook quota to the May-June Chinook directed fishery; Alternative II assigns 60 percent of the troll Chinook quota to the May-June Chinook directed fishery; Alternative III assigns 50 percent of the troll Chinook quota to the May-June Chinook directed fishery. In Alternatives I and II, the May-June fishery opens May 1, seven days per week, while the May-June fishery opens May 1, five days per week in Alternative III. In all Alternatives, sub-quotas in the areas north of the Queets River and in the area south of Leadbetter Point are in place during the May-June time period. In Alternatives I and II, there is a per week (Thursday-Wednesday) landing and possession limit in all areas, while Alternative III contains a five day per week (Friday-Tuesday) open period with landing and possession limits in all areas. The summer all-salmon fishery in Alternatives I and II opens seven days per week beginning July 1 through the earlier of September 30 while Alternative III opens five days per week beginning July 1 through the earlier of September 22 with Chinook and coho landing and possession limits in place for all Alternatives. Also in all Alternatives, the Chinook minimum size limit is 27 inches total length, all retained coho must be marked with a healed adipose fin clip, and the fishery is scheduled to open in 2025 on May 1.

Commercial fisheries south of Cape Falcon will be heavily constrained or closed owing to low abundance forecasts for Sacramento River fall Chinook (SRFC) and KRFC. Conservation concerns for ESA listed California Coastal Chinook and Southern Oregon/Northern California coho will also limit fisheries in 2024. All Alternatives were structured to achieve Council guidance for a maximum KRFC exploitation rate of 20 percent, NMFS guidance for a maximum KRFC age-4 ocean harvest rate of 6 percent, and a minimum hatchery and natural-area escapement of 180,000 adult SRFC.

For the area between Cape Falcon and Humbug Mountain the fishery would open mid-April, with periods of retention for all salmon except coho through July and June in Alternatives I and II, respectively. All Alternatives provide opportunity for retention of all salmon except coho from September 1 through October 31, with a landing limit of 75 Chinook allowed per vessel per landing week. In Alternative III, there is non-mark-selective coho retention during the month of September that is managed under a 10,000 non-marked-selective coho quota with a limit of 100 coho allowed per vessel per landing week included in Alternatives I and II, respectively. In Alternative III, the fishery is open shoreward of the 40-fathom regulatory line during the month of October.

The commercial fishery in the area between Humbug Mountain and the OR/CA border (Oregon KMZ) would be open from April 16-30 under Alternatives I and II. The fishery in this area would be closed under Alternative III.

For the area between the Oregon/California border to latitude 40°10'N. (California KMZ), June quotas of 1,000 Chinook and 5,500 Chinook for Alternatives I and II, respectively, would be in place with weekly landing and possession limits. Inseason action could be taken to modify the fishery in the California KMZ if total harvest approaches the quota. The fishery in this area would be closed under Alternative III.

The three management areas south of latitude 40°10'N include Fort Bragg (40°10'N to Point Arena), San Francisco (Point Arena to Pigeon Point), and Monterey (Pigeon Point to the U.S.-Mexico border). Alternative I would allow for 10 days of fishing in June, split between two five-day periods, for each of these management areas. Harvest limits differ by management area. Weekly landing and possession limits of 40 Chinook per vessel and landing week would be in place for each of these management areas. In the region between Point Reyes and Point San Pedro (the Fall Area Target Zone), fishing would be allowed for portions of September and October with a landing and possession limit of 40 Chinook per vessel per landing week and a harvest limit of 7,500.

Alternative II would allow for seven days of fishing in June for each of the management areas south of latitude 40°10'N with harvest limits that differ by area. Weekly landing and possession limits of 30 Chinook per vessel and landing week would be in place for each of these management areas.

Commercial salmon fisheries in California would be closed under Alternative III.

6.2 *Recreational*

North of Cape Falcon under Alternative I, areas north of the Queets River would open June 15 and areas south of the Queets River would open June 22 for all salmon species seven days per week. The daily bag limit is two salmon only one of which may be a Chinook in all areas. The closing date for all areas in Alternative I is September 30.

North of Cape Falcon under Alternative II, the areas north of the Queets River and south of Leadbetter Point would open June 22 while the area between the Queets River and Leadbetter Point would open June 29. All areas would be open for all salmon species, seven days per week; except the area between the

Queets River and Leadbetter point would have no Chinook retention on Fridays and Saturdays during July. The daily bag limit in all areas would be two salmon, only one of which may be a Chinook. The closing date in all areas would be September 30.

In Alternative III, the areas north of the Queets River would open June 22. The area between the Queets River and Leadbetter Point would open June 30. The area south of Leadbetter Point would open June 29. All areas would be open for all salmon species with a bag limit similar to Alternatives I and II. The areas north of the Queets River and the area south of Leadbetter Point would be open seven days per week. The area between the Queets River and Leadbetter Point would be open five days per week (Sunday-Thursday). The closing date in all areas would be September 22.

In all Alternatives north of Cape Falcon, all retained coho must be marked with a healed adipose fin clip.

South of Cape Falcon in the area between Cape Falcon and Humbug Mountain under Alternative I, the season would be open for all salmon except coho salmon from March 15 through October 31. In Alternative II and III in this area, the fishery would be open for all salmon except coho salmon from March 15 to July 31 and from September 1 through October 31. In all three Alternatives, the fishery is open shoreward of the 40-fathom regulatory line during the month of October. A non-mark-selective coho fishery would be open in this area in September in all three Alternatives with different quotas for each Alternative.

In the area between Cape Falcon and the OR/CA border, a mark-selective coho fishery would be open mid- to late June through mid- to late August with a marked coho quota in each Alternative.

In the area between Humbug Mountain and the OR/CA border, all Alternatives open mid- to late May for all salmon except coho and would be open until mid- to late August.

For the California management areas (California KMZ, Fort Bragg, San Francisco, and Monterey), Alternative I would allow fishing for short periods of each month from June through October. A statewide harvest guideline of 10,000 Chinook would be in place June through August, and a harvest guideline of 5,000 Chinook would be in place for September through October. Inseason action may be taken to modify fisheries when the total harvest approaches the statewide harvest guideline.

Alternative II would allow fishing for short portions of July and August in each of the California management areas. The statewide harvest guideline would be 6,500 Chinook. Inseason action may be taken to modify fisheries when the total harvest approaches the statewide harvest guideline.

Recreational salmon fisheries in California would be closed under Alternative III.

6.3 *Treaty Indian*

Tribal troll Alternatives were proposed and will be evaluated during the North of Falcon process.

The proposed Alternatives include a May-June Chinook directed fishery and an all-species fishery targeting coho and Chinook from July 1 an end date in September. An end date of no later than September 30 will be determined for the all-species fishery during the North of Falcon process. All Alternatives assign 50 percent of the Chinook quota to each fishing season. The May-June Chinook fishery opens May 1 and allows for the retention of all salmon except coho. The minimum total lengths for Chinook and Coho are 24 inches and 16 inches, respectively.

Any balance of fish remaining from the Chinook directed fishery may be transferred to the all-species fishery on an impact neutral basis.

7.0 AFFECTED ENVIRONMENT AND ANALYSIS OF IMPACTS

The affected environment consists of the following components:

- Target (FMP) species
- Social or economic environments
- Non-target species, including ESA listed salmonids
- Essential Fish Habitat
- Public health or safety
- ESA listed non-salmonid species or critical habitat, including ESA listed marine mammals
- Non-ESA listed marine mammals
- Biodiversity or ecosystem function

7.1 *Salmon Stocks in the Fishery*

Target stocks include Chinook, coho, and pink salmon stocks identified in Appendix A, Table A-1 of Preseason Report I (Part 1 of this EA; PFMC 2024a). ESA listed Chinook and coho species are not targeted in Council area salmon fisheries but will be included in the analysis of effects on target species because they are impacted coincidentally with targeted salmon stocks and frequently constrain access to targeted stocks. Environmental impacts to other ESA listed species (e.g., marine mammals) from the Alternatives will be analyzed in a later section of this EA.

A description of the historical baseline for this component of the affected environment is presented in the Review of 2023 Ocean Salmon Fisheries (PFMC 2024a). The current status (2024 ocean abundance forecasts) of the environmental components expected to be affected by the 2024 ocean salmon fisheries regulation Alternatives (FMP salmon stocks) are described in the 2024 Preseason Report I (PFMC 2024b). The criteria used to evaluate whether there are significant effects from the Alternatives on target stocks are achievement of conservation objectives, ACLs, and rebuilding criteria. For ESA listed species (also referred to as ‘stocks’ in this document) impacted by the fishery, ESA consultation standards are applied to determine whether there are significant effects. The Salmon FMP conservation objectives are based on the best available science and are intended to prevent overfishing while achieving optimum sustainable yield from West Coast salmon fisheries as required by the Magnuson-Stevens Act (MSA). The ESA consultation standards are likewise based on the best available science and are intended to ensure that fishery impacts do not appreciably reduce the likelihood of survival and recovery of listed species. FMP conservation objectives also include criteria for rebuilding overfished stocks. Therefore, conservation objectives and consultation standards are appropriate indicators for determining the significance of fishery management actions.

7.1.1 Chinook Salmon

Fishery quotas under all of the Alternatives are presented in Table 4. Stock-specific management criteria and their forecast values under the Alternatives are provided in Table 5. Projected fishery landings, bycatch, and bycatch mortality under the Alternatives are summarized in Table 6. Table 7 provide a breakdown of impacts by fishery and area for LCR natural tule Chinook. Appendix A presents tables of adult SRFC impacts, KRFC impacts, and the SRWC age-3 impact rate, stratified by fishery, month, and management area under the three Alternatives. Also included in Appendix A are impacts or impact rates expected under the ‘No Action’ Alternative (2023 fisheries).

7.1.1.1 *North of Cape Falcon*

Abundance projections important to Chinook harvest management north of Cape Falcon in 2024 are:

- *Columbia River hatchery tules*. Combined production of Lower River Hatchery (LRH) and Spring Creek Hatchery (SCH) stocks returning to the Columbia River is forecasted to be 215,300, which

is similar to the 2023 preseason expectation of 213,200. The LRH forecast is 85,500, which is greater than the forecast of 77,100 in 2023. The SCH forecast is 129,800, which is less than the 2023 forecast of 136,100.

The primary Chinook salmon management objective shaping the Alternatives north of Cape Falcon is:

- NMFS consultation standards and annual guidance for ESA listed stocks as provided in Section 5.0 above. Relevant ESA listed stocks for the area north of Cape Falcon include LCR natural tule Chinook, LRW fall Chinook, and SRW fall Chinook.

Descriptions pertaining to the achievement of key objectives for Chinook salmon management north of Cape Falcon are found below.

- *LCR natural tule fall Chinook.* The Alternatives have exploitation rates on LCR natural tule fall Chinook that range from 38.6 percent to 40.6 percent when combined with preliminary 2024 preseason harvest rates for Columbia River fisheries. All alternatives are within the NMFS consultation standard maximum for 2024 (41 percent). Additional shaping of PSC and inriver fisheries prior to the April Council meeting may result in changes to the anticipated ERs presented in the Alternatives. LCR tules are a constraining Chinook stock for fisheries north of Cape Falcon in 2024.
- *LRW fall Chinook.* The Alternatives have ocean escapement values ranging from 10,500 to 10,600, which exceeds the ESA consultation standard of 6,900 minimum ocean escapement. LRW Chinook will not constrain ocean fisheries north of Cape Falcon in 2024.
- *SRW fall Chinook.* The Alternatives have ocean exploitation rates ranging from 46.4 percent to 54.2 percent of the base period exploitation rate, which is less than the ESA consultation standard of no more than 70 percent of the 1988-1993 base period exploitation rate for all ocean fisheries. SRW Chinook will not constrain ocean fisheries north of Cape Falcon in 2024.

For Chinook fisheries north of Cape Falcon, all Alternatives satisfy NMFS's ESA consultation standards and guidance, FMP conservation objectives, and all other objectives for relevant Chinook stocks (Table 5).

7.1.1.2 *South of Cape Falcon*

Status of Chinook stocks important to 2024 Chinook harvest management south of Cape Falcon are:

- *SRFC.* The Sacramento Index forecast is 213,600, which is higher than the 2023 forecast of 169,767.
- *KRFC.* The ocean abundance forecast for this stock is 180,700, including 39,531 age-4 fish. These compare to the 2023 forecasts of 103,800, including 27,198 age-4 fish.
- *SRWC.* The forecast of age-3 escapement absent fishing is 1,100, which is lower than the 2023 forecast of 4,540.

Key Chinook salmon management objectives shaping the Alternatives south of Cape Falcon are:

- A KRFC maximum exploitation rate of 20.0 percent (Council guidance).
- A KRFC age-4 ocean harvest rate of 6.0 percent (NMFS guidance).

- A SRFC hatchery and natural area spawner escapement of at least 180,000 adults (FMP control rule and NMFS guidance).
- NMFS consultation standards and annual guidance for ESA listed stocks as provided in Section 5.0 above. Relevant ESA listed stocks for the area south of Cape Falcon include SRWC, California coastal Chinook, SRW fall Chinook, and LCR natural tule Chinook.

The maximum allowable exploitation rate for KRFC in 2024 is 20.0 percent, which is a *de minimis* exploitation rate. In such cases, the FMP stipulates:

“When recommending an allowable *de minimis* exploitation rate in a given year, the Council shall also consider the following circumstances:

- The potential for critically low natural spawner abundance, including considerations for substocks that may fall below crucial genetic thresholds;
- Spawner abundance levels in recent years;
- The status of co-mingled stocks;
- Indicators of marine and freshwater environmental conditions;
- Minimal needs for Tribal fisheries;
- Whether the stock is currently in an approaching an overfished condition;
- Whether the stock is currently overfished;
- Other considerations as appropriate.”

The Salmon Technical Team has assessed these circumstances, with the exception of minimal needs for Tribal fisheries.

Potential for low spawner abundance

The potential for critically low natural spawner abundance could be considered moderate. The 2024 minimum natural-area spawner escapement of 36,511 adults (the minimum natural-area adult escapement under an exploitation rate of 0.20) is above the minimum stock size threshold (MSST; 30,525) but lower than S_{MSY} (40,700 natural-area adult spawners). A natural-area adult escapement of 36,511 adults would represent the 26th lowest value over the past 47 years of data.

Substocks

To assess the potential for critically low abundance of substocks, a statistical model (PFMC 2007, Appendix D) was applied to historical run size data to assess the probability that escapement to either the Salmon, Scott, or Shasta rivers would fall below 720 adults, given a total, basin-wide natural area escapement of 36,511 adults in 2024. The 720 escapement threshold for these substocks was based on effective population size (genetic) considerations. Application of the model suggested that at least one of the substocks would fall below the 720 adult threshold with a probability of 0.17.

Recent spawner abundance

The natural-area adult spawner escapement has been lower than the MSST in seven of the last ten years and four of the last five years. The 2024 forecast of natural-area spawners in the absence of fishing is 45,639 adults, which is above the maximum sustainable yield spawner escapement (S_{MSY} ; 40,700) and the MSST. If fishing seasons are structured such that the maximum allowable exploitation rate of 20 percent is met, the natural-area adult spawner expectation is 36,511, which is greater than the MSST but lower than S_{MSY} .

Comingled stocks

With regard to co-mingled stocks, Sacramento River fall Chinook have a low abundance forecast and are likely to constrain fisheries in 2024. The 6 percent maximum KRFC age-4 ocean harvest rate for 2024 fisheries will also likely constrain 2024 ocean salmon fisheries.

Indicators of marine and freshwater environmental conditions

Indicators of marine and freshwater conditions encountered by KRFC broods in the 2024 fisheries [primarily brood years 2020 (age-4 in 2024) and 2021 (age-3 in 2024)] were provided in the [CCIEA Team Report](#) from the March 2024 PFMC meeting.

Brood year 2020 KRFC were the progeny of an abundance of spawners near the mean level. Flows were favorable for the incubation stage of this brood, and neutral with regard to temperature and freshwater survival. Freshwater conditions following egg incubation were generally poor with low flows and high temperatures. Hatchery releases were well below average. Early marine survival indicators were neutral, with the exception of the North Pacific Index, which was favorable.

Brood year 2021 KRFC were the progeny of an abundance of spawners near the mean level. Indicators for incubation and freshwater juvenile life stages were neutral. Hatchery releases were below average. The early marine residence indicators were neutral as well.

The mean status scores for brood years 2020 and 2021, for both freshwater and marine status, were within one standard deviation of the mean.

Approaching an overfished condition

The KRFC stock does not meet the criteria for being at risk of approaching an overfished condition.

Overfished status

KRFC were declared overfished following the 2017 escapement and continues to meet the criteria for overfished status in 2024.

Descriptions pertaining to the achievement of key objectives for Chinook salmon management south of Cape Falcon are found below.

- *SRFC*. The minimum of 180,000 hatchery and natural area adult spawners is met by each of the Alternatives.
- *KRFC*. The minimum natural area adult spawners of 36,511 natural area adult spawners is met by each of the Alternatives.
- *SRWC*. The ESA consultation standard that (1) limits the forecast age-3 impact rate in 2024 fisheries south of Point Arena to a maximum of 12.3 percent and (2) specifies time/area closures and minimum size limit constraints south of Point Arena, is met by each of the Alternatives.
- *California coastal Chinook*. NMFS guidance to limit the forecast KRFC age-4 ocean harvest rate to a maximum of 6.0 percent is met by each of the Alternatives.

Each of the Alternatives for Chinook fisheries south of Cape Falcon satisfies NMFS ESA consultation standards and guidance. The projected exploitation rates for SRFC and KRFC are lower than the maximum levels specified by their control rules in for 2024. However, KRFC does not meet its conservation objective of 40,700 natural area adult spawners under any of the Alternatives (Table 5).

7.1.2 Coho Salmon

Fishery quotas under the Alternatives are presented in Table 4. Stock-specific management criteria and their forecast values under the Alternatives are provided in Table 5. Projected fishery landings, bycatch, and bycatch mortality under the Alternatives are summarized in Table 6. Table 7 provides a breakdown of impacts by fishery and area for Lower Columbia Natural (LCN), Oregon Coastal Natural (OCN), and Southern Oregon/Northern California Coastal (SONCC) coho populations. Table 8 provides expected coho mark rates for west coast fisheries by month.

Abundance projections important to coho harvest management in Council area fisheries in 2024 are:

- *Oregon Production Index (OPI) Hatchery coho.* The forecast for hatchery coho from the Columbia River and the coast south of Cape Falcon of 403,100 is lower than the 2023 forecast of 896,900. The Columbia River early coho forecast is 227,500 compared to the 2023 forecast of 481,800, and the Columbia River late coho forecast is 173,600 compared to the 2023 forecast of 404,300.
- *OCN coho.* The OCN forecast is 233,200 compared to the 2023 forecast of 238,800.
- *LCN coho.* The LCN forecast is 87,800 compared to the 2023 forecast of 45,500.
- *Puget Sound coho.* Among Puget Sound natural stocks, Skagit and Stillaguamish coho are in the normal category, Snohomish, Hood Canal, and Strait of Juan de Fuca coho are in the low category.
- *Interior Fraser (Thompson River) coho.* This Canadian stock continues to be depressed and will likely continue to constrain ocean coho fisheries north of Cape Falcon.
- *Washington coastal coho.* Forecasts for Washington coastal coho stocks as an aggregate are decreased for natural and hatchery stocks compared to 2023. Among Washington coastal natural stocks, Queets, Hoh and Grays Harbor coho are all in the abundant category, and Quillayute fall coho are in the moderate category under the PST Southern Coho Management Plan

Key coho salmon management objectives shaping the Alternatives are:

- NMFS consultation standards and annual guidance for ESA listed stocks as provided in Section 5.0 above. Relevant stocks include Central California Coast coho (south of the Oregon/California border), SONCC coho, OCN coho, and LCN coho. The maximum allowable exploitation rates for 2024 are: (1) a combined marine/freshwater exploitation rate not to exceed 30.0 percent for OCN coho, (2) a combined exploitation rate in marine-area and mainstem Columbia River fisheries not to exceed 23.0 percent for LCN coho, and (3) a total exploitation rate not to exceed 16.0 percent for the Trinity River component of SONCC coho and a total exploitation rate not to exceed 15.0 percent for all other components of the SONCC coho ESU. Furthermore, coho retention is prohibited in all California ocean fisheries.
- Salmon FMP conservation objectives and obligations under the PST Southern Coho Management Plan for stocks originating along the Washington coast, Puget Sound, and British Columbia as provided in Section 6.2 above. The forecasts for Washington coastal coho stocks are mixed, but mostly categorized as abundant in 2024; these stocks contribute to fisheries off Washington. Forecasts for some Puget Sound and Interior Fraser coho stocks in 2024 are low; however, the majority of the exploitation on these stocks occurs in Puget Sound and will be addressed in development of fishing seasons for inside waters during the North of Falcon co-management process by the state and tribes of Washington prior to the April Council meeting. Because of their abundance status, Interior Fraser coho are subject to an exploitation rate ceiling of 10.0 percent in southern U.S. fisheries under the PST Southern Coho Management Plan.

Descriptions pertaining to the achievement of key objectives for coho salmon management are found below and provided in Table 5.

- *SONCC coho*. Alternatives I and III satisfy the maximum 16.0 percent total exploitation rate ceiling for the Trinity Natural component. Alternative 2 results in a projected exploitation rate of 16.3 percent.
- *OCN coho*. All Alternatives satisfy the maximum 30.0 percent exploitation rate when 2024 projected marine impacts are combined with preliminary 2024 freshwater impacts. Total exploitation rates projected for 2024 Alternatives range from 24.5 percent to 26.2 percent.
- *LCN coho*. Alternatives II and III satisfy the maximum 23.0 percent exploitation rate when 2024 projected marine impacts are combined with projected impacts, based on historic sharing agreements, for mainstem Columbia River fisheries. In-river fisheries have yet to be shaped for 2024. Marine exploitation rates projected for the 2024 Alternatives range from 17.1 percent to 13.5 percent.
- *Interior Fraser coho*. All Alternatives satisfy the 10.0 percent Southern U.S. exploitation rate limit required by the PST Southern Coho Management Plan when 2024 projected marine impacts are combined with the 2023 preseason modeled impacts for Puget Sound fisheries. Shaping of the State and Tribal inside fisheries will occur during the North of Falcon process, and ocean fisheries may require further shaping before final management measures are adopted in order to comply with the PST limit.
- *Washington Coast coho*. For all stocks except Quillayute fall, total exploitation rates in all Alternatives fall below the FMP and PST constraints when 2024 projected marine impacts are combined with 2023 preseason modeled impacts for Washington coastal freshwater fisheries. For Quillayute fall, the total exploitation rate exceeds the PST total exploitation rate constraint in all three Alternatives. Shaping of the State and Tribal inside fisheries will occur during the North of Falcon process, and ocean fisheries may require further shaping before final management measures are adopted in order to comply with the PST limits.
- *Puget Sound coho*. All Alternatives fall below the total exploitation rates allowed for all Puget Sound stocks, except Snohomish natural in all Alternatives, under the FMP matrix when 2024 projected marine impacts are combined with the 2023 preseason modeled impacts for Puget Sound fisheries. Shaping of the State and Tribal inside fisheries will occur during the North of Falcon process, and ocean fisheries may require further shaping before final management measures are adopted in order to comply with the FMP limits.

7.1.3 Pink Salmon

Pink salmon do not merit management consideration in 2024, as it is an even-numbered year. In odd-numbered years, impacts on Chinook and coho in pink-directed fisheries may be part of negotiations to reach a final agreement in North of Cape Falcon ocean and Puget Sound fisheries.

7.1.4 Summary of Environmental Impacts on Target Stocks

Stock forecasts for some Canadian Chinook and coho stocks, Oregon Coast Chinook stocks, and the annual catch limits for the SEAK, NBC, and WCVI AABM Chinook fisheries are not known at this time, and preliminary values have been used in the analyses presented in this report. These forecasts and limits are expected to be available prior to the April Council meeting. Negotiations in the North of Falcon process will not be completed until the April Council meeting. These negotiations affect allocation of stock impacts primarily among inside fisheries (State, Tribal, recreational, various commercial sectors, etc.) but also between inside and ocean fisheries.

Environmental impacts on salmon stocks are assessed based on compliance with conservation objectives, ACLs, rebuilding plans, and ESA consultation standards. As noted in the description of the Alternatives (Tables 1, 2, and 3), if analyses using the updated values and the results of these negotiations do not result in compliance with FMP conservation objectives or ESA consultation standards, some Alternatives will not

be viable and impacts in Council area fisheries will need to be modified to comply with all applicable objectives and standards. If updated values and negotiations result in compliance with applicable objectives and standards, Council area fishery impacts would not increase; therefore, the analysis of effects would include the upper bound of a reasonable range of effects under the Alternatives considered for 2024 Council area ocean salmon fisheries.

7.1.4.1 Targeted Salmon Stocks

Based on current assumptions regarding Canadian, and inside fishery impacts, all target salmon stocks (non-ESA listed) meet their FMP conservation objectives under Alternatives I, II, and III, with the exception of Snohomish natural and Quillayute Fall natural coho in all three Alternatives (Table 5).

7.1.4.2 ESA Listed Salmon Species

Based on current assumptions regarding Canadian and inside fishery impacts, impacts on all ESA listed salmon species meet their ESA consultation standards, with the exception of LCN coho in Alternative I and the Trinity Natural component of SONCC coho in Alternative II (Table 5).

Council area fisheries have a minor impact on ESA listed Puget Sound Chinook and on most Chinook stocks subject to the 2019 PST Agreement. At this point there appears to be sufficient flexibility within Council and inside area fisheries as a whole to achieve protection for the Puget Sound Chinook ESU.

7.2 Socioeconomics

In general, Council-area ocean salmon fisheries are managed to meet conservation objectives for stocks that are expected to achieve optimum yields while limiting impacts on depressed stocks. While analysis of biological impacts is organized around salmon stocks that spawn in particular rivers, socioeconomic impacts under the regulatory Alternatives are analyzed by ocean fishery management areas as described in the Salmon FMP. Although most stocks range across several areas, the abundance of individual stocks varies by time and area, thus the use of management areas facilitates more optimal management of each stock than would be possible with coastwide regulations. From north to south, the fishery management areas are: (1) from the U.S./Canada border to Cape Falcon (45°46' N. lat.), which is on the Oregon coast south of the Columbia River mouth; (2) between Cape Falcon and Humbug Mountain (42°40' N. lat.) on Oregon's southern coast; (3) the Oregon KMZ, which covers ocean waters from Humbug Mountain to the Oregon/California border (42° N. lat.); (4) the California KMZ includes the area from the Oregon/California border to Latitude 40°10' N. in northern California, (5) from Latitude 40°10' N. to Point Arena (38°57' N. lat.) in Mendocino County; (6) from Point Arena to Pigeon Point (37°11' N. lat.) north of Santa Cruz; and (7) from Pigeon Point to the U.S./Mexico border. There are also numerous subdivisions within these areas that are used to further balance stock conservation and harvest allocation needs. The following analysis of impacts on users of the resource and fishing communities is organized around these seven broad management areas. Figure 3 provides a map of the boundaries of these areas, also showing the main salmon ports.

Tribal ocean fisheries (including Washington State statistical area 4B) occur only in the area north of Cape Falcon. The Lower Elwha Klallam, Jamestown S'Klallam, Port Gamble S'Kallam, Makah, Quileute, Hoh, and Quinault Tribes all have fishery areas in the northern part of the area north of Cape Falcon (Table 3). Other federally-recognized tribes participate in in-river fisheries.

The Review of 2023 Ocean Salmon Fisheries (PFMC 2024a) provides an historical description of the salmon fishery affected environment. In addition to stock status assessments, the document reports socioeconomic impacts of historical fisheries and analyzes the current socioeconomic status of West Coast salmon fisheries. For the purpose of characterizing the socioeconomic impact of non-tribal Council-area

ocean salmon fisheries, commercial exvessel value, recreational fishing trips, and community level personal income impacts resulting from both commercial and recreational fishing activities are used.

The short-term economic effects of the regulatory Alternatives for non-Indian fisheries are shown in Tables 10 and 11. Table 10 shows projected commercial troll impacts expressed in terms of estimated potential exvessel value by catch area. Table 11 shows projected recreational fisheries impacts in terms of the number of projected angler-trips and community personal income impacts associated with those activities by port area. Note that exvessel values shown under the Alternatives for the commercial troll fishery in Table 10 and income impact values shown for the recreational fishery in Table 11 are not directly comparable. More directly comparable measures of short-term economic impacts from commercial and recreational salmon fisheries appear in Figures 1 and 2, which show estimated community income impacts under the respective sets of commercial troll and recreational fishery Alternatives, compared to historical impacts in real (inflation-adjusted) dollars. Both commercial and recreational income impact estimates provided in these figures are based on landing ports. In general, income impacts are estimates of the amount of personal income associated with the economic linkages related to a particular activity (see Chapter IV of the Review of 2023 Ocean Salmon Fisheries for additional description of income impact estimates). Income impacts are a measure of relative economic activity. Differences in income impacts between an Alternative and the value for the 2023 fishery indicate the expected short-term impact of the Alternative compared with taking no action, (i.e., if 2023 regulations were to remain in place). Differences in income impacts between an Alternative and recent inflation-adjusted average values provide context for the current estimates within recent historical trends. While reductions in income impacts associated with an activity may not necessarily reflect net losses in a particular community (depending on the degree to which there is compensating activity), they are likely to indicate losses to the community's businesses and individuals that depend on the lost activity for their livelihood.

Total economic effects for non-Indian fisheries under the Alternatives may vary more or less than is indicated by the short-term impacts on ocean fisheries reported below. Salmon that are not harvested in the ocean do not necessarily result in an economic loss, as they may become available for additional inside harvest in non-Indian commercial, tribal, and recreational fisheries or may provide additional spawning escapement. Thus, Alternatives that restrict ocean harvests may increase opportunities for inside harvesters (e.g., higher commercial revenue or more angler trips) or contribute to higher inside CPUE (i.e., lower costs for commercial harvesters and/or higher success rates for recreational fishers). Additionally, harvest forgone by both ocean fisheries and inside fisheries may impact future production, although the magnitude of that effect is uncertain and depends on the resulting escapement level compared to MSY escapement and the nature of the spawner-recruit relationship, both of which are influenced by habitat conditions in the ocean and in the spawning grounds.

Exvessel revenues in Table 10 are based on estimated harvest by catch area while commercial income impacts in Figure 1 are based on projected deliveries by landing area. Historically, there has been a divergence between these two measures. The difference is due to salmon caught in certain catch areas being delivered to ports in neighboring catch areas. In an attempt to account for this effect and assign income impacts to the "correct" landing area, adjustments to projections are made based on historical patterns. The patterns are typically inferred from the most recent year's catch and landings data, however in this case since many areas had no landings in 2023, these patterns were inferred from 2022 data. For example, 2022 data shows there were deliveries of salmon: (1) caught north of Cape Falcon to landing ports between Cape Falcon and Humbug Mountain; (2) caught between Cape Falcon and Humbug Mountain to landing ports in the Oregon KMZ region; (3) caught between 40°10' N. Lat. and Point Arena (Fort Bragg Region) to landing ports in the California KMZ region (Crescent City and Eureka); (4) a small amount caught between Point Arena and Pigeon Point (San Francisco Region) to landing ports south of Pigeon Point (Monterey region); and (5) caught south of Pigeon Point to landing ports in the San Francisco region and also a small amount delivered in the California KMZ region.

The expected harvest levels used to model commercial fishery impacts are taken from Table 6. Estimated harvests do not include a relatively small amount that often occurs in the state-waters-only (SWO) fishery off southern Oregon. These total harvest estimates combined with a recent prior year's average Chinook weights per fish and exvessel prices per pound were assumed to be the best indicators of expected revenues per fish in the coming season. In cases where areas had no landings in 2023, harvest parameters were inferred from 2022 data. Coastwide average Chinook weight per fish in 2022 was approximately seven percent below the prior year and three percent below the recent five-year average weight; while coastwide average Chinook exvessel prices in 2022 were 14 percent below the prior year and 12 percent below the recent five-year average in inflation-adjusted terms. If this year's actual average weight per fish or exvessel prices diverge significantly from what was observed in prior years, then salmon exvessel revenues and resulting commercial fisheries income impacts projected in this document may prove to be correspondingly biased.

Fishing effort estimates for the recreational fishery south of Cape Falcon are based on measures developed by the STT for modeling biological impacts. STT estimates for south of Cape Falcon use multi-year averages to predict effort for the coming year. Consequently, if the multi-year average for a particular time period and area happens to be higher than last year's effort level, then the model may forecast an increase in effort for the coming year even if management measures did not change from the previous year. Estimated recreational effort does not include a relatively small amount that often occurs in the SWO fishery off southern Oregon. Recreational fishery effort north of Cape Falcon was estimated using historical CPUE estimates ("success rates") applied to salmon quotas and expected harvest levels under the Alternatives. Projections of recreational catch north of Cape Falcon were made by multiplying the proposed quotas for the two species under each Alternative by the historic ratios of actual catch to the actual quotas. Effort and economic impacts were then estimated by summing recent year weighted average coho and Chinook angler success rates multiplied by the projected coho and Chinook catch under each Alternative. Unless otherwise noted, the economic effects of the commercial and recreational fisheries Alternatives summarized below are compared in terms of estimated community income impacts.

7.2.1 Alternative I

Under Alternative I, total coastwide community personal income impacts from commercial salmon fisheries are projected to be more than double last year's (2023) level but 70 percent below the recent (2018-2022) inflation-adjusted average. Coastwide income impacts from recreational fishing are projected to be 32 percent above last year's level but 34 percent below the 2018-2022 inflation-adjusted average.

Commercial fishery income impacts north of Cape Falcon are projected to be 5 percent above last year and 52 percent above the 2018-2022 inflation-adjusted average.

South of Cape Falcon, total commercial fishery income impacts are projected to exceed last year's historically low or zero levels but fall below the 2018-2022 inflation-adjusted average by 83 percent. Due to the near complete closure of commercial Chinook harvest south of Cape Falcon in 2023, all areas south of Cape Falcon are projected to see some increases in commercial fishery income impacts compared with last year's historically low levels. However relative to the 2018-2022 inflation-adjusted average, decreases in commercial fishery income impacts are projected for all areas south of Cape Falcon. Small amounts of commercial catch and landings are projected to occur in both the Oregon KMZ and California KMZ areas.

Income impacts from recreational fisheries north of Cape Falcon are projected to be 6 percent above last year and 35 percent above the 2018-2022 inflation-adjusted average.

Total recreational fishery income impacts south of Cape Falcon are projected to be 96 percent above last year but 60 percent below the 2018-2022 inflation-adjusted average. Due to the near complete closure of recreational Chinook harvest south of Cape Falcon in 2023, all areas south of Cape Falcon are projected to see increases in recreational fishery income impacts compared with last year's historically low or zero levels. However relative to the 2018-2022 inflation-adjusted average, decreases in recreational fishery income impacts are projected for all areas south of the Oregon/California border.

Under Alternative I overall coastwide income impacts for combined non-Indian commercial and recreational ocean salmon fisheries are projected to be 50 percent above last year's level but 52 percent below the 2018-2022 inflation-adjusted average. Combined income impacts north of Cape Falcon are projected to be 6 percent above last year's level and 40 percent above the 2018-2022 inflation-adjusted average. In aggregate, combined income impacts south of Cape Falcon are projected to be nearly triple last year's level but 73 percent below the 2018-2022 inflation-adjusted average. Due to the near complete closure of commercial and recreational Chinook harvest south of Cape Falcon in 2023, combined income impacts are projected to be above last year's levels in all areas south of Cape Falcon. However, relative to the 2018-2022 inflation-adjusted average, decreases in combined commercial and recreational income impacts are projected for all areas south of Cape Falcon, with the exception of the area from Cape Falcon to Humbug Mountain where a small increase is projected.

Tribal ocean fisheries north of Cape Falcon would be allocated 45,000 Chinook and 47,500 coho for ocean area harvest under Alternative I. These compare with the actual 2023 allocation of 45,000 Chinook and 57,000 coho.

7.2.2 Alternative II

Under Alternative II, total coastwide community personal income impacts from commercial salmon fisheries are projected to be 49 percent above last year's (2023) level but 78 percent below the recent (2018-2022) inflation-adjusted average. Coastwide income impacts from recreational fishing are projected to be 13 percent above last year's level but 44 percent below the 2018-2022 inflation-adjusted average.

Commercial fishery income impacts north of Cape Falcon are projected to be 3 percent below last year but 40 percent above the 2018-2022 inflation-adjusted average.

South of Cape Falcon, total commercial fishery income impacts are projected to exceed last year's historically low or zero levels but fall below the 2018-2022 inflation-adjusted average by 91 percent. Due to the near complete closure of commercial Chinook harvest south of Cape Falcon in 2023, all areas south of Cape Falcon with the exception of the Oregon KMZ are projected to see increases in commercial fishery income impacts compared with last year's historically low levels. Relative to the 2018-2022 inflation-adjusted average, decreases in commercial fishery income impacts are projected for all areas south of Cape Falcon, except the California KMZ where an increase is projected. Some commercial catch and landings are projected to occur in both the Oregon KMZ and California KMZ areas.

Income impacts from recreational fisheries north of Cape Falcon are projected to be 4 percent below last year but 23 percent above the 2018-2022 inflation-adjusted average.

Total recreational fishery income impacts south of Cape Falcon are projected to be 52 percent above last year but 69 percent below the 2018-2022 inflation-adjusted average. Due to the near complete closure of recreational Chinook harvest south of Cape Falcon in 2023, all areas south of Cape Falcon are projected to see increases in recreational fishery income impacts compared with last year's historically low or zero levels. However relative to the 2018-2022 inflation-adjusted average, decreases in recreational fishery

income impacts are projected for all areas south of Cape Falcon with the exception of Cape Falcon to Humbug Mountain where a seven percent increase is projected.

Under Alternative II overall coastwide income impacts for combined non-Indian commercial and recreational ocean salmon fisheries are projected to be 21 percent above last year's level but 61 percent below the 2018-2022 inflation-adjusted average. Combined income impacts north of Cape Falcon are projected to be 4 percent below last year's level but 27 percent above the 2018-2022 inflation-adjusted average. In aggregate, combined income impacts south of Cape Falcon are projected to be approximately double last year's level but 81 percent below the 2018-2022 inflation-adjusted average. Due to the near complete closure of commercial and recreational Chinook harvest south of Cape Falcon in 2023, combined income impacts are projected to be above last year's levels in all areas south of Cape Falcon. However relative to the 2018-2022 inflation-adjusted average, decreases in combined commercial and recreational income impacts are projected for all areas south of Cape Falcon.

Tribal ocean fisheries north of Cape Falcon would be allocated 40,000 Chinook and 37,500 coho for ocean area harvest under Alternative II. These compare with the actual 2023 allocation of 45,000 Chinook and 57,000 coho.

7.2.3 Alternative III

Under Alternative III, total coastwide community personal income impacts from commercial salmon fisheries are projected to be 6 percent below last year's (2023) level and 86 percent below the recent (2018-2022) inflation-adjusted average. Coastwide income impacts from recreational fishing are projected to be 10 percent below last year's level and 55 percent below the 2018-2022 inflation-adjusted average.

Commercial fishery income impacts north of Cape Falcon are projected to be 11 percent below last year but 28 percent above the 2018-2022 inflation-adjusted average.

South of Cape Falcon, total commercial fishery income impacts are projected to exceed last year's historically low level but fall below the 2018-2022 inflation-adjusted average by 98 percent. All areas south of Humbug Mountain are projected to see closure of commercial fisheries and to experience impacts comparable to last year's historically low or zero levels. While no commercial salmon catch is projected south of Humbug Mountain under this Alternative, a small amount of catch from the Cape Falcon to Humbug Mountain region is projected to be landed in Oregon KMZ area ports based on data patterns observed during the 2022 season.

Income impacts from recreational fisheries north of Cape Falcon are projected to be 15 percent below last year but 8 percent above the 2018-2022 inflation-adjusted average.

Total recreational fishery income impacts south of Cape Falcon are projected to be 2 percent above last year's level (due to some recreational fishing north of the Oregon/California border) but fall 79 percent below the 2018-2022 inflation-adjusted average. All areas south of the Oregon/California border are projected to see closure of recreational fisheries and to experience impacts comparable to last year's historically low or zero levels.

Under Alternative III overall coastwide income impacts for combined non-Indian commercial and recreational ocean salmon fisheries are projected to be 9 percent below last year's level and 71 percent below the 2018-2022 inflation-adjusted average. Combined income impacts north of Cape Falcon are projected to be 14 percent below last year's level but 13 percent above the 2018-2022 inflation-adjusted average. In aggregate, combined income impacts south of Cape Falcon are projected to be 7 percent above last year's level but 90 percent below the 2018-2022 inflation-adjusted average. All areas south of the

Oregon/California border are projected to see closure of commercial and recreational fisheries and to experience impacts comparable to last year's historically low or zero levels.

Tribal ocean fisheries north of Cape Falcon would be allocated 35,000 Chinook and 27,500 coho for ocean area harvest under Alternative III. These compare with the actual 2023 allocation of 45,000 Chinook and 57,000 coho.

7.2.4 Summary of Impacts on the Socioeconomic Environment

Coastwide combined commercial and recreational salmon fishery income impacts under the Alternatives are projected to range from 50 percent above (Alternative I) to 9 percent below (Alternative III) last year's (2023) historically low levels. Projected levels under the Alternatives also represent reductions relative to the recent (2018-2022) inflation-adjusted averages of 52 percent under Alternative I, 61 percent under Alternative II, and 71 percent under Alternative III.

Coastwide income impacts from commercial salmon fisheries are projected to exceed last year's historically low level under Alternative I and Alternative II but fall below last year under Alternative III. Coastwide income impacts from commercial salmon fisheries are projected to be below the 2018-2022 inflation-adjusted average by at least 70 percent (Alternative I) under all three Alternatives. North of Cape Falcon, commercial salmon fisheries income impacts are projected to be above last year and the 2018-2022 inflation-adjusted average under Alternative I, and below last year but above the 2018-2022 inflation-adjusted average under Alternative II and Alternative III. All areas south of Cape Falcon would see some increase in commercial fisheries income impacts compared with last year under Alternative I and Alternative II. However, with respect to the 2018-2022 inflation-adjusted average, (with the exception of Humbug Mountain to the Oregon/California border) reductions are projected for all areas south of Cape Falcon under all three Alternatives. Coastwide commercial fisheries income impacts under Alternative III are projected to be even lower than last year's historically low levels.

Coastwide income impacts from recreational salmon fisheries are projected to be above last year under Alternative I (32 percent) and Alternative II (13 percent), but below last year by 10 percent under Alternative III, and below the 2018-2022 inflation-adjusted average by at least 34 percent (Alternative I) under all three Alternatives. Income impacts from recreational salmon fisheries north of Cape Falcon are projected to be above last year under Alternative I (6 percent), but below last year under Alternative II (4 percent) and Alternative III (15 percent). Compared with the 2018-2022 inflation-adjusted average, areas north of Cape Falcon are projected to see increases in recreational salmon fisheries income impacts of at least 8 percent (Alternative III) under all three Alternatives. The combined area south of Cape Falcon would see an increase in recreational fisheries income impacts compared with last year under all Alternatives, although the increase would only be 2 percent under Alternative III. All areas south of the Oregon/California border would see projected recreational salmon fisheries income impacts of zero under Alternative III due to closure of the recreational salmon fishery in those areas.

Among the Alternatives, projections for Alternative I show the most positive or least negative coastwide combined commercial and recreational fisheries income impacts overall and for all seven management areas. Projections for Alternative III include the least positive or most negative combined commercial and recreational fisheries income impacts coastwide and for all areas, with the exception of Humbug Mountain to the Oregon/California border (Oregon KMZ) which may be slightly better off under Alternative III than Alternative II. All commercial and recreational ocean salmon fisheries in the areas south of the Oregon/California border would be closed under Alternative III.

Under the three action Alternatives, ocean tribal fisheries occurring north of Cape Falcon would be allocated a maximum of 45,000 Chinook and 47,500 coho under Alternative I, 40,000 Chinook and 37,500

coho under Alternative II, and 35,000 Chinook and 27,500 coho under Alternative III. These compare with the no-action Alternative, which is the actual 2023 allocation of 45,000 Chinook and 57,000 coho.

7.3 *Non-target, Non-ESA Listed, Fish Species*

Prior NEPA analyses have considered the effects of the ocean salmon fisheries on non-target, non-ESA listed fish species. Since then, ocean salmon fisheries have not changed substantially in terms of season length, areas, depth, bag limits, etc. Nor is there any new information to suggest that the incidental nature of encounters of non-target species in ocean salmon fisheries has changed. Therefore, conclusions from previous environmental analyses indicating that effects on non-target fish species are low and not significant are still applicable, as discussed below. The differences between the Alternatives for the 2024 salmon fishery are not discernible with respect to their effect on non-target fish species.

Impacts to groundfish stocks from salmon troll fisheries continue to be managed as part of the open access groundfish fishery sector and are at similar levels compared to recent years. Previous environmental analysis concluded that the amount of groundfish taken incidentally in the salmon fishery is very low and is not substantially altered by changes in the salmon fishery. The 2024 ocean salmon regulation Alternatives are not expected to differ substantially from fisheries analyzed previously with respect to groundfish impacts; therefore, effects from the Alternatives to groundfish stocks are not significant.

Impacts to Pacific halibut from salmon troll fisheries continue to be managed under limits established through the International Pacific Halibut Commission (IPHC) process and under the Area 2A (Council area) catch sharing plan. Previous environmental analysis stated that data on the commercial segment of salmon fisheries show the co-occurrence rates for salmon and halibut, coastal pelagic species, highly migratory species, and non-Council managed fish species are low. The 2024 ocean salmon regulation Alternatives include Pacific halibut landing restrictions within the range enacted in the past and are not expected to differ substantially from earlier analyses with respect to Pacific halibut impacts; therefore, effects from the Alternatives to Pacific halibut are not significant. Likewise, there are no changes to the salmon fishery for 2024 that would change impacts to other non-salmon fish species compared to previous analyses, therefore, effects from the Alternatives to these species are not expected to be significant.

7.4 *Non-ESA Listed Marine Mammals*

The commercial salmon troll fisheries off the coasts of Washington, Oregon, and California are classified as Category III fisheries, indicating a remote or no likelihood of causing incidental mortality or serious injury to marine mammals (86 FR 3028, January 14, 2021). Recreational salmon fisheries use similar gear and techniques as the commercial fisheries and are assumed to have similar encounter rates and impacts. The non-ESA listed marine mammal species that are known to interact with ocean salmon fisheries are California sea lion and harbor seals. Populations of both these species are at stable and historically high levels. There is no new information to suggest that the nature of interactions between California sea lions or harbor seals in ocean salmon fisheries has changed since the Category III determination. Therefore, the impacts from the 2024 salmon regulation Alternatives to non-ESA listed marine mammals are not expected to be significant, and there is no discernible difference between the effects of the Alternatives on these resources.

7.5 *ESA Listed Species*

ESA listed salmonid species present in Council area waters are described in Chapter 5 of this document. ESA listed sockeye and chum salmon, and steelhead trout are rarely encountered in ocean salmon fisheries, and the Alternatives for Council area ocean salmon fisheries are in compliance with applicable BOs for listed ESUs of these species as listed in Chapter 5 of this document. Because anticipated impacts are negligible, there are no significant impacts expected on listed sockeye or chum salmon or steelhead trout

from the Alternatives analyzed in this EA, and there is no discernible difference between the effects of the Alternatives on these resources.

There is no record of injury or mortality of Guadalupe fur seals in Pacific Coast salmon fisheries. No sea turtles have been reported taken by the ocean salmon fisheries off Washington, Oregon, or California, and NMFS has determined that commercial fishing by Pacific Coast salmon fisheries would pose a negligible threat to Pacific turtle species. There is no discernible difference between the effects of the Alternatives on these resources.

Of the ESA listed marine mammals that occur in Council area waters, only Southern Resident killer whales (SRKW), a distinct population segment (DPS) of *Orcinus orca*, are likely to be affected by salmon fisheries. The “resident” killer whale ecotype is dependent on fish as a prey item; the primary prey for the SRKW DPS is Chinook salmon (SRKW Workgroup 2020). The SRKW DPS occurs regularly throughout the coastal waters of the states of Washington, Oregon, and Vancouver Island, British Columbia, Canada; individuals are known to travel as far south as central California and as far north as Southeast Alaska (SRKW Workgroup 2020).

Salmon fisheries conducted under the FMP may directly affect SRKW through interactions with vessels and gear, and indirectly affect them by reducing prey availability. The risk assessment report, prepared by the Council’s Ad-Hoc Southern Resident Killer Whale Workgroup (SRKW Workgroup 2020), presented at the Council’s March 2020 meeting, provides information on SRKW and their predator-prey interaction with Pacific salmon. The report can be found online at: <https://www.pcouncil.org/documents/2020/02/e-3-a-srkw-workgroup-report-1-electronic-only.pdf/>.

At its November 2020 meeting, based on the information compiled and analysis developed by the SRKW Workgroup, the Council adopted a final preferred Alternative for a subsequent amendment to the FMP to include management provisions responsive to the needs of SRKW. These management provisions were incorporated into Amendment 21 of the FMP and set a Chinook salmon annual abundance management threshold below which the Council and NMFS would implement specific steps to limit ocean salmon fishery impacts on Chinook salmon in order to increase salmon prey availability for SRKW. This threshold is compared to the projected pre-fishing Chinook abundance in the north of Cape Falcon area calculated annually using forecasts compiled by the STT. The specific steps the Council would implement should the threshold be triggered include time and area closures and temporal shifts in fishing. In April 2020, NMFS completed a BO on the effects of implementing Amendment 21 of the FMP and concluded that the effects were not likely to jeopardize the continued existence of the SRKW DPS or destroy or adversely modify its designated or proposed critical habitat. Amendment 21 also provides for technical review and consideration of new data by the Council, the STT, and the SSC that may result in an updated threshold (PFMC 2021).

At their March 2022 meeting, the Council was informed of recent updates to models that may warrant an update to the numerical value of the Chinook abundance threshold. Based on these developments, the Council followed the process outlined in Amendment 21 to the FMP and adopted a change to numerical value of the Chinook abundance threshold at their November 2022 Council meeting. The change was informed by a technical review of recent updates to models, and the STT provided a report to aid the Council in determining the appropriate numerical value of the threshold. The threshold continues to be based on the arithmetic mean of the seven years identified in section 6.6.8 of the salmon FMP representing pre-fishing Chinook salmon abundance in the area North of Cape Falcon (1994-1996, 1998-2000, and 2007). The updated Chinook abundance threshold is 623,000 Chinook.

As mentioned above, the annual management measures for Council salmon fisheries are developed to be consistent with all ESA BOs. In 2024, the projected pre-fishing Chinook abundance in the north of Cape Falcon area is 797,300 across all action Alternatives, which is greater than the threshold value (Table 5).

7.6 *Seabirds*

The types of vessels used in ocean salmon fisheries and the conduct of the vessels are not conducive to collisions or the introduction of rats or other non-indigenous species to seabird breeding colonies. Other types of accidental bird encounters are a rare event for commercial and recreational ocean salmon fisheries. Therefore, there are no significant impacts expected on seabirds from the Alternatives analyzed in this EA, and there is no discernible difference between the effects of the Alternatives on seabirds.

7.7 *Biodiversity and Ecosystem Function*

The removal of adult salmon by the ocean fisheries is not considered to significantly affect the lower trophic levels or the overall marine ecosystem because salmon are not the only or primary predator in the marine environment. Therefore, no significant impacts are expected on biodiversity or ecosystem function from the Alternatives analyzed in this EA, and there is no discernible difference between the effects of the Alternatives on these resources.

7.8 *Ocean and Coastal Habitats*

Council Area salmon fisheries do not employ bottom contact gear, and there is no evidence of direct gear effects on fish habitat from Council-managed salmon fisheries on essential fish habitat (EFH) for salmon or other managed species. Critical habitat for ESA listed salmon does not include Council area ocean water. Because Council area salmon fisheries are conducted at sea and without bottom contact gear, there is no interaction with unique geographic characteristics or other cultural, scientific, or historical resources such as those that might be listed on the National Register of Historical Places. Therefore, no significant impacts are expected on ocean and coastal habitats from the Alternatives analyzed in this EA, and there is no discernible difference between the effects of the Alternatives on these resources.

7.9 *Public Health and Safety*

Fisheries management can affect safety if, for example, season openings make it more likely that fishermen will have to go out in bad weather because fishing opportunities are limited. The Salmon FMP, however, has provisions to adjust management measures if unsafe weather affected fishery access. The Alternatives for 2024 ocean salmon regulations have season structures similar to those employed in previous salmon seasons and are not expected to result in any significant increase in the risk to human health or safety at sea. There are also no discernible differences between the effects of the Alternatives on the risk to human health or safety at sea.

7.10 *Short-term and Long-term Impacts*

The purpose of long term and short-term impacts analysis is to consider the combined effects of many actions on the human environment over time that would be missed if each action were evaluated separately.

7.10.1 Consideration of the Affected Resource

The affected resources that relate to the Pacific Coast salmon fishery are described in the Affected Environment sections of Preseason Report I and in Section 9.0 of this report. The significance of impacts will be discussed in relation to these affected resources listed below.

- Fishery and Fish Resources,
- Protected Resources,
- Biodiversity/Ecosystem Function and Habitats,
- Socioeconomics.

7.10.2 Geographic Boundaries

The analysis focuses on actions related to Council-managed ocean salmon commercial and recreational fisheries. Council-managed ocean fisheries occur in the exclusive economic zone (EEZ), from three to 200 miles offshore, off the coasts of the states of Washington, Oregon, and California as well as the ports in these states that receive landings from the ocean salmon fisheries. Since salmon are anadromous and spend part of their lifecycle in fresh water, the geographic scope also includes internal waters (e.g., Puget Sound) and rivers that salmon use to migrate towards their spawning grounds.

7.10.3 Temporal Boundaries

The temporal scope of past and present actions for the affected resources is primarily focused on actions that have occurred after framework FMP implementation (1984). The temporal scope of future actions for all affected resources extends about five years into the future. This period was chosen because the dynamic nature of resource management and lack of information on future projects make it very difficult to predict impacts beyond this timeframe with any certainty.

7.10.4 Past, Present, and Reasonably Foreseeable Future Actions

Fishery Actions

The Council sets management measures for ocean salmon fisheries annually based on stock forecasts and in accordance with conservation objectives set in the FMP and guidance provided by NMFS for managing impacts to ESA listed stocks. The Council manages ocean salmon fisheries through an intensive preseason analysis process to shape salmon fisheries impacts on salmon stocks within the parameters of the FMP conservation measures and ESA requirements.

Fisheries outside of the Council's jurisdiction also impact the Council area salmon fishery. The Council considers fisheries managed by the states and treaty Indian tribes in the North of Falcon management process and Columbia River fisheries managed under *U.S. v. Oregon* Management Plan, as well as obligations for fisheries off Alaska and Canada under the PST. Additionally, the Council and NMFS manage ocean salmon fisheries inseason to keep fisheries impacts within the constraints set preseason. The Council also conducts annual methodology reviews to improve models and other tools for assessing salmon stocks.

Non-Fishing Related Actions

Because salmon spend part of their lifecycle in fresh water, they are more vulnerable to a broad range of human activities (since humans spend most of their time on land) that affect the quantity and quality of these freshwater environments. These effects are generally well known and diverse. They include physical barriers to migration (dams), changes in water flow and temperature (often a secondary effect of dams or water diversion projects), and degradation of spawning environments (such as increased silt in the water from adjacent land use). Non-fishing activities in the marine environment can introduce chemical pollutants and sewage; and result in changes in water temperature, salinity, dissolved oxygen, and suspended sediment which poses a risk to the affected resources. Human-induced non-fishing activities tend to be localized in

nearshore areas and marine project areas. When these activities co-occur, they are likely to work additively or synergistically to decrease habitat quality and may indirectly constrain the sustainability of the managed resources, non-target species, and protected resources. Decreased habitat suitability tends to reduce the tolerance of affected species to the impacts of fishing effort. Mitigation through regulations that would reduce fishing effort could negatively impact human communities. The overall impact to the affected species and their habitats on a population level is unknown, but likely neutral to low negative, since a large portion of these species have a limited or minor exposure to the localized non-fishing perturbations.

For many of the proposed non-fishing activities to be permitted by other Federal agencies, those agencies would examine the potential impacts on the affected resources. The Magnuson-Stevens Act (50 CFR 600.930) imposes an obligation on other Federal agencies to consult with the Secretary of Commerce on actions that may adversely affect EFH. The eight fishery management councils engage in the review process by making comments and recommendations on any Federal or state action that may affect habitat, including EFH, for their managed species and by commenting on actions likely to substantially affect habitat, including EFH. In addition, under the Fish and Wildlife Coordination Act (Section 662), “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the U.S., or by any public or private agency under Federal permit or license, such department or agency first shall consult with the U.S. Fish and Wildlife Service (USFWS), Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular state wherein the” activity is taking place. This act provides another avenue for review of actions by other Federal and state agencies that may impact resources that NMFS manages in the reasonably foreseeable future. In addition, NMFS and the USFWS share responsibility for implementing the ESA. ESA requires NMFS to designate "critical habitat", to the maximum extent prudent and determinable, for any species it lists under the ESA (i.e., areas that contain physical or biological features essential to conservation, which may require special management considerations or protection) and to develop and implement recovery plans for threatened and endangered species. The ESA provides another avenue for NMFS to review actions by other entities that may impact endangered and protected resources whose management units are under NMFS’ jurisdiction.

The effects of climate on the biota of the California Current ecosystem have been recognized for some time. The El Niño-Southern Oscillation (ENSO) is widely recognized to be the dominant mode of inter-annual variability in the equatorial Pacific, with impacts throughout the rest of the Pacific basin and the globe. During the negative (El Niño) phase of the ENSO cycle, jet stream winds are typically diverted northward, often resulting in increased exposure of the Pacific Coast of the U.S. to subtropical weather systems. The impacts of these events to the coastal ocean generally include reduced upwelling winds, deepening of the thermocline, intrusion of offshore (subtropical) waters, dramatic declines in primary and secondary production, poor recruitment, reduced growth, and survival of many resident species (such as salmon and groundfish), and northward extensions in the range of many tropical species. Concurrently, top predators such as seabirds and pinnipeds often exhibit reproductive failure. In addition to inter-annual variability in ocean conditions, the North Pacific seems to exhibit substantial inter-decadal variability, which is referred to as the Pacific (inter) Decadal Oscillation (PDO).

Anomalously warm sea surface temperatures in the northeast Pacific Ocean developed in 2013 and continued to persist into 2016; this phenomenon was termed “the Blob.” During the persistence of the Blob, distribution of marine species was affected (e.g., tropical, and subtropical species were documented far north of their usual ranges), marine mammals and seabirds starved, and a coastwide algal bloom that developed in the summer of 2015 resulted in domoic acid poisoning of animals at various trophic levels, from crustaceans to marine mammals. In 2015-2016, a very strong El Niño event disrupted the Blob. The extent of the impact of The Blob on salmon and salmon fisheries has not been fully determined. It is also uncertain if or when environmental conditions would cause a repeat of this event. NMFS’ Northwest and

Southwest Fisheries Science Centers presented information to the Council indicating that the broods that will contribute to 2024 harvest and escapement encountered generally average, but mixed, ocean conditions for salmon returning to the Columbia Basin. Stoplight charts for KRFC and SRFC indicated that fish returning in 2024 encountered generally average to below average conditions at all stages of their life cycle.

Within the California Current itself, scientists have described long-term warming trends in the upper 50 to 75 meters of the water column. Recent paleoecological studies from marine sediments have indicated that 20th century warming trends in the California Current have exceeded natural variability in ocean temperatures over the last 1,400 years. Statistical analyses of past climate data have improved our understanding of how climate has affected North Pacific ecosystems and associated marine species productivities.

In addition, changes in river flows and flow variability may affect population growth of anadromous fishes. Ward et al. (2015) found that increases in variability in freshwater flows may have a more negative effect than any other climate signal included in their model. Some climate change models predict that in the Pacific Northwest, there will be warmer winters and more variable river flows, which may affect the ability of anadromous fishes to recover in the future (Ward et al. 2015). However, our ability to predict future impacts on a large-scale ecosystem stemming from climate forcing events remains uncertain.

7.10.5 Magnitude and Significance of Proposed Action

The following section presents the short term and long term impacts of past, present, and reasonably foreseeable future actions on each of the managed resources. This is followed by a discussion on the synergistic effects of the proposed action, as well as past, present, and reasonably foreseeable future actions.

7.10.5.1 Fishery and Fish Resources

Past, present, and reasonably foreseeable future actions that affect the salmon fishery and fish resources are considered annually when the Council sets management measures for ocean salmon fisheries based on stock forecasts and in accordance with conservation objectives set in the FMP and guidance provided by NMFS for managing impacts to ESA listed stocks. The Council also considers fisheries managed by the states and treaty Indian tribes in the North of Falcon management process and Columbia River fisheries managed under *U.S. v. Oregon* Management Plan, as well as obligations under the PST. Additionally, the Council and NMFS manage ocean salmon fisheries inseason to keep fisheries impacts within the constraints set preseason. The Council also conducts annual methodology reviews to improve models and other tools for assessing salmon stocks. Therefore, the degree of both short term and long term effects, including the proposed action, on the salmon fishery and fish resources are expected to be low positive and not significant.

7.10.5.2 Protected Resources

Past, present, and foreseeable future actions that affect ESA listed salmon are considered annually when the Council sets management measures for ocean salmon fisheries; NMFS provides guidance for managing impacts to ESA listed stocks based on BOs and stock productivity information provided by the states and analyzed by the STT. Fishery management actions have been taken to manage impacts on ESA listed salmon, and the states have developed information to better inform fishery management decisions. Therefore, the magnitude and significance of cumulative effects, including the proposed action on ESA listed salmon are expected to be low positive and not significant.

7.10.5.3 Biodiversity/Ecosystem Function and Habitats

Past, present, and foreseeable future actions that affect biodiversity/ecosystem function and habitats are considered to the extent practicable annually. When considering the proposed action's removal of adult salmon by the ocean fisheries in addition to past, present, and reasonably foreseeable future actions, such removal of these salmon is not considered to significantly affect the lower trophic levels or the overall

marine ecosystem because salmon are not the only primary predator. In addition, Council area salmon fisheries are conducted at sea with hook-and-line gear and thus, there is no to negligible interactions expected with EFH for salmon or other managed species.

Salmon escapement to fresh water provides for spawning and for carrying marine derived nutrients to freshwater habitats. The importance of salmon carcasses in the transport of marine derived nutrients to freshwater habitats is described in Appendix A of the FMP and the related EA (see Final Environmental Assessment and Regulatory Impact Review; Pacific Coast Salmon Plan Amendment 18: Incorporating Revisions to Pacific Salmon Essential Fish Habitat, available on the Council's website: www.pcouncil.org) and also in the EIS for Puget Sound Chinook Harvest Resource Management Plan (Puget Sound Chinook Harvest Resource Management Plan FEIS. NMFS Northwest Region with Assistance from the Puget Sound Treaty Tribes and Washington Department of Fish and Wildlife. December 2004. 2 volumes, available on the NMFS West Coast Region website: <http://www.westcoast.fisheries.noaa.gov/>). Council fisheries are designed to provide escapement of salmon to provide for natural spawning and transport of marine derived nutrients.

7.10.5.4 Socioeconomic Environment

Each year the Council evaluates the socioeconomic impact of past salmon fisheries in the stock assessment and fishery evaluation document (e.g., PFMC 2024a) and also evaluates foreseeable future impacts in the annual preseason reports; these documents are also used as the basis for the NEPA analysis for the annual management measures. The magnitude and significance of cumulative effects, including the proposed action on the socioeconomic environment, is expected to be low positive, and not significant.

8.0 CONCLUSION

This analysis has identified no significant environmental impacts that would result from the 2024 ocean salmon regulation Alternatives, from final regulations selected from within the range presented in these Alternatives.

9.0 LIST OF AGENCIES AND PERSONS CONSULTED

The following public meetings were held as part of the salmon management process (Council-sponsored meetings in bold):

- November 1-8, 2023: **Pacific Fishery Management Council meeting**, Garden Grove, CA.
- January 16-19, 2024: **Salmon Technical Team meeting** (Review preparation), Portland OR.
- February 14-15: California Fish and Game Commission meeting, Sacramento, CA.
- February 20-23: **Salmon Technical Team meeting** (Preseason Report I preparation), Portland, OR.
- February 28: Oregon Ocean Salmon public meeting, hybrid meeting in Newport, OR and via webinar.
- March 1: California Department of Fish and Wildlife public meeting, on-line.
- March 1 : Washington Department of Fish and Wildlife hybrid public meeting.
- March 5-11: **Pacific Fishery Management Council meeting**, in Fresno, CA.
- March 12: North of Falcon hybrid meeting. Discussion of management objectives and preliminary fishery proposals for sport and commercial fisheries in Puget Sound and coastal Washington, with limited discussion of the Columbia River and ocean fisheries.
- March 19: North of Falcon, Coastal Freshwater and Puget Sound sport hybrid meeting.
- March 21: North of Falcon, Puget Sound freshwater and marine sport hybrid meeting.
- March 25-26: **Public hearings on management options**, meetings with focused discussions in Washington, Oregon, and California. Each hearing is either in person, or on-line but not both (hybrid).
- March 27: North of Falcon No 2 – Statewide fishery proposals (Puget Sound) hybrid
- April 5-11: **Pacific Fishery Management Council meeting**, in in Seattle, WA.
- April 17-18: California Fish and Game Commission meeting, San Jose, CA.
- April 19: Oregon Fish and Wildlife Commission meeting Tillamook, OR.

The following organizations were consulted and/or participated in preparation of supporting documents:

Northwest Indian Fisheries Commission
Columbia River Intertribal Fish Commission
West Coast Indian Tribes

National Marine Fisheries Service, West Coast Region, Sustainable Fisheries Division
National Marine Fisheries Service, Northwest Fisheries Science Center
National Marine Fisheries Service, Southwest Fisheries Science Center
U.S. Fish and Wildlife Service, Columbia River Fisheries Program Office
United States Coast Guard

California Department of Fish and Wildlife
Oregon Department of Fish and Wildlife
Washington Department of Fish and Wildlife

10.0 REFERENCES

- PFMC. 2007. Final Environmental Assessment for Pacific Coast Salmon Plan Amendment 15: An Initiative to Provide for *De Minimis* Fishing Opportunity for Klamath River Fall-run Chinook Salmon. (Document prepared by the Pacific Fishery Management Council and National Marine Fisheries Service.) Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220-1384.
- PFMC. 2024a. Review of 2023 ocean salmon fisheries. Pacific Fishery Management Council, Portland, Oregon.
- PFMC. 2024b. Preseason Report I: Stock abundance analysis and environmental assessment part 1 for 2024 ocean salmon fishery management measures. Pacific Fishery Management Council, Portland, Oregon.
- SRKW Workgroup. 2020. Pacific Fishery Management Council Salmon Fishery Management Plan Impacts to Southern Resident Killer Whales: Final Draft Risk Assessment. PFMC Briefing Book for March 2020. Available at <https://www.pcouncil.org/documents/2020/02/e-3-a-srkw-workgroup-report-1-electronic-only.pdf> (website accessed November 6, 2020).
- Ward, E.J., J.H. Anderson, T.J. Beechie, G.R. Pess, and M.J. Ford. 2015. Increasing hydrologic variability threatens depleted anadromous fish populations. *Global Change Biology* DOI: 10.1111/gcb.12847

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council adopted. (Page 1 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information
Model #: Coho-2410, Chinook-0724	Model #: Coho-2411, Chinook-0824	Model #: Coho-2412, Chinook-0924
<ol style="list-style-type: none"> 1. Overall non-Indian TAC: 85,000 Chinook and 105,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 42,500 Chinook and 16,800 marked coho. 3. Trade: May be considered at the April Council meeting. 4. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. 	<ol style="list-style-type: none"> 1. Overall non-Indian TAC: 78,000 Chinook and 95,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 39,000 Chinook and 15,200 marked coho. 3. Trade: Same as Alternative 1. 4. Same as Alternative 1. 	<ol style="list-style-type: none"> 1. Overall non-Indian TAC: 72,000 Chinook and 80,000 coho marked with a healed adipose fin clip (marked). 2. Non-Indian commercial troll TAC: 36,000 Chinook and 12,800 marked coho. 3. Trade: Same as Alternative 1. 4. Same as Alternative 1.
A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
U.S./Canada Border to Cape Falcon	U.S./Canada Border to Cape Falcon	U.S./Canada Border to Cape Falcon
<ul style="list-style-type: none"> • May 1-15. See 2023 management measures, which are subject to inseason action and the 2024 season described below. • May 16 through the earlier of June 29, or 28,300 Chinook. <p>Catch limits in place for the following areas (C.8):</p> <ul style="list-style-type: none"> -U.S./Canada border to Queets River - No more than 7,510 Chinook. -Leadbetter Pt. to Cape Falcon - No more than 6,570 Chinook. <p>Landing and possession limits in place for the following areas. Landing limits will be evaluated weekly inseason. Landing week is Thursday through Wednesday (C.1, C.8).</p> <ul style="list-style-type: none"> -U.S./Canada border to Queets River - 70 Chinook per vessel per landing week. -Queets River to Leadbetter Pt. - 200 Chinook per vessel per landing week. -Leadbetter Pt. to Cape Falcon - 60 Chinook per vessel per landing week. 	<ul style="list-style-type: none"> • May 1-15. See 2023 management measures, which are subject to inseason action and the 2024 season described below. • May 16 through the earlier of June 29, or 23,400 Chinook. <p>Catch limits in place for the following areas (C.8):</p> <ul style="list-style-type: none"> -U.S./Canada border to Queets River - No more than 6,200 Chinook. -Leadbetter Pt. to Cape Falcon - No more than 5,440 Chinook. <p>Landing and possession limits in place for the following areas. Landing limits will be evaluated weekly inseason. Landing week is Thursday through Wednesday (C.1, C.8).</p> <ul style="list-style-type: none"> -U.S./Canada border to Queets River - 60 Chinook per vessel per landing week. -Queets River to Leadbetter Pt. - 100 Chinook per vessel per landing week. -Leadbetter Pt. to Cape Falcon - 50 Chinook per vessel per landing week. 	<ul style="list-style-type: none"> • May 1-15. See 2023 management measures, which are subject to inseason action and the 2024 season described below. • May 16 through the earlier of June 29, or 18,000 Chinook. <p>Catch limits in place for the following areas (C.8):</p> <ul style="list-style-type: none"> -U.S./Canada border to Queets River - No more than 4,770 Chinook. -Leadbetter Pt. to Cape Falcon - No more than 4,180 Chinook. <p>Landing and possession limits in place for the following areas. Landing limits will be evaluated weekly inseason. Landing period is Friday through Tuesday (C.1, C.8).</p> <ul style="list-style-type: none"> -U.S./Canada border to Queets River - 50 Chinook per vessel per open period. -Queets River to Leadbetter Pt. - 50 Chinook per vessel per open period. -Leadbetter Pt. to Cape Falcon - 40 Chinook per vessel per open period.

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 2 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon
<p>U.S./Canada Border to Cape Falcon <i>(continued)</i></p> <p>Open seven days per week (C.1)</p> <p>All salmon, except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).</p> <p>When it is estimated that approximately 50% of the overall Chinook quota or any Chinook subarea guideline has been landed, inseason action may be considered to ensure the quota and subarea guidelines are not exceeded.</p> <p>If the Chinook quota is exceeded, the excess will be deducted from the all-salmon season (C.8).</p> <p>In 2025, the season will open May 1 consistent with all preseason regulations in place in this area and subareas during May 16-June 30, 2024, including subarea salmon guidelines and quotas and weekly vessel limits except as described below for vessels fishing or in possession of salmon north of Leadbetter Point. This opening could be modified following Council review at its March and/or April 2025 meetings.</p>	<p>U.S./Canada Border to Cape Falcon <i>(continued)</i></p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>	<p>U.S./Canada Border to Cape Falcon <i>(continued)</i></p> <p>Open five days per week (Fri.-Tues.) (C.1).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 3 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> July 1 through the earlier of September 30, or 14,200 Chinook or 16,800 marked coho (C.8). <p>Open seven days per week.</p> <p>All salmon. Chinook minimum size limit of 27 inches total length. Coho minimum size limit of 16 inches total length (B, C.1). All coho must be marked with a healed adipose fin clip (C.8.e). No chum retention north of Cape Alava, Washington in August and September (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).</p> <p>Landing and possession limit of 100 Chinook and 150 marked coho per vessel per landing week (Thurs.-Wed.). Landing limits will be evaluated weekly, inseason (C.1).</p> <p>When it is estimated that approximately 50% of the overall Chinook quota has been landed, inseason action may be considered to ensure the quota is not exceeded.</p>	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> July 1 through the earlier of September 30, or 15,600 Chinook or 15,200 marked coho. (C.8). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Landing and possession limits: <u>July 1-10:</u> 60 Chinook and 100 marked coho for the open period; <u>Beginning July 11:</u> 40 Chinook and 100 marked coho per vessel per landing week (Thurs.-Wed.).</p> <p>Same as Alternative 1.</p>	<p>U.S./Canada Border to Cape Falcon</p> <ul style="list-style-type: none"> July 1 through the earlier of September 22, or 18,000 Chinook or 12,800 marked coho (C.8). <p>Open five days per week (Fri.-Tues.) (C.1).</p> <p>Same as Alternative 1.</p> <p>Landing and possession limit of 50 marked coho per vessel per open period (Fri.-Tues.). Landing limits will be evaluated weekly, inseason (C.1).</p> <p>Same as Alternative 1.</p>
<p>For all commercial troll fisheries north of Cape Falcon:</p> <p>Mandatory closed areas include Salmon Troll Yelloweye Rockfish Conservation Area, Cape Flattery, Columbia Control Zones, Grays Harbor Control Zone closed beginning August 12.</p> <p>Vessels must land and deliver their salmon within 24 hours of any closure of this fishery.</p> <p>Vessels may not land fish east of the Sekiu River or east of Tongue Point, Oregon.</p> <p>Vessels fishing or in possession of salmon <u>north</u> of Leadbetter Point must land and deliver all species of fish in a Washington port and must possess a Washington troll and/or salmon delivery license. <u>For delivery to Washington ports south of Leadbetter Point</u>, vessels must notify the Washington Department of Fish and Wildlife at 360-249-1215 prior to crossing the Leadbetter Point line with area fished, total Chinook, coho, and halibut catch aboard, and destination with approximate time of delivery. During any single trip, only one side of the Leadbetter Point line may be fished (C.11).</p> <p>Vessels fishing or in possession of salmon while fishing <u>south</u> of Leadbetter Point must land and deliver all species of fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land all species of fish in Garibaldi, Oregon. All Chinook caught north of Cape Falcon and being delivered by boat to Garibaldi must meet the minimum legal total length of 28 inches for Chinook for south of Cape Falcon seasons unless the season in waters off Garibaldi have been closed for Chinook retention for more than 48 hours (C.1.).</p> <p>Under state law, vessels must report their catch on a state fish receiving ticket. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon to notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-857-2546 or sending notification via e-mail to nfalcon.trollreport@odfw.oregon.gov. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).</p> <p>Vessels in possession of salmon <u>north of the Queets River</u> may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. Vessels in possession of salmon <u>south of the Queets River</u> may not cross the Queets River line without first notifying WDFW at 360-249-1215 with area fished, total Chinook, coho and halibut catch aboard, and destination. (C.11). Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).</p>		

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 4 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
South of Cape Falcon	South of Cape Falcon	South of Cape Falcon
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information
<p>1. Sacramento River fall Chinook spawning escapement of 188,025 hatchery and natural area adults.</p> <p>2. Sacramento Index exploitation rate of 12.0%.</p> <p>3. Klamath River recreational fishery allocation: 3,135 adult Klamath River fall Chinook.</p> <p>4. Klamath tribal allocation: 6,619 adult Klamath River fall Chinook.</p> <p>5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 71% / 29%.</p> <p>6. Overall commercial troll coho TAC: 0.</p> <p>Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.</p>	<p>1. Sacramento River fall Chinook spawning escapement of 180,978 hatchery and natural area adults.</p> <p>2. Sacramento Index exploitation rate of 15.3%.</p> <p>3. Klamath River recreational fishery allocation: 3,297 adult Klamath River fall Chinook.</p> <p>4. Klamath tribal allocation: 6,565 adult Klamath River fall Chinook.</p> <p>5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 90% / 10%.</p> <p>6. Overall commercial troll coho TAC: 0</p> <p>Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.</p>	<p>1. Sacramento River fall Chinook spawning escapement of 182,985 hatchery and natural area adults.</p> <p>2. Sacramento Index exploitation rate of 14.3%.</p> <p>3. Klamath River recreational fishery allocation 6,059 adult Klamath River fall Chinook.</p> <p>4. Klamath tribal allocation: 6,305 adult Klamath River fall Chinook.</p> <p>5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: NA.</p> <p>6. Overall commercial troll coho TAC: 10,000.</p> <p>Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the California Fish and Game Commission.</p>

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 5 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Cape Falcon to Humbug Mt.</p> <ul style="list-style-type: none"> • April 16-May 29; • June 1-5; 12-16; 26-30; • July 12-15; 27-31; • September 1-October 31 (C.9.a). <p>Open seven days per week. All salmon, except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).</p> <p>Beginning September 1, no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.). Vessel limits may be modified inseason.</p> <p>In 2025, the season will open March 15 for all salmon except coho. Chinook minimum size limit of 28 inches total length (B, C.1). Gear restrictions (C.2, C.3) same as in 2024. This opening could be modified following Council review at its March 2025 meeting (C.8).</p>	<p>Cape Falcon to Humbug Mt.</p> <ul style="list-style-type: none"> • April 16-30; • May 27- 31; • June 11-20; • September 1-October 31 (C.9.a). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>	<p>Cape Falcon to Humbug Mt.</p> <ul style="list-style-type: none"> • September 1-October 31 (C.9.a). <p>Open seven days per week. All salmon except coho, except as listed below for the non-mark-selective coho fishery (September 1-30). Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).</p> <p>September 1, through the earlier of a 10,000 non-marked coho quota or September 30, no more than 100 coho allowed per vessel per landing week (Thurs.-Wed.). If the coho quota is met prior to September 30, then all salmon except coho season continues (C.4, C.7).</p> <p>Beginning September 1, no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.). Vessel limits may be modified inseason.</p> <p>Beginning October 1, open only shoreward of the 40-fathom regulatory line (C.5.f).</p> <p>In 2025, same as Alternative 1.</p>
<p>Humbug Mt. to OR/CA Border (Oregon KMZ)</p> <ul style="list-style-type: none"> • April 16-30. <p>Open seven days per week. All salmon, except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). All vessels fishing in the area must land their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).</p> <p>In 2025, the season will open March 15 for all salmon except coho. Chinook minimum size limit of 28 inches total length (B, C.1). Gear restrictions (C.2, C.3) same as in 2024. This opening could be modified following Council review at its March 2025 meeting (C.8).</p>	<p>Humbug Mt. to OR/CA Border (Oregon KMZ)</p> <ul style="list-style-type: none"> • Same as Alternative 1. <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>	<p>Humbug Mt. to OR/CA Border (Oregon KMZ)</p> <ul style="list-style-type: none"> • Closed <p>In 2025, same as Alternative 1.</p>

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 6 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>OR/CA Border to Humboldt South Jetty (California KMZ)</p> <ul style="list-style-type: none"> • June 1- through the earlier of June 30 or a 1,000 Chinook quota. <p>Landing and possession limit of 15 Chinook per vessel per landing week.(C.8.f).</p> <p>Open five days per week (Fri.-Tue.). All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for an additional closure adjacent to the Smith River.</p> <p>All fish caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6), and prior to fishing outside the area (C.10). Electronic Fish tickets must be submitted within 24-hours of landing (C.12)</p> <p>Inseason action may be considered when total harvest is approaching the quota. Fishery will close upon reaching the quota.</p> <p>In 2025, the season will open May 1 through the earlier of May 31, or a 3,000 Chinook quota. Chinook minimum size limit of 27 inches total length (B, C.1). Landing and possession limit of 25 Chinook per vessel per week(C.8.f). Open five days per week (Fri.-Tue.). All salmon except coho (C.4, C.7). Any remaining portion of Chinook quotas may be transferred inseason on an impact neutral basis to the next open quota period (C.8.b). All fish caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6), and prior to fishing outside the area (C.10). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for an additional closure adjacent to the Smith River. This opening could be modified following Council review at its March or April 2025 meetings..</p>	<p>OR/CA Border to Humboldt South Jetty (California KMZ)</p> <ul style="list-style-type: none"> • June 1- through the earlier of June 30 or a 5,500 Chinook quota. <p>Landing and possession limit of 40 Chinook per vessel per landing week (C.8.f).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>	<p>OR/CA Border to Humboldt South Jetty (California KMZ)</p> <ul style="list-style-type: none"> • Closed. <p>In 2025, same as Alternative 1.</p>
<p>Humboldt South Jetty to Latitude 40°10' N.</p> <ul style="list-style-type: none"> • Closed. 	<p>Humboldt South Jetty to Latitude 40°10' N.</p> <ul style="list-style-type: none"> • Closed. 	<p>Humboldt South Jetty to Latitude 40°10' N.</p> <ul style="list-style-type: none"> • Closed.

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 7 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Latitude 40°10' N. to Point Arena (Fort Bragg)</p> <ul style="list-style-type: none"> • June 1-5, 8-12 (C.6), or attainment of a 5,500 Chinook harvest limit. <p>Landing and possession limit of 40 Chinook per vessel per landing week (C.8.f).</p> <p>All salmon except coho (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Chinook minimum size limit of 27 inches total length (B, C.1).</p> <p>All fish caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6), and prior to fishing outside the area (C.10). Electronic Fish tickets must be submitted within 24 hours of landing (C.12).</p> <p>Inseason action may be considered when total harvest is approaching the harvest limit. Fishery will close upon reaching the harvest limit.</p> <p>In 2025, the season will open April 16 for all salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). Gear restrictions same as in 2024 (C.2, C.3). This opening could be modified following Council review at its March 2025 meeting.</p>	<p>Latitude 40°10' N. to Point Arena (Fort Bragg)</p> <ul style="list-style-type: none"> • June 1-7 (C.6), or attainment of a 4,000 Chinook harvest limit. <p>Landing and possession limit of 30 Chinook per vessel per landing week (C.8.f).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, Same as Alternative 1.</p>	<p>Latitude 40°10' N. to Point Arena (Fort Bragg)</p> <ul style="list-style-type: none"> • Closed. <p>In 2025, Same as Alternative 1.</p>

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 8 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Pt. Arena to Pigeon Pt. (San Francisco)</p> <ul style="list-style-type: none"> • June 1-5, 8-12 (C.6), or attainment of the 7,500 Chinook harvest limit. <p>Landing and possession limit of 40 Chinook per vessel per landing week (C.8.f).</p> <p>All salmon except coho (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Chinook minimum size limit of 27 inches total length (B, C.1).</p> <p>All fish caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6), and prior to fishing outside the area (C.10). Electronic Fish tickets must be submitted within 24 hours of landing (C.12).</p> <p>Inseason action may be considered when total harvest is approaching the harvest limit. Fishery will close upon reaching the harvest limit.</p> <p>Point Reyes to Point San Pedro (Fall Area Target Zone)</p> <ul style="list-style-type: none"> • September 2-6, 9-13, 16-20, 23-27, 30: • October 1-4, 7-11. • Open through the earlier of the above September and October dates or attainment of the 7,500 Chinook harvest limit. <p>Landing and possession limit of 40 Chinook per vessel per landing week (C.8.f).</p> <p>Open five days per week (Mon,-Fri.). All salmon except coho (C.4, C.7). Chinook minimum size limit of 26 inches total length (B, C.1). All salmon caught in this area must be landed between Point Arena and Pigeon Point (C.6, C.11). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).</p> <p>In 2025, the season will open May 1 for all salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). Gear restrictions same as in 2024 (C.2, C.3). This opening could be modified following Council review at its March or April 2025 meeting.</p>	<p>Pt. Arena to Pigeon Pt. (San Francisco)</p> <ul style="list-style-type: none"> • June 1-7 (C.6), or attainment of a 5,500 Chinook harvest limit. <p>Landing and possession limit of 30 Chinook per vessel per landing week (C.8.f).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, Same as Alternative 1.</p>	<p>Pt. Arena to Pigeon Pt. (San Francisco)</p> <ul style="list-style-type: none"> • Closed. <p>In 2025, Same as Alternative 1.</p>

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 9 of 13)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Pigeon Point to U.S./Mexico Border (Monterey)</p> <ul style="list-style-type: none"> June 1-5, 8-12 (C.6), or attainment of a 3,500 Chinook harvest limit. <p>Landing and possession limit of 40 Chinook per vessel per landing week (C.8.f).</p> <p>All salmon except coho (C.4, C.7). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Chinook minimum size limit of 27 inches total length (B, C.1).</p> <p>All fish caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6), and prior to fishing outside the area (C.10). Electronic Fish tickets must be submitted within 24 hours of landing (C.12).</p> <p>Inseason action may be considered when total harvest is approaching the harvest limit. Fishery will close upon reaching the harvest limit.</p> <p>In 2025, the season will open May 1 for all salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). Gear restrictions same as in 2024 (C.2, C.3). This opening could be modified following Council review at its March or April 2025 meeting.</p>	<p>Pigeon Point to U.S./Mexico Border (Monterey)</p> <ul style="list-style-type: none"> June 1-7 (C.6), or attainment of the 2,500 Chinook harvest limit. <p>Landing and possession limit of 30 Chinook per vessel per landing week (C.8.f).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, Same as Alternative 1.</p>	<p>Pigeon Point to U.S./Mexico Border (Monterey)</p> <ul style="list-style-type: none"> Closed. <p>In 2025, Same as Alternative 1.</p>
<p>When the fishery is closed between the OR/CA border and Humbug Mountain and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival (C.6).</p> <p>California State regulations require all salmon be made available to a CDFW representative for sampling immediately at port of landing. Any person in possession of a salmon with a missing adipose fin, upon request by an authorized agent or employee of the CDFW, shall immediately relinquish the head of the salmon to the State (California Fish and Game Code §8226).</p>		

TABLE 1. 2024 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council Adopted. (Page 10 of 13)

B. MINIMUM SIZE (Inches) (See C.1)					
Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	27	20.5	16	12	None
Cape Falcon to Humbug Mt.	28	21.5	16	12	None
Humbug Mt. to OR/CA Border	28	21.5	-	-	None
OR/CA Border to Humboldt South Jetty	27-	-	-	-	-
Latitude 40°10' N. to Pt. Arena	27	-	-	-	-
Pt. Arena to Pigeon Pt.	27	-	-	-	-
Pigeon Pt. to U.S./Mexico Border	27	-	-	-	-

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Compliance with Minimum Size or Other Special Restrictions: All salmon on board a vessel must meet the minimum size, landing/possession limit, or other special requirements for the area being fished and the area in which they are landed if the area is open or has been closed less than 48 hours for that species of salmon. Salmon may be landed in an area that has been closed for a species of salmon more than 48 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the area in which they were caught. Salmon may not be filleted prior to landing.

Any person who is required to report a salmon landing by applicable state law must include on the state landing receipt for that landing both the number and weight of salmon landed by species. States may require fish landing/receiving tickets be kept on board the vessel for 90 days or more after landing to account for all previous salmon landings.

C.2. Gear Restrictions:

- a. Salmon may be taken only by hook and line using single point, single shank, barbless hooks.
- b. Cape Falcon, Oregon, to the OR/CA border: No more than 4 spreads are allowed per line.
- c. OR/CA border to U.S./Mexico border: No more than 6 lines are allowed per vessel, and barbless circle hooks are required when fishing with bait by any means other than trolling.

C.3. Gear Definitions:

Trolling defined: Fishing from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
Troll fishing gear defined: One or more lines that drag hooks behind a moving fishing vessel engaged in trolling. In that portion of the fishery management area off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.
Spread defined: A single leader connected to an individual lure and/or bait.
Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

C.4. Vessel Operation in Closed Areas with Salmon on Board:

- a. Except as provided under C.4.b below, it is unlawful for a vessel to have troll or recreational gear in the water while in any area closed to fishing for a certain species of salmon, while possessing that species of salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species, and no salmon are in possession.
- b. When Genetic Stock Identification (GSI) samples will be collected in an area closed to commercial salmon fishing, the scientific research permit holder shall notify NOAA OLE, USCG, CDFW, WDFW, ODFW, and OSP at least 24 hours prior to sampling and provide the following information: the vessel name, date, location, and time collection activities will be done. Any vessel collecting GSI samples in a closed area shall not possess any salmon other than those from which GSI samples are being collected. Salmon caught for collection of GSI samples must be immediately released in good condition after collection of samples.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

C.5. Control Zone Definitions:

- a. *Cape Flattery Control Zone* - The area from Cape Flattery (48°23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48°10'00" N. lat.) and east of 125°05'00" W. long.
- b. *Salmon Troll Yelloweye Rockfish Conservation Area* – The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.
- c. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 55'36" N. lat., 124°10'51" W. long.).
- d. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09' N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" W. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long.), and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west by 124°23'00" W. long. (approximately 12 nautical miles off shore); and on the south by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- f. Waypoints for the 40 fathom regulatory line from Cape Falcon to Humber Mt. (50 CFR 660.71 (k) (12)-(70), when in place.

45°46.00' N. lat., 124°04.49' W. long.;	44°51.28' N. lat., 124°10.21' W. long.;	44°08.30' N. lat., 124°16.75' W. long.;	43°10.96' N. lat., 124°32.33' W. long.;
45°44.34' N. lat., 124°05.09' W. long.;	44°49.49' N. lat., 124°10.90' W. long.;	44°01.18' N. lat., 124°15.42' W. long.;	43°05.65' N. lat., 124°31.52' W. long.;
45°40.64' N. lat., 124°04.90' W. long.;	44°44.96' N. lat., 124°14.39' W. long.;	43°51.61' N. lat., 124°14.68' W. long.;	42°59.66' N. lat., 124°32.58' W. long.;
45°33.00' N. lat., 124°04.46' W. long.;	44°43.44' N. lat., 124°14.78' W. long.;	43°42.66' N. lat., 124°15.46' W. long.;	42°54.97' N. lat., 124°36.99' W. long.;
45°32.27' N. lat., 124°04.74' W. long.;	44°42.26' N. lat., 124°13.81' W. long.;	43°40.49' N. lat., 124°15.74' W. long.;	42°53.81' N. lat., 124°38.57' W. long.;
45°29.26' N. lat., 124°04.22' W. long.;	44°41.68' N. lat., 124°15.38' W. long.;	43°38.77' N. lat., 124°15.64' W. long.;	42°50.00' N. lat., 124°39.68' W. long.;
45°20.25' N. lat., 124°04.67' W. long.;	44°34.87' N. lat., 124°15.80' W. long.;	43°34.52' N. lat., 124°16.73' W. long.;	42°49.13' N. lat., 124°39.70' W. long.;
45°19.99' N. lat., 124°04.62' W. long.;	44°33.74' N. lat., 124°14.44' W. long.;	43°28.82' N. lat., 124°19.52' W. long.;	42°46.47' N. lat., 124°38.89' W. long.;
45°17.50' N. lat., 124°04.91' W. long.;	44°27.66' N. lat., 124°16.99' W. long.;	43°23.91' N. lat., 124°24.28' W. long.;	42°45.74' N. lat., 124°38.86' W. long.;
45°11.29' N. lat., 124°05.20' W. long.;	44°19.13' N. lat., 124°19.22' W. long.;	43°20.83' N. lat., 124°26.63' W. long.;	42°44.79' N. lat., 124°37.96' W. long.;
45°05.80' N. lat., 124°05.40' W. long.;	44°15.35' N. lat., 124°17.38' W. long.;	43°17.96' N. lat., 124°28.81' W. long.;	42°45.01' N. lat., 124°36.39' W. long.;
45°05.08' N. lat., 124°05.93' W. long.;	44°14.38' N. lat., 124°17.78' W. long.;	43°16.75' N. lat., 124°28.42' W. long.;	42°44.14' N. lat., 124°35.17' W. long.;
45°03.83' N. lat., 124°06.47' W. long.;	44°12.80' N. lat., 124°17.18' W. long.;	43°13.97' N. lat., 124°31.99' W. long.;	42°42.14' N. lat., 124°32.82' W. long.;
45°01.70' N. lat., 124°06.53' W. long.;	44°09.23' N. lat., 124°15.96' W. long.;	43°13.72' N. lat., 124°33.25' W. long.;	42°40.50' N. lat., 124°31.98' W. long.;
44°58.75' N. lat., 124°07.14' W. long.;	44°08.38' N. lat., 124°16.79' W. long.;	43°12.26' N. lat., 124°34.16' W. long.;	

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

C.6. Notification When Unsafe Conditions Prevent Compliance with Regulations: If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate number of salmon (by species) on board, the estimated time of arrival, and the specific reason the vessel is not able to meet special management area landing restrictions.

In addition to contacting the U.S. Coast Guard, vessels fishing south of the Oregon/California border must notify CDFW within one hour of leaving the management area by calling 800-889-8346 and providing the same information as reported to the U.S. Coast Guard. All salmon must be offloaded within 24 hours of reaching port.

C.7. Incidental Pacific Halibut Harvest: License applications for incidental harvest for Pacific halibut during commercial salmon fishing must be obtained from NMFS.

- a. Pacific halibut retained must be no less than 32 inches in total length (with head on).
- b. During the salmon troll season, incidental harvest is allowed during April, May, and June, and after June 30 if quota remains. WDFW, ODFW, and CDFW will monitor landings. NMFS may make inseason adjustments to the landing restrictions to assure that the incidental harvest rate is appropriate for salmon and halibut availability, does not encourage target fishing on halibut, and does not increase the likelihood of exceeding the quota for this fishery, and may prohibit retention of halibut in the non-Indian salmon troll fishery if there is risk in exceeding the subquota for the salmon troll fishery or the non-tribal commercial fishery allocation. Inseason adjustments will be announced on the NMFS hotline (phone: 800-662-9825 or 206-526-6667). See the most current Pacific Halibut Catch Sharing Plan for more details.
- c. Incidental Pacific halibut catch regulations in the commercial salmon troll fishery adopted for 2024, prior to any 2024 inseason action, will be in effect when incidental Pacific halibut retention opens on April 1, 2024 unless otherwise modified by inseason action at the March 2024 Council meeting.
- d. At the 2024 March meeting, the Council adopted the following options for public review:
Beginning May 16, 2024, through the end of the 2024 salmon troll fishery, and beginning April 1, 2025, until modified through inseason action or superseded by the 2025 management measures license holders may land or possess no more than X Pacific halibut per X Chinook, except one Pacific halibut may be possessed or landed without meeting the ratio requirement, and:
Option I - no more than 35 halibut may be possessed or landed per trip.
Option II - no more than 30 halibut may be possessed or landed per trip.
Option III - no more than 25 halibut may be possessed or landed per trip.
- e. "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long.;
48°18' N. lat.; 124°59' W. long.;
48°11' N. lat.; 124°59' W. long.;
48°11' N. lat.; 125°11' W. long.;
48°04' N. lat.; 125°11' W. long.;
48°04' N. lat.; 124°59' W. long.;
48°00' N. lat.; 124°59' W. long.;
48°00' N. lat.; 125°18' W. long.;
and connecting back to 48°18' N. lat.; 125°18' W. long.

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

- C.8. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
- Chinook remaining from the May through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - Chinook remaining from May, June, and/or July non-Indian commercial troll quotas in the Oregon or California KMZ may be transferred to the Chinook quota for the next open period if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - NMFS may transfer salmon between the recreational and commercial fisheries north of Cape Falcon if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS), and if the transfer would not result in exceeding preseason impact expectations on any stocks.
 - The Council will consider inseason recommendations for special regulations for any experimental fisheries annually in March; proposals must meet Council protocol and be received in November the year prior.
 - If retention of unmarked coho (adipose fin intact) is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected impacts on all stocks is not exceeded.
 - Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.
- C.9. State Waters Fisheries: Consistent with Council management objectives:
- The State of Oregon may establish additional late-season fisheries in state waters.
 - The State of California may establish limited fisheries in selected state waters.
 - Check state regulations for details.
- C.10. For the purposes of California Fish and Game Code, Section 8232.5, the definition of the Klamath Management Zone (KMZ) for the ocean salmon season shall be that area from Humbug Mountain, Oregon, to Latitude 40°10' N.
- C.11. Latitudes for geographical reference of major landmarks along the west coast. Data source: 2023 West Coast federal salmon regulations, Chapter 5.
<https://www.federalregister.gov/documents/2023/05/11/2023-10090/fisheries-off-west-coast-states-west-coast-salmon-fisheries-2023-specifications-and-management#h-56>

Cape Flattery, WA	48°23'00" N lat.	Humboldt South Jetty, CA	40°45'53" N lat.
Cape Alava, WA	48°10'00" N lat.	40°10' line (near Cape Mendocino, CA)	40°10'00" N lat.
Queets River, WA	47°31'42" N lat.	Horse Mountain, CA	40°05'00" N lat.
Leadbetter Point, WA	46°38'10" N lat.	Point Arena, CA	38°57'30" N lat.
Cape Falcon, OR	45°46'00" N lat.	Point Reyes, CA	37°59'44" N lat.
South end Heceta Bank line, OR	43°58'00" N lat.	Point San Pedro, CA	37°35'40" N lat.
Humbug Mountain, OR	42°40'30" N lat.	Pigeon Point, CA	37°11'00" N lat.
Oregon-California border	42°00'00" N lat.	Point Sur, CA	36°18'00" N lat.
		Point Conception, CA	34°27'00" N lat.

- C.12. California 24-hour reporting requirements: Salmon harvested under quota or harvest limit regulations must be reported within 24-hours of landing via electronic fish tickets. Electronic fish tickets shall be completed at the time of the receipt, purchase, or transfer of fish, whichever occurs first, and shall contain the number of salmon landed. Once transfer of fish begins, all fish aboard the vessel are counted as part of the landing. The electronic fish ticket is a web-based form submitted through the "E-Tix" application, managed by the Pacific States Marine Fisheries Commission (PSMFC) and located at <https://etix.psmfc.org>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 1 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information
<p>1. Overall non-Indian TAC: 85,000 Chinook and 105,000 coho marked with a healed adipose fin clip (marked).</p> <p>2. Recreational TAC: 42,500 Chinook and 88,200 marked coho; all retained coho must be marked.</p> <p>3. Various daily limits and species combinations of one and two salmon will be considered. Including one fish, two fish only, one of which may be a Chinook, and two fish only one of which may be a coho.</p> <p>4. Trade:</p> <p>5. No Area 4B add-on fishery.</p> <p>6. Buoy 10 fishery opens August 1 with an expected landed catch of 22,000 marked coho in August and September.</p> <p>7. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.</p>	<p>1. Overall non-Indian TAC: 78,000 Chinook and 95,000 coho marked with a healed adipose fin clip (marked).</p> <p>2. Recreational TAC: 39,000 Chinook and 79,800 marked coho; all retained coho must be marked.</p> <p>3. Same as Alternative 1.</p> <p>4. Trade:</p> <p>5. Same as Alternative 1.</p> <p>6. Buoy 10 fishery opens August 1 with an expected landed catch of 27,000 marked coho in August and September.</p> <p>7. Same as Alternative I.</p>	<p>1. Overall non-Indian TAC: 72,000 Chinook and 80,000 coho marked with a healed adipose fin clip (marked).</p> <p>2. Recreational TAC: 36,000 Chinook and 67,200 marked coho; all retained coho must be marked.</p> <p>3. Same as Alternative 1.</p> <p>4. Trade:</p> <p>5. Same as Alternative 1.</p> <p>6. Buoy 10 fishery opens August 1 with an expected landed catch of 32,000 marked coho in August and September.</p> <p>7. Same as Alternative I.</p>
<p>U.S./Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 15 through earlier of September 30, or 9,170 marked coho subarea quota, with a subarea guideline of 9,780 Chinook (C.5). <p>Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, of which only one may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1).</p> <p>See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</p> <p>Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</p>	<p>U.S./Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 22 through earlier of September 30, or 8,300 marked coho subarea quota, with a subarea guideline of 8,970 Chinook (C.5). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>	<p>U.S./Canada Border to Cape Alava (Neah Bay)</p> <ul style="list-style-type: none"> June 22 through earlier of September 22, or 6,990 marked coho subarea quota, with a subarea guideline of 8,280 Chinook (C.5). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 2 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Cape Alava to Queets River (La Push Subarea)</p> <ul style="list-style-type: none"> June 15 through earlier of September 30, or 2,290 marked coho subarea quota, with a subarea guideline of 1,700 Chinook (C.5). <p>Open seven days per week. All salmon, except no chum beginning August 1; two salmon per day, of which only one may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1).</p> <p>See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</p>	<p>Cape Alava to Queets River (La Push Subarea)</p> <ul style="list-style-type: none"> June 22 through earlier of September 30, or 2,070 marked coho subarea quota, with a subarea guideline of 1,550 Chinook (C.5). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>	<p>Cape Alava to Queets River (La Push Subarea)</p> <ul style="list-style-type: none"> June 22 through earlier of September 22, or 1,750 marked coho subarea quota, with a subarea guideline of 1,440 Chinook (C.5). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>
<p>Queets River to Leadbetter Point (Westport Subarea)</p> <ul style="list-style-type: none"> June 22 through earlier of September 30, or 32,640 marked coho subarea quota, with a subarea guideline of 18,060 Chinook (C.5). <p>Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 22 inches total length (B).</p> <p>Grays Harbor Control Zone closed beginning August 12 (C.4.b).</p> <p>See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</p>	<p>Queets River to Leadbetter Point (Westport Subarea)</p> <ul style="list-style-type: none"> June 29 through earlier of September 30, or 29,530 marked coho subarea quota, with a subarea guideline of 16,580 Chinook (C.5). <p>Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook, except <u>no Chinook retention on Fridays or Saturdays during July</u>. Possession of Chinook salmon is illegal when Chinook retention is prohibited in the area. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 22 inches total length (B).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>	<p>Queets River to Leadbetter Point (Westport Subarea)</p> <ul style="list-style-type: none"> June 30 through earlier of September 22, or 24,860 marked coho subarea quota, with a subarea guideline of 15,300 Chinook (C.5). <p>Open five days per week (Sun.–Thurs.). All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 22 inches total length (B).</p> <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 3 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Leadbetter Point to Cape Falcon (Columbia River Subarea)</p> <ul style="list-style-type: none"> • June 22 through earlier of September 30, or 44,100 marked coho subarea quota, with a subarea guideline of 12,960 Chinook (C.5). <p>Open seven days per week. All salmon; two salmon per day, no more than one of which may be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 22 inches total length (B).</p> <p>Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</p>	<p>Leadbetter Point to Cape Falcon (Columbia River Subarea)</p> <ul style="list-style-type: none"> • June 22 through earlier of September 30, or 39,900 marked coho subarea quota, with a subarea guideline of 11,900 Chinook (C.5). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>	<p>Leadbetter Point to Cape Falcon (Columbia River Subarea)</p> <ul style="list-style-type: none"> • June 29 through earlier of September 22, or 33,600 marked coho subarea quota, with a subarea guideline of 10,980 Chinook (C.5). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 4 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
South of Cape Falcon	South of Cape Falcon	South of Cape Falcon
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information
<ol style="list-style-type: none"> 1. Sacramento River fall Chinook spawning escapement of 188,025 hatchery and natural area adults. 2. Sacramento Index exploitation rate of 12.0%. 3. Klamath River recreational fishery allocation: 3,135 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 6,619 adult Klamath River fall Chinook. 5. Overall recreational coho TAC: 50,000 coho marked with a healed adipose fin clip (marked), and 30,000 coho in the non-mark-selective coho fishery. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the CFGC. 	<ol style="list-style-type: none"> 1. Sacramento River fall Chinook spawning escapement of 180,978 hatchery and natural area adults. 2. Sacramento Index exploitation rate of 15.3%. 3. Klamath River recreational fishery allocation: 3,297 adult Klamath River fall Chinook. 4. Klamath tribal allocation: 6,565 adult Klamath River fall Chinook 5. Overall recreational coho TAC: 45,000 coho marked with a healed adipose fin clip (marked), and 27,500 coho in the non-mark-selective coho fishery. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the CFGC. 	<ol style="list-style-type: none"> 1. Sacramento River fall Chinook spawning escapement of 182,985 hatchery and natural area adults. 2. Sacramento Index exploitation rate of 14.3%. 3. Klamath River recreational fishery allocation 6,059 adult Klamath River fall Chinook. Klamath tribal allocation: 6,305 adult Klamath River fall Chinook. 5. Overall recreational coho TAC: 40,000 coho marked with a healed adipose fin clip (marked), and 25,000 coho in the non-mark-selective coho fishery. 6. Fisheries may need to be adjusted to meet NMFS ESA consultation standards, FMP requirements, other management objectives, or upon receipt of new allocation recommendations from the CFGC.
<p>Cape Falcon to Humbug Mt.</p> <ul style="list-style-type: none"> • March 15-October 31 (C.6). <p>Open seven days per week. All salmon except coho, except as provided below during the all-salmon mark-selective coho fishery and the non-mark-selective coho fishery (C.5), two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Beginning October 1, the fishery is open only within the 40-fathom management line (C.5.f).</p> <p>In 2025, the season will open March 15 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2024 (C.2, C.3). This opening could be modified following Council review at its March 2025 meeting.</p>	<p>Cape Falcon to Humbug Mt.</p> <ul style="list-style-type: none"> • March 15 – July 31; • September 1- October 31 (C.6). <p>Same as Alternative 1, except beginning September 1, the daily bag limit is two salmon per day, only one of which may be a Chinook.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1</p>	<p>Cape Falcon to Humbug Mt.</p> <ul style="list-style-type: none"> • March 15 – July 31; • September 1- October 31 (C.6). <p>Same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1</p>
<p>Fishing in the Stonewall Bank yelloweye rockfish conservation area is restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d).</p>		

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 5 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Cape Falcon to OR/CA Border. Mark-selective coho fishery:</p> <ul style="list-style-type: none"> • June 15 through the earlier of August 18, or 50,000 marked coho quota (C.6). <p>Open seven days per week. All salmon, two salmon per day. All retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Any remainder of the mark-selective coho quota may be transferred inseason on an impact neutral basis to the September the non-selective coho fishery from Cape Falcon to Humbug Mountain (C.5).</p>	<p>Cape Falcon to OR/CA Border. Mark-selective coho fishery:</p> <ul style="list-style-type: none"> • June 22 through the earlier of August 18, or 45,000 marked coho quota (C.6). <p>Cape Falcon to Humbug Mt.: Open seven days per week. For the period of June 22-July 31 All salmon, two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). For the period of August 1-18, all salmon except Chinook, two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Humbug Mt. to the OR/CA Border: Open seven days per week. For the period of June 22-August 18, all salmon, two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Same as Alternative 1.</p>	<p>Cape Falcon to OR/CA Border. Mark-selective coho fishery:</p> <ul style="list-style-type: none"> • June 29 through the earlier of August 25, or 40,000 marked coho quota (C.6). <p>Cape Falcon to Humbug Mt.: Open seven days per week. For the period of June 29-July 31, all salmon, two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). For the period of August 1-25 All salmon except Chinook, two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Humbug Mt. to the OR/CA Border: Open seven days per week. For the period of June 29-August 25, all salmon, two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Any remainder of the mark-selective coho quota may be transferred inseason on an impact neutral basis to the September recreational or troll non-selective coho fishery from Cape Falcon to Humbug Mountain (C.5) with priority given to the recreational fishery.</p>
<p>Cape Falcon to Humbug Mt. Non-mark-selective coho fishery:</p> <ul style="list-style-type: none"> • September 1 through the earlier of September 30, or 30,000 non-mark-selective coho quota (C.6). Open days may be modified inseason. <p>Open seven days per week. All salmon, two salmon per day (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p>	<p>Cape Falcon to Humbug Mt. Non-mark-selective coho fishery:</p> <ul style="list-style-type: none"> • September 1 through the earlier of September 30, or 27,500 non-mark-selective coho quota (C.6). Open days may be modified inseason. <p>Same as Alternative 1.</p>	<p>Cape Falcon to Humbug Mt. Non-mark-selective coho fishery:</p> <ul style="list-style-type: none"> • September 8 through the earlier of September 30, or 25,000 non-mark-selective coho quota (C.6). Open days may be modified inseason. <p>Same as Alternative 1.</p>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 6 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Humbug Mt. to OR/CA Border (Oregon KMZ)</p> <ul style="list-style-type: none"> • May 16-August 31 (C.6). <p>Open seven days per week. All salmon except coho, except as listed above for the mark-selective coho fishery from Cape Falcon to the OR/CA border (June 15-August 18). Two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p>	<p>Humbug Mt. to OR/CA Border (Oregon KMZ)</p> <ul style="list-style-type: none"> • May 25- August 18 (C.6). <p>Open seven days per week. All salmon except coho, except as listed above for the mark-selective coho fishery from Cape Falcon to the OR/CA border (June 22-August 18). Two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).</p>	<p>Humbug Mt. to OR/CA Border (Oregon KMZ)</p> <ul style="list-style-type: none"> • May 16-August 25 (C.6). <p>Open seven days per week. All salmon except coho, except as listed above for the mark-selective coho fishery from Cape Falcon to the OR/CA border (June 29-August 25). Two salmon per day, all retained coho must be marked with a healed adipose fin clip (C.1). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3)</p>
<p>Fishing in the Stonewall Bank yelloweye rockfish conservation area restricted to trolling only on days the all-depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d)</p>		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>OR/CA Border to latitude 40°10' N. (California KMZ)</p> <ul style="list-style-type: none"> • June 5-9; • July 3-7; • August 1-6, • September 1-3, 27-29; • October 18-20 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 10,000 Chinook during June through August, and 5,000 Chinook during September through October.</p> <p>Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <p>Klamath Control Zone closed in August (C.4.e). See California State regulations for additional closures adjacent to the Smith, Eel, and Klamath Rivers.</p> <p>In 2025, season opens May 1 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2024 (C.2, C.3). This opening could be modified following Council review at its March or April 2025 meeting.</p>	<p>OR/CA Border to latitude 40°10' N. (California KMZ)</p> <ul style="list-style-type: none"> • July 4-7; • August 1-4, 29-31 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.</p> <p>Same as Alternative 1</p> <p>Same as Alternative 1</p> <p>In 2025, same as Alternative 1</p>	<p>OR/CA Border to latitude 40°10' N. (California KMZ)</p> <ul style="list-style-type: none"> • Closed <p>In 2025, same as Alternative 1</p>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 7 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Latitude 40°10' N. to Point Arena (Fort Bragg)</p> <ul style="list-style-type: none"> • June 5-9; • July 3-7; • August 1-6, • September 1-3, 27-29; • October 18-20 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 10,000 Chinook during June through August, and 5,000 Chinook during September through October.</p> <p>Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2025, season opens April 5 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2024 (C.2, C.3). This opening could be modified following Council review at its March 2025 meeting.</p>	<p>Latitude 40°10' N. to Point Arena (Fort Bragg)</p> <ul style="list-style-type: none"> • July 4-7 • August 1-4, 29-31 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>	<p>Latitude 40°10' N. to Point Arena (Fort Bragg)</p> <ul style="list-style-type: none"> • Closed <p>In 2025, same as Alternative 1.</p>
<p>Point Arena to Pigeon Point (San Francisco)</p> <ul style="list-style-type: none"> • June 5-9; • July 3-7; • August 1-6, • September 1-3, 27-29; • October 18-20 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 10,000 Chinook during June through August, and 5,000 Chinook during September through October</p> <p>Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2025, season opens April 5 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2024 (C.2, C.3). This opening could be modified following Council review at its March 2025 meeting</p>	<p>Point Arena to Pigeon Point (San Francisco)</p> <ul style="list-style-type: none"> • July 4-7 • August 1-4, 29-31 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.</p> <p>Same as Alternative 1.</p> <p>In 2025, same as Alternative 1.</p>	<p>Point Arena to Pigeon Point (San Francisco)</p> <ul style="list-style-type: none"> • Closed <p>In 2025, same as Alternative 1</p>

TABLE 2. 2024 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council Adopted. (Page 8 of 10)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<p>Pigeon Point to U.S./Mexico Border (Monterey)</p> <ul style="list-style-type: none"> • June 5-9; • July 3-7; • August 1-6, • September 1-3, 27-29; • October 18-20 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 10,000 Chinook during June through August, and 5,000 Chinook during September through October.</p> <p>Open seven days per week. All salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2025, season opens April 5 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2024 (C.2, C.3). This opening could be modified following Council review at its March 2025 meeting.</p>	<p>Pigeon Point to U.S./Mexico Border (Monterey)</p> <ul style="list-style-type: none"> • July 4-7 • August 1-4, 29-31 (C.6). <p>Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 10,000 Chinook during June through August, and 6,500 Chinook during September through October.</p> <p>In 2025, same as Alternative 1</p>	<p>Pigeon Point to U.S./Mexico Border (Monterey)</p> <ul style="list-style-type: none"> • Closed <p>In 2025, same as Alternative 1.</p>
<p>California State regulations require all salmon be made available to a CDFW representative for sampling immediately at port of landing. Any person in possession of a salmon with a missing adipose fin, upon request by an authorized agent or employee of the CDFW, shall immediately relinquish the head of the salmon to the State (California Code of Regulations Title 14 Section 1.73).</p>		

B. MINIMUM SIZE (Inches) (See C.1)

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon (Westport and Col R)	22	16	None
North of Cape Falcon (Neah Bay and La Push)	24	16	None
Cape Falcon to Humbug Mt.	24	16	None
Humbug Mt. to OR/CA Border	24	16	None
OR/CA Border to Pt. Arena	20	-	None
Pt. Arena to Pigeon Pt.	20	-	None
Pigeon Pt. to U.S./Mexico Border	20	-	None

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. Compliance with Minimum Size and Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught. Salmon may not be filleted, or salmon heads removed prior to landing.
Ocean Boat Limits: Off the coast of Washington, Oregon, and California, each fisher aboard a vessel may continue to use angling gear until the combined daily limits of Chinook and coho salmon for all licensed and juvenile anglers aboard have been attained (additional state restrictions may apply).
- C.2. Gear Restrictions: Salmon may be taken only by hook and line using barbless hooks. All persons fishing for salmon, and all persons fishing from a boat with salmon on board must meet the gear restrictions listed below for specific areas or seasons.
- U.S./Canada Border to Pt. Conception, California:* No more than one rod may be used per angler; and no more than two single point, single shank, barbless hooks are required for all fishing gear.
 - Latitude 40°10' N. to Pt. Conception, California:* Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.
- C.3. Gear Definitions:
- Recreational fishing gear defined:* Off Oregon and Washington, angling tackle consists of a single line that must be attached to a rod and reel held by hand or closely attended; the rod and reel must be held by hand while playing a hooked fish. No person may use more than one rod and line while fishing off Oregon or Washington. Off California, the line must be attached to a rod and reel held by hand or closely attended; weights directly attached to a line may not exceed four pounds (1.8 kg). While fishing off California north of Pt. Conception, no person fishing for salmon, and no person fishing from a boat with salmon on board, may use more than one rod and line. Fishing includes any activity which can reasonably be expected to result in the catching, taking, or harvesting of fish.
 - Trolling defined:* Angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
 - Circle hook defined:* A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.
- C.4. Control Zone Definitions:
- The Bonilla-Tatoosh Line:* A line running from the western end of Cape Flattery to Tatoosh Island Lighthouse (48°23'30" N. lat., 124°44'12" W. long.) to the buoy adjacent to Duntze Rock (48°24'37" N. lat., 124°44'37" W. long.), then in a straight line to Bonilla Pt. (48°35'39" N. lat., 124°42'58" W. long.) on Vancouver Island, British Columbia.
 - Grays Harbor Control Zone -* The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 55'36" N. lat., 124°10'51" W. long.).
 - Columbia Control Zone:* An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09" N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" W. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long. and then along the north jetty to the point of intersection with the Buoy #10 line; and on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
 - Stonewall Bank Yelloweye Rockfish Conservation Area:* The area defined by the following coordinates in the order listed:
44°37.46' N. lat.; 124°24.92' W. long.
44°37.46' N. lat.; 124°23.63' W. long.
44°28.71' N. lat.; 124°21.80' W. long.
44°28.71' N. lat.; 124°24.10' W. long.
44°31.42' N. lat.; 124°25.47' W. long.
and connecting back to 44°37.46' N. lat.; 124°24.92' W. long.
 - Klamath Control Zone:* The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west by 124°23'00" W. long. (approximately 12 nautical miles offshore); and, on the south by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (continued)

g. Waypoints for the 40 fathom regulatory line from Cape Falcon to Humbug Mt. (50 CFR 660.71 (k) (12)-(70), when in place

45°46.00' N. lat., 124°04.49' W. long.;	44°43.44' N. lat., 124°14.78' W. long.;	43°34.52' N. lat., 124°16.73' W. long.;
45°44.34' N. lat., 124°05.09' W. long.;	44°42.26' N. lat., 124°13.81' W. long.;	43°28.82' N. lat., 124°19.52' W. long.;
45°40.64' N. lat., 124°04.90' W. long.;	44°41.68' N. lat., 124°15.38' W. long.;	43°23.91' N. lat., 124°24.28' W. long.;
45°33.00' N. lat., 124°04.46' W. long.;	44°34.87' N. lat., 124°15.80' W. long.;	43°20.83' N. lat., 124°26.63' W. long.;
45°32.27' N. lat., 124°04.74' W. long.;	44°33.74' N. lat., 124°14.44' W. long.;	43°17.96' N. lat., 124°28.81' W. long.;
45°29.26' N. lat., 124°04.22' W. long.;	44°27.66' N. lat., 124°16.99' W. long.;	43°16.75' N. lat., 124°28.42' W. long.;
45°20.25' N. lat., 124°04.67' W. long.;	44°19.13' N. lat., 124°19.22' W. long.;	43°13.97' N. lat., 124°31.99' W. long.;
45°19.99' N. lat., 124°04.62' W. long.;	44°15.35' N. lat., 124°17.38' W. long.;	43°13.72' N. lat., 124°33.25' W. long.;
45°17.50' N. lat., 124°04.91' W. long.;	44°14.38' N. lat., 124°17.78' W. long.;	43°12.26' N. lat., 124°34.16' W. long.;
45°11.29' N. lat., 124°05.20' W. long.;	44°12.80' N. lat., 124°17.18' W. long.;	43°10.96' N. lat., 124°32.33' W. long.;
45°05.80' N. lat., 124°05.40' W. long.;	44°09.23' N. lat., 124°15.96' W. long.;	43°05.65' N. lat., 124°31.52' W. long.;
45°05.08' N. lat., 124°05.93' W. long.;	44°08.38' N. lat., 124°16.79' W. long.;	42°59.66' N. lat., 124°32.58' W. long.;
45°03.83' N. lat., 124°06.47' W. long.;	44°08.30' N. lat., 124°16.75' W. long.;	42°54.97' N. lat., 124°36.99' W. long.;
45°01.70' N. lat., 124°06.53' W. long.;	44°01.18' N. lat., 124°15.42' W. long.;	42°53.81' N. lat., 124°38.57' W. long.;
44°58.75' N. lat., 124°07.14' W. long.;	43°51.61' N. lat., 124°14.68' W. long.;	42°50.00' N. lat., 124°39.68' W. long.;
44°51.28' N. lat., 124°10.21' W. long.;	43°42.66' N. lat., 124°15.46' W. long.;	
44°49.49' N. lat., 124°10.90' W. long.;	43°40.49' N. lat., 124°15.74' W. long.;	
44°44.96' N. lat., 124°14.39' W. long.;	43°38.77' N. lat., 124°15.64' W. long.;	

C.5. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

- a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.
- b. Coho may be transferred inseason among recreational subareas north of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
- c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon if there is agreement among the representatives of the SAS, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
- d. Fishery managers may consider inseason action modifying regulations restricting retention of unmarked (adipose fin intact) coho. To remain consistent with preseason expectations, any inseason action shall consider, if significant, the difference between observed and preseason forecasted (adipose-clipped) mark rates. Such a consideration may also include a change in bag limit of two salmon, no more than one of which may be a coho.
- e. Marked coho remaining from the Cape Falcon to OR/CA Border. A recreational mark-selective coho quota may be transferred inseason to the Cape Falcon to Humbug Mt. non-mark-selective recreational fishery if the transfer would not result in exceeding preseason impact expectations on any stocks.

C.6. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for detail.

TABLE 3. 2024 Treaty Indian troll management Alternatives for ocean salmon fisheries – Council Adopted. (Page 1 of 2)

A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information
<p>1. Overall Treaty-Indian TAC: 45,000 Chinook and 47,500 coho.</p> <p>2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.</p> <p>3. In 2024, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2023. All catch in May 2024 applies against the 2024 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2024 meetings.</p>	<p>1. Overall Treaty-Indian TAC: 40,000 Chinook and 37,500 coho.</p> <p>2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.</p> <p>3. In 2024, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2023. All catch in May 2024 applies against the 2024 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2024 meetings.</p>	<p>1. Overall Treaty-Indian TAC: 35,000 Chinook and 27,500 coho.</p> <p>2. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries.</p> <p>3. In 2024, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2023. All catch in May 2024 applies against the 2024 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2024 meetings.</p>
<ul style="list-style-type: none"> • May 1 through the earlier of June 30 or 22,500 Chinook quota. <p>All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C).</p> <ul style="list-style-type: none"> • July 1 through a season end date of no later than September 30 (TBD), or 22,500 Chinook quota, or 47,500 coho quota. <p>All Salmon. See size limit (B) and other restrictions (C).</p>	<ul style="list-style-type: none"> • May 1 through the earlier of June 30 or 20,000 Chinook quota. <p>All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C).</p> <ul style="list-style-type: none"> • July 1 through a season end date of no later than September 30 (TBD), or 20,000 Chinook quota or 37,500 coho quota <p>All salmon. See size limit (B) and other restrictions (C).</p>	<ul style="list-style-type: none"> • May 1 through the earlier of June 30 or 17,500 Chinook quota. <p>All salmon may be retained except coho. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B) and other restrictions (C).</p> <ul style="list-style-type: none"> • July 1 through a season end date of no later than September 30 (TBD), or 17,500 Chinook quota or 27,500 coho quota <p>All salmon. See size limit (B) and other restrictions (C).</p>

B. MINIMUM LENGTH (TOTAL INCHES)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	24.0 (61.0 cm)	18.0 (45.7 cm)	16.0 (40.6 cm)	12.0 (30.5 cm)	None

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. Tribe and Area Boundaries. All boundaries may be changed to include such other areas as may hereafter be authorized by a Federal court for that tribe's treaty fishery.
- S'KLALLAM - Washington State Statistical Area 4B (defined to include those waters of Puget Sound easterly of a line projected from the Bonilla Point light on Vancouver Island to the Tatoosh Island light, thence to the most westerly point on Cape Flattery and westerly of a line projected true north from the fishing boundary marker at the mouth of the Sekiu River [WAC 220-301-030]).
- MAKAH - Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.
- QUILEUTE - A polygon commencing at Cape Alava, located at latitude 48°10'00" north, longitude 124°43'56.9" west; then proceeding west approximately forty nautical miles at that latitude to a northwestern point located at latitude 48°10'00" north, longitude 125°44'00" west; then proceeding in a southeasterly direction mirroring the coastline at a distance no farther than forty nautical miles from the mainland Pacific coast shoreline at any line of latitude, to a southwestern point at latitude 47°31'42" north, longitude 125°20'26" west; then proceeding east along that line of latitude to the Pacific coast shoreline at latitude 47°31'42" north, longitude 124°21'9.0" west.
- HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.
- QUINAULT - A polygon commencing at the Pacific coast shoreline near Destruction Island, located at latitude 47°40'06" north, longitude 124°23'51.362" west; then proceeding west approximately thirty nautical miles at that latitude to a northwestern point located at latitude 47°40'06" north, longitude 125°08'30" west; then proceeding in a southeasterly direction mirroring the coastline no farther than thirty nautical miles from the mainland Pacific coast shoreline at any line of latitude, to a southwestern point at latitude 46°53'18" north, longitude 124°53'53" west; then proceeding east along that line of latitude to the Pacific coast shoreline at latitude 46°53'18" north, longitude 124°7'36.6" west.
- C.2. Gear restrictions
- a. Single point, single shank, barbless hooks are required in all fisheries.
 - b. No more than eight fixed lines per boat.
 - c. No more than four hand-held lines per person in the Makah area fishery (Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.)
- C.3. Quotas
- a. The quotas include troll catches by the S'Klallam and Makah Tribes in Washington State Statistical Area 4B from May 1 through September 15.
 - b. The **Quileute Tribe may continue a ceremonial and subsistence fishery** during the time frame of October 1 through October 15 in the same manner as in 2004-2015. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2024 season (estimated harvest during the October ceremonial and subsistence fishery: 20 Chinook; 40 coho).
- C.4. Area Closures
- a. The area within a six nautical mile radius of the mouths of the Queets River (47°31'42" N. lat.) and the Hoh River (47°45'12" N. lat.) will be closed to commercial fishing.
 - b. A closure within two nautical miles of the mouth of the Quinault River (47°21'00" N. lat.) may be enacted by the Quinault Nation and/or the State of Washington and will not adversely affect the Secretary of Commerce's management regime.
- C.5. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
- a. Chinook remaining from the May through June treaty-Indian ocean troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.

TABLE 4. 2024 Chinook and coho harvest quotas and guidelines (*) for ocean salmon fishery management Alternatives - Council adopted.

Fishery or Quota Designation	Chinook for Alternative			Coho for Alternative		
	I	II	III	I	II	III
NORTH OF CAPE FALCON						
TREATY INDIAN OCEAN TROLL^{a/}						
U.S./Canada Border to Cape Falcon (All Except Coho)	22,500	20,000	17,500	-	-	-
U.S./Canada Border to Cape Falcon (All Species)	22,500	20,000	17,500	47,500	37,500	27,500
Subtotal Treaty Indian Ocean Troll	45,000	40,000	35,000	47,500	37,500	27,500
NON-INDIAN COMMERCIAL TROLL^{b/}						
U.S./Canada Border to Cape Falcon (All Except Coho)	28,300	23,400	18,000	-	-	-
U.S./Canada Border to Cape Falcon (All Species)	14,200	15,600	18,000	16,800	15,200	12,800
Subtotal Non-Indian Commercial Troll	42,500	39,000	36,000	16,800	15,200	12,800
RECREATIONAL						
U.S./Canada Border to Cape Alava ^{b/}	9,780 *	8,970 *	8,280 *	9,170	8,300	6,990
Cape Alava to Queets River ^{b/}	1,700 *	1,550 *	1,440 *	2,290	2,070	1,750
Queets River to Leadbetter Pt. ^{b/}	18,060 *	16,580 *	15,300 *	32,640	29,530	24,860
Leadbetter Pt. to Cape Falcon ^{b/c/}	12,960 *	11,900 *	10,980 *	44,100	39,900	33,600
Subtotal Recreational	42,500	39,000	36,000	88,200	79,800	67,200
TOTAL NORTH OF CAPE FALCON	130,000	118,000	107,000	152,500	132,500	107,500
SOUTH OF CAPE FALCON						
COMMERCIAL TROLL^{a/}						
Cape Falcon to Humbug Mt.	-	-	-	-	-	10,000
Humbug Mt. to OR/CA Border	-	-	-	-	-	-
OR/CA Border to Humboldt South Jetty	1,000	5,500	-	-	-	-
Horse Mt. to Pt. Arena	5,500	4,000	-	-	-	-
Pt. Arena to Pigeon pt.	7,500	5,500	-	-	-	-
Pigeon Point to U.S./Mexico Border	3,500	2,500	-	-	-	-
Subtotal Commercial Troll	17,500	17,500	-	-	-	10,000
RECREATIONAL						
Cape Falcon to OR/CA Border	-	-	-	80,000 ^{d/}	72,500 ^{e/}	65,000 ^{f/}
OR/CA Border to U.S./Mexico Border	15,000	6,500	-	-	-	-
TOTAL SOUTH OF CAPE FALCON	32,500	24,000	-	80,000	72,500	75,000

a/ Quotas are non-mark selective for both Chinook and coho.

b/ Quotas are non-mark-selective for Chinook and mark-selective for coho.

c/ Does not include Buoy 10 fishery. Expected catch in August and September: Alternative I - 22,000 marked coho; Alternative II - 27,000 marked coho; Alternative III - 32,000 marked coho.

d/ The quota consists of both mark-selective and non-mark-selective coho quotas: 50,000 and 30,000 respectively.

e/ The quota consists of both mark-selective and non-mark-selective coho quotas: 45,000 and 27,500 respectively.

f/ The quota consists of both mark-selective and non-mark-selective coho quotas: 40,000 and 25,000 respectively.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2024 ocean fishery Alternatives - Council Adopted ^{a/} (Page 1 of 3)

Key Stock/Criteria	PROJECTED			2024
	Alt I	Alt II	Alt III	Criteria
CHINOOK				
Columbia Upriver Brights	259.1	260.5	262.8	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	86.9	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 ^{cf} (threatened)	40.6%	39.5%	38.6%	≤ 41.0% Total adult equivalent fishery exploitation rate (2024 NMFS ESA guidance).
Columbia Lower River Wild ^{ef} (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	131.2	133.2	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	52.6	53.5	54.4	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	54.2%	50.0%	46.4%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	36,511	36,511	36,511	≥ 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 6,619, 6,565, and 6,305 adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	20.0%	20.0%	20.0%	≤ 20.0% Council guidance
Adult river mouth return	63.5	63.6	66.1	NA Total adults in thousands.
Age-4 ocean harvest rate	6.0%	5.9%	0.2%	≤ 6.0% NMFS guidance.
KMZ sport fishery share	7.90%	5.80%	69.20%	
River recreational fishery share	47.4%	50.2%	96.1%	Equals 3,135, 3,297, and 6,059 adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	2.8%	1.7%	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	188.0	181.0	183.0	≥ 180,000 2024 minimum hatchery and natural area adult escapement (NMFS Guidance).
Sacramento Index Exploitation Rate	12.0%	15.3%	14.3%	≤ 42.9% FMP control rule.
Ocean commercial impacts	16.8	11.9	0.0	Includes fall (Sept-Dec) 2023 impacts (12 SRFC).
Ocean recreational impacts	5.7	4.0	0.8	Includes fall (Sept-Dec) 2023 impacts (141 SRFC).
River recreational impacts	3.1	16.8	29.8	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	293.0	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

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2024 ocean fishery Alternatives - Council Adopted^{af} (Page 2 of 3).

Key Stock/Criteria	PROJECTED			2024 Criteria	Spaw ner Objective or Other Comparative Standard as Noted ^{b/}
	Alt I	Alt II	Alt III		
COHO	COHO			COHO	
Interior Fraser (Thompson River)	9.8%(5.0%)	8.9%(4.1%)	7.9%(3.1%)	≤ 10.0%	2024 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	33.3%(4.4%)	32.7%(3.6%)	32.0%(2.7%)	≤ 60.0%	2024 total exploitation rate ceiling; FMP matrix ^{df}
Stillaguamish	39.1%(3.2%)	38.6%(2.5%)	38.2%(2.0%)	≤ 50.0%	2024 total exploitation rate ceiling; FMP matrix ^{df}
Snohomish	43.7%(3.2%)	43.2%(2.6%)	42.7%(2.0%)	≤ 40.0%	2024 total exploitation rate ceiling; FMP matrix ^{df}
Hood Canal	42.6%(4.7%)	42.0%(3.9%)	41.4%(3.0%)	≤ 45.0%	2024 total exploitation rate ceiling; FMP matrix ^{df}
Strait of Juan de Fuca	12.6%(4.5%)	11.8%(3.8%)	11.1%(3.0%)	≤ 40.0%	2024 total exploitation rate ceiling; FMP matrix ^{df}
Quillayute Fall	9.5	9.6	9.7	6.3	FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
	42.6%	42.2%	41.7%	≤ 39%	PST total exploitation rate constraint for 2024. ^{df/}
Hoh	4.0	4.1	4.2	2.0	FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
	51.2%	50.2%	49.3%	≤ 59%	PST total exploitation rate constraint for 2024. ^{df/}
Queets Wild	10.5	10.7	10.9	5.8	FMP MSY adult spaw ner estimate. Value depicted is ocean escapement.
	41.6%	40.3%	39.2%	≤ 55%	PST total exploitation rate constraint for 2024. ^{df/}
Grays Harbor	73.0	73.9	74.7	35.4	FMP MSP natural area adult spaw ner estimate. Value depicted is ocean escapement.
	56.0%	55.5%	54.9%	≤ 57%	PST total exploitation rate constraint for 2024. ^{df/}
Willapa Bay	34.3	35.0	35.6	17.2	FMP MSY natural area adult spaw ner estimate. Value depicted is ocean escapement.
Low er Columbia River Natural (threatened)	17.1%	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 ^{af}	59%	60%	61%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	145.0	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	97.5	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)	26.2%	24.7%	24.5%	≤ 30.0%	Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Trinity Natural	16.0%	16.3%	15.5%	≤ 16.0%	Total exploitation rate ceiling (NMFS ESA consultation standard).
Klamath Natural	8.4%	8.7%	7.8%	≤ 15.0%	Total exploitation rate ceiling (NMFS ESA consultation standard).
Rogue Natural	7.4%	7.7%	6.8%	≤ 15.0%	Total exploitation rate ceiling (NMFS ESA consultation standard).
Other Natural	2.5%	2.8%	1.9%	≤ 15.0%	Total exploitation rate ceiling (NMFS ESA consultation standard).

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2024 ocean fishery Alternatives - Council Adopted^{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 6. Preliminary projections of Chinook and coho harvest impacts for 2024 ocean salmon fishery management Alternatives - Council Adopted. (Page 1 of 2)

Area and Fishery	2024 Catch Projection			2024 Bycatch Mortality ^{a/} Projection			2024 Bycatch Projection ^{b/}			Observed in 2023	
	I	II	III	I	II	III	I	II	III	Catch	Bycatch Mortality
	CHINOOK (thousands of fish)										
OCEAN FISHERIES:											
NORTH OF CAPE FALCON											
Treaty Indian Ocean Troll	45.0	40.0	35.0	4.6	4.1	3.6	11.5	10.2	8.9	28.5	2.9
Non-Indian Commercial Troll	42.5	39.0	36.0	17.1	15.3	13.5	60.7	54.1	47.7	37.7	15.3
Recreational	42.5	39.0	36.0	5.1	4.9	4.4	23.5	21.7	19.9	30.1	3.7
CAPE FALCON TO HUMBUG MT.^{c/}											
Commercial Troll	15.1	7.3	1.4	3.0	1.5	0.3	8.4	4.1	0.8	1.5	0.3
Recreational	7.6	2.1	2.1	0.9	1.1	1.4	3.0	5.3	7.2	1.7	0.2
HUMBUG MT. TO OR/CA BORDER											
Commercial Troll	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Recreational	1.5	1.3	1.5	0.2	0.1	0.2	0.6	0.5	0.6	0.0	0.0 ^{d/}
OR/CA BORDER TO to LAT 40°10' N.											
Commercial Troll	1.0	5.5	-	0.2	1.1	-	0.6	3.1	-	0.0	0.0
Recreational	1.3	0.3	-	0.1	0.0	-	0.5	0.1	-	0.0	0.0 ^{d/}
LAT 40°10' N. TO PT. ARENA											
Commercial Troll	5.3	1.6	-	1.1	0.3	-	3.0	0.9	-	0.0	0.0 ^{d/}
Recreational	0.8	0.3	-	0.1	0.0	-	0.3	0.1	-	0.0	0.0 ^{d/}
PT. ARENA TO PIGEON PT.											
Commercial Troll	13.7	4.3	-	2.7	0.9	-	7.6	2.4	-	0.0	0.0 ^{d/}
Recreational	6.2	2.4	-	0.7	0.3	-	2.3	0.9	-	0.0	0.0 ^{d/}
SOUTH OF PIGEON PT.											
Commercial Troll	3.6	2.2	-	0.7	0.4	-	2.0	1.2	-	0.0	0.0 ^{d/}
Recreational	0.8	0.3	-	0.1	0.0	-	0.3	0.1	-	0.0	0.0 ^{d/}
TOTAL OCEAN FISHERIES											
Commercial Troll	126.3	99.9	72.4	29.4	23.5	17.4	93.7	75.9	57.4	67.6	18.5
Recreational	60.6	45.6	39.5	7.2	6.5	6.0	30.5	28.8	27.7	31.8	3.9
INSIDE FISHERIES:											
Area 4B	-	-	-	-	-	-	-	-	-	-	-
Buoy 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.1	3.9 ^{d/}

TABLE 6. Preliminary projections of Chinook and coho harvest impacts for 2024 ocean salmon fishery management Alternatives - Council adopted. (Page 2 of 2).

Area and Fishery	2024 Catch Projection			2024 Bycatch Mortality ^{a/} Projection			2024 Bycatch Projection ^{b/}			Observed in 2023	
	I	II	III	I	II	III	I	II	III	Catch	Bycatch Mortality
OCEAN FISHERIES:											
COHO (thousands of fish)											
NORTH OF CAPE FALCON											
Treaty Indian Ocean Troll ^{e/}	47.5	37.5	27.5	3.2	2.6	2.0	5.7	4.9	3.8	30.0	1.8
Non-Indian Commercial Troll	16.8	15.2	12.8	11.0	9.6	7.7	37.2	32.2	25.8	9.4	4.1
Recreational	88.2	79.8	67.2	23.2	20.7	17.1	108.2	96.2	79.4	59.6	10.2
SOUTH OF CAPE FALCON											
Commercial Troll	0.0	0.0	10.0	2.6	2.9	0.5	10.0	11.2	0.5	3.2	0.2
Recreational ^{e/}	80.0	72.5	65.0	25.5	22.6	20.4	123.9	108.8	98.6	50.6	10.2
TOTAL OCEAN FISHERIES											
Commercial Troll	64.3	52.7	50.3	16.8	15.1	10.2	52.9	48.2	30.2	42.7	6.0
Recreational	168.2	152.3	132.2	48.7	43.3	37.5	232.1	205.0	178.0	110.2	20.4
INSIDE FISHERIES:											
Area 4B	-	-	-	-	-	-	-	-	-	-	-
Buoy 10	22.0	27.0	32.0	6.8	8.1	9.3	32.4	38.7	44.2	9.8	1.7 ^{d/}

a/ The bycatch mortality reported in this table consists of drop-off mortality (includes predation on hooked fish) plus hook-and-release mortality of Chinook and coho salmon in Council-area fisheries. Drop-off mortality for both Chinook and coho is assumed to be equal to 5% of total encounters. The hook-and-release mortality (HRM) rates used for both Chinook and coho are:

Commercial: 26%.

Recreational, north of Pt. Arena: 14%.

Recreational, south of Pt. Arena: 16% (based on the expected proportion of fish that will be caught using mooching versus trolling gear, and the HRMs of 42.2% and 14% for these two respective gear types).

b/ Bycatch calculated as dropoff mortality plus fish released.

c/ Includes Oregon territorial water, late season Chinook fisheries.

d/ Based on reported released Chinook or coho. Reported releases in California fisheries are used as a surrogate in Oregon fisheries.

e/ Includes fisheries that allow retention of all legal sized coho.

TABLE 7. Expected coastwide exploitation rates by fishery for 2024 ocean fisheries management Alternatives for lower Columbia Natural (LCN), Oregon coastal natural (OCN), Lower Columbia River (LCR) tule Chinook, and Southern Oregon Northern California Coastal (SONCC) coho salmon by natural-origin subcomponent - Council Adopted (Page 1 of 2)

Fishery	Exploitation Rate (Percent)								
	LCN Coho			OCN Coho			LCR Tule Chinook		
	I	II	III	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.1%	2.1%
BRITISH COLUMBIA	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%	13.9%	14.1%	14.3%
PUGET SOUND/STRAIT	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.4%	0.4%	0.4%
NORTH OF CAPE FALCON									
Treaty Indian Ocean Troll	2.4%	1.9%	1.4%	0.5%	0.4%	0.3%	2.2%	2.0%	1.7%
Recreational	6.4%	5.7%	4.6%	1.1%	1.0%	0.8%	4.5%	4.1%	3.8%
Non-Indian Troll	1.7%	1.5%	1.2%	0.4%	0.3%	0.3%	6.1%	5.6%	5.1%
SOUTH OF CAPE FALCON									
Recreational:							0.2%	0.1%	0.1%
Cape Falcon to Humbug Mt.	5.7%	5.1%	4.5%	14.5%	13.1%	12.0%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.1%	0.1%	0.1%	0.6%	0.5%	0.4%	-	-	-
OR/CA border to Latitude 40°10' N. (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
Fort Bragg	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%	-	-	-
Troll:							0.8%	0.4%	0.2%
Cape Falcon to Humbug Mt.	0.2%	0.2%	1.1%	0.2%	0.1%	1.9%	-	-	-
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
OR/CA border to Horse Mt. (KMZ)	0.0%	0.1%	0.0%	0.1%	0.4%	0.0%	-	-	-
Fort Bragg	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-	-	-
South of Pt. Arena	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-
BUOY 10	2.6%	3.1%	3.5%	0.2%	0.2%	0.2%	10.5%	10.7%	10.8%
ESTUARY/FRESHWATER	NA	NA	NA	8.2%	8.2%	8.2%			
TOTAL^{a/}	17.1%	15.0%	13.5%	26.2%	24.7%	24.5%	40.6%	39.5%	38.6%

TABLE 7. Expected coastwide exploitation rates by fishery for 2024 ocean fisheries management Alternatives for lower Columbia Natural (LCN), Oregon coastal natural (OCN), Lower Columbia River (LCR) tulle Chinook, and Southern Oregon Northern California Coastal (SONCC) coho salmon by natural-origin subcomponent - Council Adopted (Page 2 of 2).

Fishery	Exploitation Rate (Percent)											
	Trinity Natural			Klamath Natural			Rogue Natural			Other SONCC		
	I	II	III	I	II	III	I	II	III	I	II	III
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BRITISH COLUMBIA	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
PUGET SOUND/STRAIT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Recreational	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Indian Troll	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SOUTH OF CAPE FALCON												
Recreational:												
Cape Falcon to Humbug Mt.	0.9%	0.7%	0.6%	0.9%	0.7%	0.6%	0.9%	0.7%	0.6%	0.9%	0.7%	0.6%
Humbug Mt. to OR/CA border (KMZ)	1.1%	1.0%	0.9%	1.1%	1.0%	0.9%	1.1%	1.0%	0.9%	1.1%	1.0%	0.9%
OR/CA border to Latitude 40°10' N. (KMZ)	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
Fort Bragg	0.0%	0.0%	0.0%	0.0%	0.0%	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%	0.0%	0.0%	0.0%	0.0%	0.0%
Troll:												
Cape Falcon to Humbug Mt.	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
OR/CA border to Horse Mt. (KMZ)	0.2%	0.9%	0.0%	0.2%	0.9%	0.0%	0.2%	0.9%	0.0%	0.2%	0.9%	0.0%
Fort Bragg	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%
South of Pt. Arena	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BUOY 10	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ESTUARY/FRESHWATER	13.5%	13.5%	13.6%	5.9%	5.9%	5.9%	4.9%	4.9%	4.9%	0.0%	0.0%	0.0%
TOTAL	16.0%	16.3%	15.5%	8.4%	8.7%	7.8%	7.4%	7.7%	6.8%	2.5%	2.8%	1.9%

a/ Totals do not include Buoy 10 and estuary/freshwater for LCN. For OCN, SONCC, and LCR Tulle Chinook, includes projected impacts of inriver fisheries that have not yet been shaped. Bolded values identify ocean exploitation rates that, when combined with freshwater harvest rates, would exceed the total allowable exploitation rate.

TABLE 8. Projected coho mark rates for 2024 fisheries under base period fishing patterns (percent marked).

Area	Fishery	June	July	August	Sept
Canada					
Johnstone Strait	Recreational	--	27%	22%	--
West Coast Vancouver Island	Recreational	44%	43%	41%	42%
North Georgia Strait	Recreational	43%	44%	43%	38%
South Georgia Strait	Recreational	46%	49%	44%	45%
Juan de Fuca Strait	Recreational	44%	44%	45%	43%
Johnstone Strait	Troll	50%	40%	33%	37%
NW Vancouver Island	Troll	47%	42%	43%	43%
SW Vancouver Island	Troll	53%	48%	48%	49%
Georgia Strait	Troll	52%	50%	51%	46%
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational	49%	47%	47%	46%
Strait of Juan de Fuca (Area 6)	Recreational	46%	46%	48%	43%
San Juan Island (Area 7)	Recreational	52%	53%	47%	34%
North Puget Sound (Areas 6 & 7A)	Net	--	48%	49%	38%
Council Area					
Neah Bay (Area 4/4B)	Recreational	44%	50%	48%	53%
LaPush (Area 3)	Recreational	44%	51%	54%	51%
Westport (Area 2)	Recreational	56%	56%	54%	52%
Columbia River (Area 1)	Recreational	57%	59%	54%	55%
Tillamook	Recreational	51%	47%	40%	28%
New port	Recreational	46%	41%	38%	26%
Coos Bay	Recreational	32%	30%	20%	10%
Brookings	Recreational	27%	17%	15%	3%
Neah Bay (Area 4/4B)	Troll	51%	50%	49%	48%
LaPush (Area 3)	Troll	50%	51%	48%	47%
Westport (Area 2)	Troll	49%	53%	54%	56%
Columbia River (Area 1)	Troll	57%	57%	55%	46%
Tillamook	Troll	51%	48%	45%	45%
New port	Troll	46%	43%	37%	35%
Coos Bay	Troll	32%	29%	24%	14%
Brookings	Troll	23%	24%	27%	47%
Columbia River					
Buoy 10	Recreational	--	--	--	54%

TABLE 9. Status categories and constraints for Puget Sound and Washington Coast coho under the FMP and PST Southern Coho Management Plan.

FMP		
FMP Stock	Total Exploitation Rate Constraint ^{a/}	Categorical Status ^{a/}
Skagit	60%	Normal
Stillaguamish	50%	Normal
Snohomish	40%	Low
Hood Canal	45%	Low
Strait of Juan de Fuca	40%	Low
Quillayute Fall	59%	
Hoh	65%	
Queets	65%	
Grays Harbor	65%	

PST Southern Coho Management Plan		
U.S. Management Unit	Total Exploitation Rate Constraint ^{b/}	Categorical Status ^{c/}
Skagit	60%	Abundant
Stillaguamish	50%	Abundant
Snohomish	40%	Moderate
Hood Canal	45%	Moderate
Strait of Juan de Fuca	40%	Moderate
Quillayute Fall ^{c/}	39%	Moderate
Hoh ^{c/}	59%	Abundant
Queets ^{c/}	55%	Abundant
Grays Harbor ^{c/d/}	57%	Abundant

a/ Preliminary. For Puget Sound stocks, the exploitation rate constraints and categorical status (Normal, Low, Critical) reflect application of Comprehensive Coho Agreement rules, as adopted in the FMP. For Washington Coast stocks, exploitation rate constraints represent MFMT. Note that under *U.S. v. Washington* and *Hoh v. Baldrige* case law, the management objectives can differ from FMP objectives provided there is an annual agreement among the state and tribal comanagers; therefore, the exploitation rates used to report categorical status do not necessarily represent maximum allowable rates for these stocks.

b/ Preliminary. For Puget Sound and Washington Coast management units, the exploitation rate constraints reflect application of the 2019 PST Southern Coho Management Plan.

c/ Categories (Abundant, Moderate, Low) correspond to the general exploitation rate ranges depicted in paragraph 8(b)(iii) of the 2019 PST Southern Coho Management Plan. For Washington Coast stocks, categorical status is determined by the exploitation rate associated with meeting the escapement goal (or the lower end of the escapement goal range). As Washington Coast stocks are managed to achieve agreed escapement goals, this exploitation rate also becomes an approximation of the maximum allowable rate unless the stock is in the "Low" status. In that case, an ER of up to 20% is allowed.

d/ Based on projected natural area spawners (wild plus hatchery strays) and MSP escapement goal of 35,400. Exploitation rate constraint subject to change should comanagers agree to a modified escapement goal under *U.S. v. Washington* and *Hoh v. Baldrige* case law.

TABLE 10. Preliminary projected exvessel value under Council-adopted 2024 non-Indian commercial troll regulatory Alternatives compared to 2023 and the 2018-2022 average (in inflation-adjusted dollars).

Management Area	Alternative	Exvessel Value (thousands of dollars) ^{a/}				
		2024 Projected ^{b/}	2023 Actual	Percent Change from 2023	2018-2022 Average	Percent Change From 2018-2022 Average
North of Cape Falcon	I	3,248	3,533	-8%	2,270	+43%
	II	2,977		-16%		+31%
	III	2,727		-23%		+20%
Cape Falcon to Humbug Mt.	I	1,457	238	+512%	1,853	-21%
	II	705		+196%		-62%
	III	335		+40%		-82%
Humbug Mt. to OR/CA Border	I	1	0	-	89	-99%
	II	1		-		-99%
	III	0		-		-100%
OR/CA Border to 40°10' N. Lat.	I	113	0	-	74	+52%
	II	619		-		+735%
	III	0		-		-100%
40°10' N. Lat. to Pt. Arena	I	368	0	-	1,217	-70%
	II	114		-		-91%
	III	0		-		-100%
Pt. Arena to Pigeon Pt.	I	1,112	0	-	8,846	-87%
	II	346		-		-96%
	III	0		-		-100%
South of Pigeon Pt.	I	320	0	-	5,094	-94%
	II	193		-		-96%
	III	0		-		-100%
Total South of Cape Falcon	I	3,371	238	+1,315%	17,172	-80%
	II	1,978		+730%		-88%
	III	335		+40%		-98%
West Coast Total	I	6,619	3,771	+76%	19,442	-66%
	II	4,954		+31%		-75%
	III	3,062		-19%		-84%

a/ Values are inflation-adjusted to 2023 dollars. Exvessel values are not comparable to the income impacts shown in Table 11.

b/ Projections are based on expected catches in the Council management area and estimated 2023 (or 2022 in cases where there were no landings in 2023) average weights and exvessel prices.

TABLE 11. Preliminary projected angler trips and coastal community income impacts generated under Council-adopted 2024 recreational ocean salmon fishery regulatory Alternatives compared to 2023 and the 2018-2022 average (in inflation-adjusted dollars).

Management Area	Alternative	Angler Trips (thousands)			Community Income Impacts (thousands of dollars) ^{a/}			Percent Change in Income Impacts	
		Estimates Based on the	2023	2018-2022	Estimates Based	2023	2018-2022	Compared to	Compared to
		Options	Actual	Avg.	on the Options	Actual	Avg.	2023	2018-2022 Avg.
North of Cape Falcon ^{b/}	I	87.7	83.0	63.1	13,408.5	12,685	9,941	+6%	+35%
	II	79.9			12,213.0			-4%	+23%
	III	70.4			10,754.7			-15%	+8%
Cape Falcon to Humbug Mt.	I	77.1	59.9	65.6	6,769.9	5,263	5,417	+29%	+25%
	II	66.1			5,805.6			+10%	+7%
	III	58.1			5,099.4			-3%	-6%
Humbug Mt. to OR/CA Border	I	5.2	0.3	5.3	332.1	22	312	+1,388%	+7%
	II	4.4			281.8			+1,163%	-10%
	III	4.9			313.4			+1,304%	+1%
OR/CA Border to 40°10' N. Lat.	I	2.2	0.0	5.5	283.4	0	732	-	-61%
	II	0.9			109.2			-	-85%
	III	0.0			0.0			-	-100%
40°10' N. Lat. to Pt. Arena	I	1.5	0.0	7.5	267.1	0	1,353	-	-80%
	II	1.0			186.1			-	-86%
	III	0.0			0.0			-	-100%
Pt. Arena to Pigeon Pt.	I	9.1	0.0	55.5	2,341.4	0	14,862	-	-84%
	II	5.7			1,471.0			-	-90%
	III	0.0			0.0			-	-100%
South of Pigeon Pt.	I	2.2	0.0	21.0	346.4	0	3,255	-	-89%
	II	1.1			177.2			-	-95%
	III	0.0			0.0			-	-100%
Total South of Cape Falcon	I	97.4	60.3	160.4	10,340	5,285	25,931	+96%	-60%
	II	79.3			8,031			+52%	-69%
	III	63.0			5,413			+2%	-79%
West Coast Total	I	185.1	143.3	223.5	23,749	17,970	35,871	+32%	-34%
	II	159.2			20,244			+13%	-44%
	III	133.4			16,167			-10%	-55%

a/ Income impacts are not comparable to the exvessel values shown in Table 9. All dollar values are expressed in inflation-adjusted 2023 dollars.

b/ Does not include Buoy 10 fishery.

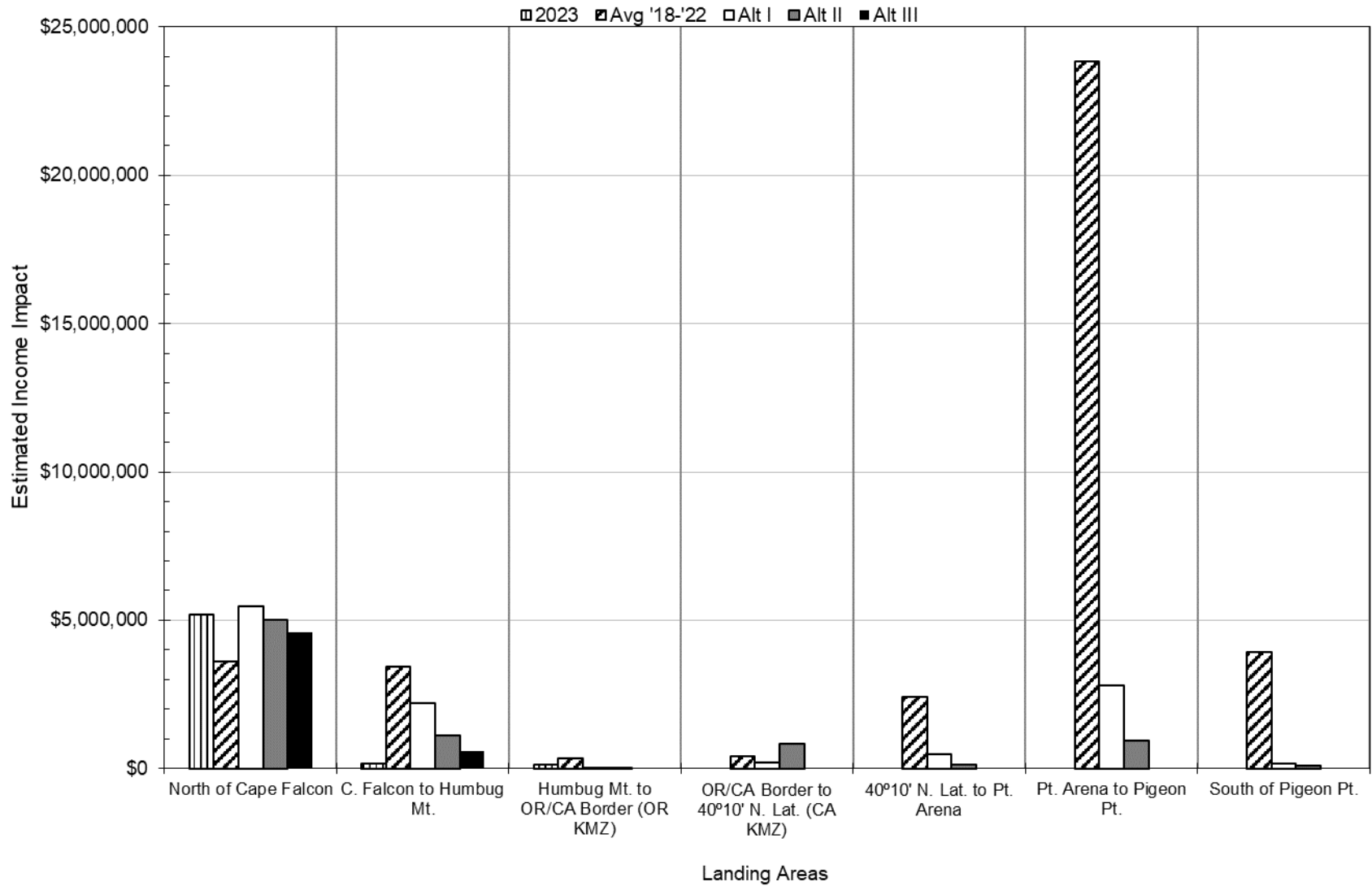


FIGURE 1. Projected community income impacts associated with landings projected under the Council adopted 2024 commercial fishery Alternatives compared to 2023 and the 2018-2022 average (in inflation-adjusted dollars).

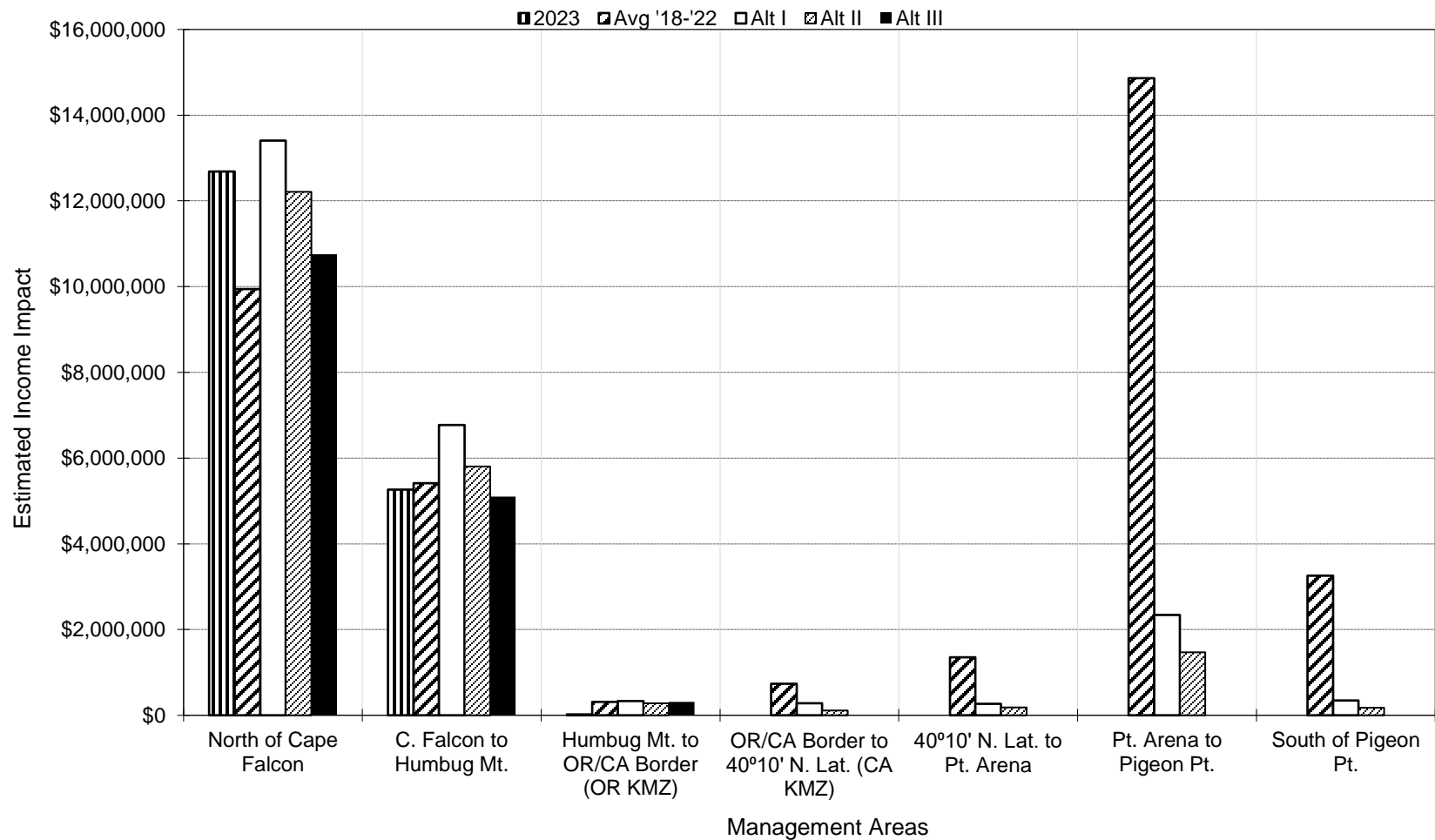


FIGURE 2. Projected community income impacts associated with angler effort projected under the Council adopted 2024 recreational fishery Alternatives compared to 2023 and the 2018-2022 average (in inflation-adjusted dollars).

APPENDIX A: PROJECTED IMPACTS FOR AGE-3 SACRAMENTO RIVER WINTER CHINOOK, ADULT KLAMATH RIVER FALL CHINOOK, AGE-4 KLAMATH RIVER FALL CHINOOK AND ADULT SACRAMENTO RIVER FALL CHINOOK.

Table A-1. Sacramento River winter Chinook age-3 ocean impact rate south of Point Arena by fishery and Alternative. The impacts are displayed as a percent for each Alternative by fishery, port area, and month. Max rate: 12.3%.

Commercial									
Alternative I									
Port	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
SF		0.16			0.14	0.08			0.37
MO		0.49							0.49
Total	0.00	0.65	0.00	0.00	0.14	0.08	0.00	0.00	0.86

Alternative II									
Port	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
SF		0.11							0.11
MO		0.34							0.34
Total	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.45

Alternative III									
Port	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
SF									0.00
MO									0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Recreational										
Alternative I										
Port	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
SF			0.26	0.41	0.19	0.02	0.02			0.91
MO			0.28	0.49	0.26	0.02	0			1.05
Total	0.00	0.00	0.54	0.90	0.45	0.04	0.02	0.00	0.00	1.95

Alternative II										
Port	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
SF				0.33	0.23					0.56
MO				0.40	0.30					0.70
Total	0.00	0.00	0.00	0.73	0.53	0.00	0.00	0.00	0.00	1.26

Alternative III										
Port	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
SF										0.00
MO										0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

Commercial											Recreational											
Alternative I											Alternative I											
<i>36,511 natural area spawners, 20% spawner reduction rate, 6.0% age-4 ocean harvest rate</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		11	8	20	209		248	248	NO	35	0	0	0	11	0	0	25	94	130	165
CO	0	0		64	19	333	212		628	628	CO	0	0	0	0	0	0	3	7	161	171	171
KO				0					0	0	KO						5	101	9	76	191	191
KC							292		292	292	KC							48	39	10	97	97
FB							382		382	382	FB							8	21	6	35	35
SF							1,225		1,225	1,225	SF							61	104	28	193	193
MO							178		178	178	MO							0	0	0	0	0
Total	0	0		75	27	2,430	422		2,954	2,954	Total	35	0	0	0	11	5	221	205	376	818	853
Alternative II											Alternative II											
<i>36,511 natural area spawners, 20% spawner reduction rate, 5.9% age-4 ocean harvest rate</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		11	1	14			26	26	NO	35	0	0	0	11	0	0	25	16	52	87
CO	0	0		64	3	222			289	289	CO	0	0	0	0	0	0	2	7	21	30	30
KO				0					0	0	KO						2	101	9	44	156	156
KC							1,608		1,608	1,608	KC								31	11	42	42
FB							267		267	267	FB								16	7	23	23
SF							858		858	858	SF								83	32	115	115
MO							124		124	124	MO								0	0	0	0
Total	0	0		75	5	3,093			3,173	3,173	Total	35	0	0	0	11	2	103	172	132	420	455
Alternative III											Alternative III											
<i>36,511 natural area spawners, 20% spawner reduction rate, 0.2% age-4 ocean harvest rate</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							0	0	NO	35	0	0	0	11	0	0	26	22	59	94
CO	0	0							0	0	CO	0	0	0	0	0	0	1	7	30	38	38
KO									0	0	KO						5	102	10	63	180	180
KC									0	0	KC											
FB									0	0	FB											
SF									0	0	SF											
MO									0	0	MO											
Total	0	0							0	0	Total	35	0	0	0	11	5	102	43	116	277	312

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

Commercial										Recreational												
Alternative I										Alternative I												
Fall 2023			Summer 2024						Summer	Year	Fall 2023			Summer 2024						Summer	Year	
Port Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Port Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		952	766	314	902		2,934	2,934	NO	0	0	0	3	0	3	71	220	76	373	373
CO	0	12		691	738	588	117		2,134	2,146	CO	141	0	0	0	7	3	36	124	38	208	349
KO				0					0	0	KO						13	90	136	60	299	299
KC							235		235	235	KC							69	86	67	222	222
FB							2,347		2,347	2,347	FB							34	193	105	332	332
SF							6,102		6,102	6,102	SF							954	1,582	951	3,487	3,487
MO							3,072		3,072	3,072	MO							247	285	73	605	605
Total	0	12		1,643	1,504	12,657	1,019		16,823	16,835	Total	141	0	0	3	7	19	1,501	2,626	1,371	5,527	5,668
Alternative II										Alternative II												
Fall 2023			Summer 2024						Summer	Year	Fall 2023			Summer 2024						Summer	Year	
Port Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Port Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		952	132	209			1,293	1,293	NO	0	0	0	3	0	3	44	220	10	280	280
CO	0	12		691	127	392			1,210	1,222	CO	141	0	0	0	7	3	24	124	4	162	303
KO				0					0	0	KO						6	90	136	35	267	267
KC						1,291			1,291	1,291	KC								69	78	147	147
FB						1,643			1,643	1,643	FB								154	123	277	277
SF						4,272			4,272	4,272	SF								1,266	1,110	2,376	2,376
MO						2,150			2,150	2,150	MO								228	85	313	313
Total	0	12		1,643	259	9,957			11,859	11,871	Total	141	0	0	3	7	12	158	2,197	1,443	3,820	3,961
Alternative III										Alternative III												
Fall 2023			Summer 2024						Summer	Year	Fall 2023			Summer 2024						Summer	Year	
Port Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Port Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0									NO	0	0	0	3	0	3	17	220	13	256	256
CO	0	12								12	CO	141	0	0	0	7	3	11	124	5	150	291
KO											KO						13	90	136	49	288	288
KC											KC											
FB											FB											
SF											SF											
MO											MO											
Total	0	12		0						12	Total	141	0	0	3	7	19	118	480	67	694	835

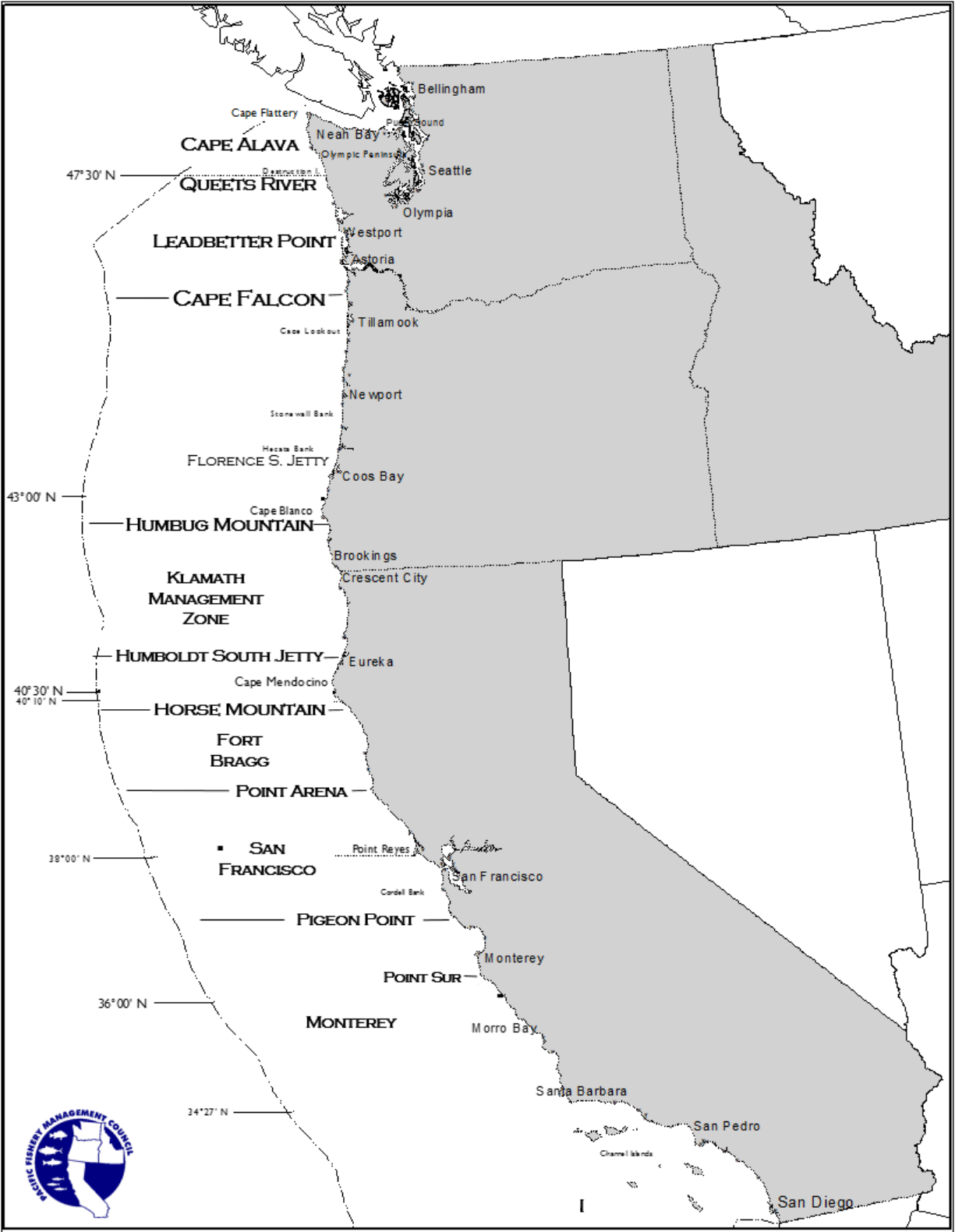


FIGURE 3. Map of Pacific West Coast with major salmon ports and management boundaries. This map is for reference only and is not intended for use in navigation or fishery regulation.