# Preface to the Final Environmental Assessment for 2025 Ocean Salmon Fisheries Management Measures (RIN 0648-BN19)

The development of annual management measures for West Coast salmon fisheries is a well-documented and public process. Alternatives for annual management measures are developed at the March meeting of the Pacific Fishery Management Council (Council). At this meeting, the previous year's fisheries are reviewed, and alternatives are developed for the current year's fisheries after considering projected stock abundances, conservation objectives in the Fishery Management Plan (FMP), and compliance with the Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), and other relevant laws, as well as international agreements under the Pacific Salmon Treaty (PST). Public meetings are held in Washington, Oregon, and California in late March to give the public the opportunity to provide comments on the alternatives. The Council meets again in April to consider public and agency input on the alternatives and to develop and adopt a preferred alternative. Impacts of the preferred alternative are typically within the range of impacts analyzed for the preliminary alternatives, although new fisheries data developed between March and April, especially regarding fisheries north of Cape Falcon, may require modification of the range of impacts.

During this process, the Council and the National Marine Fisheries Service (NMFS) develop a series of documents that describe the development and analysis of the alternatives. These documents collectively form the basis for the Environmental Assessment (EA) for NMFS' analysis of the proposed action of adopting the 2025 ocean salmon fisheries specifications and management measures under the National Environmental Policy Act (NEPA). This Preface is provided to guide the reader through the three documents that, collectively, form the EA (see Table 1, below). These documents are available to the public on the Council's website (www.pcouncil.org):

Preseason Report I (PRE I): Stock Abundance Analysis and Environmental Assessment Part 1 for 2025 Ocean Salmon Fishery Regulations (March 2025).

PRE I describes Purpose and Need, Affected Environment, and the no-action alternative.

Preseason Report II (PRE II): Proposed Alternatives and Environmental Assessment Part 2 for 2025 Ocean Salmon Fishery Regulations (March 2025).

PRE II describes and analyzes the action alternatives.

Preseason Report III (PRE III): Analysis of Council Adopted Management Measures for 2025 Ocean Salmon Fisheries (April 2025).

PRE III describes and analyzes the final preferred alternative adopted by the Council.

A fourth document, also available on the Council's website, is referenced in the EA and describes some aspects of the affected environment, especially related to salmon stocks: Review of 2024 Ocean Salmon Fisheries (February 2025).

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This final EA includes edits and information added after review of the initial documents and in response to public comments. Therefore, this final EA will have differences from the Preseason Report documents on the Council's website.

Table 1. Directory of NEPA elements in the Environmental Assessment for 2025 Ocean Salmon Fisheries Management Measures (RIN 0648-BN19).

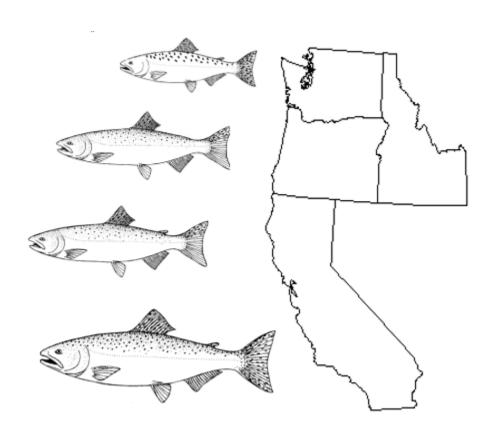
NEPA Element	Location
Purpose and Need	PRE I: Introduction
Affected Environment	PRE I and PRE II
Description of the Affected Environment	PRE I: Section I and Appendix F
	PRE II: Chapter 8
Alternatives	PRE I, PRE II, and PRE III
Description of No-action alternative	PRE I: Section II
Description of Action alternatives	PRE II: Chapter 7, Tables 1 – 4; PRE III: Chapter
	9, Tables 1 - 4
Analysis of Impacts	PRE I and PRE II
Analysis of the No-action Alternative	PRE I: Section II
Salmon Stocks in the Fishery	PRE II: Chapter 8.1, Tables 5-8
Socioeconomics	PRE II: Chapter 8.2, Tables 9-10, Figures 1-2
Non-target, Non-ESA Listed Species	PRE II: Chapter 8.3
Non-ESA Listed Marine Mammals	PRE II: Chapter 8.4
ESA Listed Species (other than salmon)	PRE II: Chapter 8.5
	PRE III: Chapter 11
Seabirds	PRE II: Chapter 8.6
Biodiversity and Ecosystem Function	PRE II: Chapter 8.7
Ocean and Coastal Habitats	PRE II: Chapter 8.8
Public Health and Safety	PRE II: Chapter 8.9
Short Term and Long Term Impacts	PRE II: Chapter 8.10
Final Preferred Alternative	PRE III
Description	PRE III: Tables 1 – 4
Socioeconomic Impacts	PRE III: Chapter 10, Tables 9-10
Effects of the Proposed Action	PRE III: Chapter 11, Tables 5-7, and 11-12
Compliance with other Applicable Law	Addendum
Finding of No Significant Impact (FONSI)	Addendum

## PRESEASON REPORT I

## STOCK ABUNDANCE ANALYSIS AND

## ENVIRONMENTAL ASSESSMENT PART 1 FOR 2025 OCEAN SALMON FISHERY REGULATIONS

**REGULATION IDENTIFIER NUMBER 0648-BN19** 



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Preseason I March 2025

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#### LIST OF ACRONYMS AND ABBREVIATIONS

ABC acceptable biological catch

ACL annual catch limit

BY brood year

CCC central California coast (coho)

CDFW California Department of Fish and Wildlife
CoTC Coho Technical Committee (of the PSC)
Pacific Fishery Management Council
CRFMP Columbia River Fishery Management Plan

CWT coded-wire tag

EA Environmental Assessment

EEZ exclusive economic zone (from 3-200 miles from shore)

EIS Environmental Impact Statement

EMAP Environmental Monitoring and Assessment Program

ESA Endangered Species Act ESU evolutionarily significant unit

 $F_{ABC}$  exploitation rate associated with ABC

 $F_{ACL}$  exploitation rate associated with ACL (=  $F_{ABC}$ )

FMP fishery management plan

F<sub>MSY</sub> maximum sustainable yield exploitation rate

FNMC Far-North-Migrating Coastal

 $F_{OFL}$  exploitation rate associated with the overfishing limit (=  $F_{MSY}$ , MFMT)

FONSI Finding of No Significant Impacts
FRAM Fishery Regulatory Assessment Model

GAM generalized additive models

ISBM individual stock-based management

JA3 January age-3 coho

Jack CR Columbia River jacks (coho)

Jack OC Oregon coastal and Klamath River Basin jacks (coho)

Jack OPI Jack CR + Jack OC (coho)

KMZ Klamath management zone (ocean zone between Humbug Mountain and Horse Mountain

where management emphasis is on Klamath River fall Chinook)

KOHM Klamath Ocean Harvest Model
KRFC Klamath River fall Chinook
KRTT Klamath River Technical Team
LCN lower Columbia River natural (coho)

LCR lower Columbia River (natural tule Chinook)
LRB lower Columbia River bright (Chinook)

LRH lower Columbia River hatchery (tule fall Chinook returning to hatcheries below Bonneville

Dam)

LRW lower Columbia River wild (bright fall Chinook spawning naturally in tributaries below

Bonneville Dam)

MCB Mid-Columbia River bright (bright hatchery fall Chinook released below McNary Dam)

MFMT maximum fishing mortality threshold

MOC mid-Oregon coast

MSA Magnuson-Stevens Fishery Conservation and Management Act

MSM mixed stock model

MSST minimum stock size threshold MSY maximum sustainable yield

NA not available

NEPA National Environmental Policy Act

#### LIST OF ACRONYMS AND ABBREVIATIONS (continued)

NMFS National Marine Fisheries Service

NOC north Oregon coast

NPGO North Pacific Gyre Oscillation NS1G National Standard 1 Guidelines

OA3 ocean age-3 coho

OCN Oregon coast natural (coho)
OCNL Oregon coast natural lake (coho)
OCNR Oregon coast natural river (coho)

ODFW Oregon Department of Fish and Wildlife

OFL overfishing limit

OPI Oregon Production Index (coho salmon stock index south of Leadbetter Point)

OPIH Oregon Production Index public hatchery
OPITT Oregon Production Index Technical Team

OY Optimum Yield

PDO Pacific Decadal Oscillation

PFMC Pacific Fishery Management Council (Council)

PRIH Private hatchery

PSC Pacific Salmon Commission
PST Pacific Salmon Treaty
RER rebuilding exploitation rate
RK Rogue/Klamath (coho)

RMP Resource Management Plan (for exemption from ESA section 9 take prohibitions under limit

6 of the 4(d) rule)

ROPI Rogue Ocean Production Index (Chinook)

SAB Select Area brights (bright fall Chinook destined for Select Area sites on the lower Columbia

River)

S<sub>ABC</sub> spawning escapement associated with ABC

 $S_{ACL}$  spawning escapement associated with ACL (=  $S_{ABC}$ )

SCH Spring Creek Hatchery (tule fall Chinook returning to SCH)

SHM Sacramento Harvest Model

SI Sacramento Index
SJF Strait of Juan de Fuca
SMSY MSY spawning escapement

 $S_{OFL}$  spawning escapement associated with the overfishing limit (=  $S_{MSY}$ )

SOC south Oregon Coast

SONC southern Oregon/northern California (Chinook) SONCC southern Oregon/northern California coast (coho)

SRFC Sacramento River fall Chinook
SRS Stratified Random Sampling
SRWC Sacramento River winter Chinook
STEP Salmon Trout Enhancement Program

STT Salmon Technical Team (formerly the Salmon Plan Development Team)

TAC Technical Advisory Committee (U.S. v. Oregon)

TAC total allowable catch

URB Upriver bright (naturally spawning bright fall Chinook primarily migrating past McNary Dam)

VSI visual stock identification
WCVI West Coast Vancouver Island

WDFW Washington Department of Fish and Wildlife

#### INTRODUCTION

This is the second report 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 constitutes the first part of an Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements for the 2025 ocean salmon management measures.

The STT will provide two additional reports prior to the beginning of the ocean salmon season to help guide the Council's selection of annual fishery management measure, Preseason Report II and Preseason Report III. They will analyze the impact of the Council's proposed alternatives and adopted fishery management recommendations, respectively. These reports will constitute the rest of the sections needed for the EA and will include additional descriptions of the affected environment, a description of the alternatives, and an analysis of the environmental consequences of the alternatives and, including cumulative effects.

A summary of stock abundance forecasts can be found in Section I. Section II provides an assessment of 2024 regulations applied to 2025 abundance forecasts. Appendices provide supplementary information as follows: Appendix A provides a summary of Council stocks and their management objectives; Appendix B contains the Council's current harvest allocation schedules; Appendix C contains pertinent data for Oregon Production Index (OPI) area coho; Appendix D provides a description of the methodology reviewed to develop an updated F<sub>MSY</sub> proxy for Sacramento River fall Chinook; and Appendix E includes documentation provided by Washington co-managers to the Salmon Technical Team on an update and correction to the Coho FRAM. Appendix F provides detailed stock-by-stock analyses of abundance, a description of prediction methodologies, and accuracy of past abundance forecasts for Chinook and coho salmon, respectively. Appendix F also summarizes abundance and forecast information for pink salmon. For NEPA purposes, Section I and Appendix F of this document describe the affected environment, and Section II provides a description and analysis of the No-Action Alternative.

#### PURPOSE AND NEED

The purpose of this action, development, and implementation of ocean salmon fishery management measures for the 2025, <sup>1</sup> is to allow fisheries to harvest surplus production of healthy natural and hatchery salmon stocks within the constraints specified under the Salmon FMP, the Pacific Salmon Treaty (PST), and measures needed to ensure consistency of fishery management with requirements for ESA-listed species (referred to in the FMP as "consultation standards"). In achieving this purpose, management measures must take into account the allocation of harvest among different user groups and port areas. Without this action, the 2024 management measures would remain in effect, and these do not consider changes in abundance of stocks in the mixed stock ocean salmon fisheries or recent modifications to the management framework. Therefore, this action is needed to ensure constraining stocks are not overharvested, and that harvest of abundant stocks can be optimized and achieve the most overall benefit to the nation.

The Salmon FMP also establishes nine more general harvest-related objectives:

Annual management measures are effective beginning 16 May of the year they are implemented and generally continue through 15 May of the following year when they are replaced with the next year's measures. For ease of reference, we refer to the measures being developed for the 16 May 2025 -15 May 2026 fishing season as the 2025 management measures.

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Introduction

Preseason I

- 1. Establish ocean exploitation rates for commercial and recreational salmon fisheries that are consistent with requirements for stock conservation objectives and annual catch limits (ACLs), specified ESA consultation standards, or any applicable rebuilding plans.
- 2. Fulfill obligations to provide opportunity for tribal Indian harvest of salmon as provided in treaties with the United States, as mandated by applicable decisions of the Federal courts, and as specified in the October 4, 1993 opinion of the Solicitor, Department of Interior, with regard to federally-recognized Indian fishing rights of Klamath River Tribes.
- 3. Maintain ocean salmon fishing seasons supporting the continuance of established recreational and commercial fisheries, while meeting salmon harvest allocation objectives among ocean and inside recreational and commercial fisheries that are fair and equitable, and in which fishing interests shall equitably share the obligations of fulfilling any treaty or other legal requirements for harvest opportunities.
- 4. Minimize fishery mortalities for those fish not landed from all ocean salmon fisheries as consistent with achieving optimum yield (OY) and bycatch management specifications.
- 5. Manage and regulate fisheries so that the OY encompasses the quantity and value of food produced, the recreational value, and the social and economic values of the fisheries.
- 6. Develop fair and creative approaches to managing fishing effort; and evaluate and apply effort management systems as appropriate to achieve these management objectives.
- 7. Support the enhancement of salmon stock abundance in conjunction with fishing effort management programs to facilitate economically viable and socially acceptable commercial, recreational, and tribal seasons.
- 8. Achieve long-term coordination with the member states of the Council, Indian tribes with federally-recognized fishing rights, Canada, the North Pacific Fishery Management Council, Alaska, and other management entities which are responsible for salmon habitat or production. Manage consistent with the PST and other international treaty obligations.
- 9. In recommending seasons, to the extent practicable, promote the safety of human life at sea.

These objectives provide "sideboards" for setting management measures necessary to implement the Salmon FMP, which is consistent with the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including the 10 National Standards set forth in the MSA.

Implementation of 2025 management measures will allow fisheries to harvest surplus production of healthy natural and hatchery salmon stocks within the constraints specified under the Salmon FMP and consistent with the MSA.

The MSA includes requirements to end and prevent overfishing through specification of overfishing limits (OFL), acceptable biological catch (ABC), ACLs and accountability measures (AMs). Because OFLs, ABCs, and ACLs are based on annual abundance forecasts, Preseason Report I also specifies OFLs, ABCs, and ACLs for 2025 fisheries.

#### SECTION I. DESCRIPTION OF THE AFFECTED ENVIRONMENT

The action area for this proposed action is the exclusive economic zone (EEZ) of the United States, 3 to 200 nautical miles, off the West Coast of the U.S. (California, Oregon, and Washington).

The affected environment relevant to establishing the 2025 ocean salmon fishery management measures consists of the following components:

• Target Species – Non-ESA-listed Chinook, coho, and pink salmon

- ESA-listed salmon species that are incidentally caught in the ocean salmon fisheries
- Socioeconomic aspects of coastal communities, federally-recognized Tribes, and states
- Other non-target fish species Pacific Halibut, groundfish
- Marine mammals pinnipeds, killer whales
- Seabirds
- Biodiversity and ecosystem function
- Ocean and coastal habitats, ESA critical habitat, and Essential Fish Habitat (EFH)
- Public health or safety
- Unique characteristics of the geographic area
- Cultural, scientific, or historical resources such as those eligible for listing in the National Register of Historic Places

A description of the historical baseline for the components of the affected environment is presented in the *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025). The current status (2025 ocean abundance forecasts) of the environmental components expected to be affected by the 2025 ocean salmon fisheries regulation alternatives (FMP salmon stocks, including those listed under the ESA) are described in this report (Part 1 of the 2025 salmon EA). The *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025) provides a historical description of the salmon fishery affected environment, including stock status and socioeconomic impacts, and represents the current status of the socioeconomic component of the affected environment.

The 2024 ocean salmon fisheries specifications and management measures were assessed in the 2024 NEPA process for ocean salmon regulations (Preseason Reports II and III; PFMC 2024b and 2024c). In those analyses, the proposed management measures were determined to have no significant impacts on the affected environment.

The 2025 No-Action Alternative is the same as the 2024 action. For most components of the affected environment, there have not been changes between 2024 and 2025 that would result in effects on those components being significant in 2025. This document, therefore, does not reanalyze the No-Action Alternative's impact on most components of the affected environment. This document does, however, include analysis of the impacts of the No-Action Alternative on salmon stocks identified in the FMP, the component of the environment for which conditions have changed such that the effects in 2025 are different.

The component of the affected environment that is described in this document consists only of the salmon stocks identified in the FMP (Appendix A). The 2025 forecast abundance of the FMP salmon stocks represents this component of the affected environment. The surviving stock after fishery-related mortality is generally referred to as spawning escapement (S), and the proportion of the stock that succumbs to fishing-related mortality is generally referred to as the exploitation rate (F). These are the metrics that constitute conservation objectives for FMP stocks, and by which effects of the alternatives to this part of the affected environment are evaluated. Thus, application of management measures (alternatives) to the abundance forecasts (affected environment) results in projected exploitation rates and spawning escapements (effects).

A description of the other components of the affected environment considered for 2025 ocean salmon fishery regulation alternatives, including socioeconomic components, and updated additional information on the biological components of the environment, will be presented in Preseason Report II, to be issued after the March Council meeting.

#### ABUNDANCE FORECASTS

Abundance forecasts for 2025 are summarized for key Chinook and coho salmon stocks in Tables I-1 and I-2, respectively. A cursory comparison of preseason forecast and postseason abundance estimates for selected stocks is presented in Figures II-2, II-3, II-4 and III-1. More detailed analyses of this subject are covered in Chapters II (Chinook) and III (coho). Information on pink salmon abundance and forecasts is contained in Chapter IV. Council Salmon FMP conservation objectives are presented in Appendix A; allocation objectives are presented in Appendix B.

In addition to the key stocks with abundance forecasts listed in Tables I-1 and I-2, Council management decisions for the 2025 ocean salmon fishing seasons may be constrained by other stocks, such as some of those listed under the ESA or subject to Pacific Salmon Commission (PSC) agreements, which may not have abundance forecasts made, or do not have abundance forecasts available in time for inclusion in this report. These include the following Evolutionarily Significant Units (ESUs): Central Valley Spring Chinook, California Coastal Chinook, Lower Columbia River (LCR) natural Chinook (tule component), Snake River Fall Chinook; Central California Coast coho, Southern Oregon/Northern California Coast coho, and Interior Fraser (including Thompson River) coho.

## ACCEPTABLE BIOLOGICAL CATCH, ANNUAL CATCH LIMITS, AND OVERFISHING LIMITS

The Salmon FMP includes specifications of ABC, ACLs, OFLs, and Scientific and Statistical Committee (SSC) recommendations for ABC.

Currently, ABC and ACLs specifications are required for three salmon stocks; Sacramento River fall Chinook (SRFC), which serve as an indicator stock for the Central Valley Fall Chinook complex, Klamath River fall Chinook (KRFC), which serve as an indicator stock for the Southern Oregon/Northern California Chinook complex, and Willapa Bay natural coho. Other stocks in the FMP are not required to have ACLs either because they are components of these two stock complexes, are ESA-listed, are hatchery stocks, or are managed under an international agreement.

ABCs and ACLs are not specified for stocks that are managed under an international agreement as there is a statutory exception in the MSA to the requirement for ACLs, and the National Standard 1 Guidelines (NS1Gs) state that ABCs are not required if stocks meet this international exception. The NS1Gs allow the flexibility to consider alternative approaches for specifying ACLs for stocks with unusual life history characteristics like Pacific salmon, and particularly for species listed under the ESA and hatchery stocks. For hatchery stocks, broodstock goals serve as conservation objectives rather than specifying ACLs. For ESA-listed stocks, consultation standards describe necessary controls to ensure fisheries avoid jeopardizing the listed species.

Preseason OFLs are determined for all non-ESA-listed and non-hatchery stocks with an estimate of  $F_{MSY}$  (or Maximum Fishing Mortality Threshold, MFMT) and sufficient information available to make abundance forecasts.

#### **Acceptable Biological Catch**

For salmon, ABC is defined in terms of spawner escapement ( $S_{ABC}$ ), which is determined annually based on stock abundance in spawner equivalent units (N) and the exploitation rate  $F_{ABC}$ .

$$S_{ABC}=N \times (1 - F_{ABC})$$

The ABC control rule defines  $F_{ABC}$  as a fixed exploitation rate reduced from  $F_{MSY}$  to account for scientific uncertainty. The degree of the reduction in F between  $F_{ABC}$  and  $F_{MSY}$  depends on whether  $F_{MSY}$  is directly

estimated (tier 1 stock) or a proxy value is used (tier 2 stock). For tier 1 stocks,  $F_{ABC}$  equals  $F_{MSY}$  reduced by five percent. For tier 2 stocks,  $F_{ABC}$  equals  $F_{MSY}$  reduced by ten percent.

Tier-1: 
$$F_{ABC} = F_{MSY} \times 0.95$$
.  
Tier-2:  $F_{ABC} = F_{MSY} \times 0.90$ .

#### **Annual Catch Limit**

ACLs are also defined in terms of spawner escapement ( $S_{ACL}$ ) based on N and the corresponding exploitation rate ( $F_{ACL}$ ), where the exploitation rate is a fixed value that does not change on an annual basis.

F<sub>ACL</sub> is equivalent to F<sub>ABC</sub> and

$$S_{ACL} = N \times (1-F_{ACL}),$$

which results in  $S_{ACL} = S_{ABC}$  for each management year.

During the annual preseason salmon management process,  $S_{ACL}$  is estimated using the fixed  $F_{ACL}$  exploitation rate and the preseason forecast of N. Thus, fishery management measures must result in an expected spawning escapement greater than or equal to this preseason estimate of  $S_{ACL}$ .

#### Overfishing Limit

For salmon, OFL is defined in terms of spawner escapement ( $S_{OFL}$ ), which is consistent with the common practice of using spawner escapement to assess stock status for salmon.  $S_{OFL}$  is determined annually based on stock abundance, in spawner equivalent units (N) and the exploitation rate  $F_{OFL}$ .

F<sub>OFL</sub> is defined as being equal to F<sub>MSY</sub> (or MFMT) and

$$S_{OFL} = N \times (1 - F_{MSY}).$$

#### STATUS DETERMINATION CRITERIA

The FMP includes status determination criteria (SDC) for overfishing, approaching an overfished condition, overfished, not overfished/rebuilding, and rebuilt. These criteria are:

- Overfishing occurs when a single year exploitation rate exceeds the MFMT, which is based on the maximum sustainable yield exploitation rate (F<sub>MSY</sub>);
- Approaching an overfished condition occurs when the geometric mean of the two most recent postseason estimates of spawning escapement, and the current preseason forecast of spawning escapement, is less than the minimum stock size threshold (MSST);
- Overfished status occurs when the most recent 3-year geometric mean spawning escapement is less than the MSST;
- Not overfished/rebuilding status occurs when a stock has been classified as overfished and has not yet been rebuilt, and the most recent 3-year geometric mean spawning escapement is greater than the MSST but less than S<sub>MSY</sub>;
- A stock is rebuilt when the most recent 3-year geometric mean spawning escapement exceeds S<sub>MSY</sub>.

Comparison of stock status to criteria for overfishing, overfished, not overfished/rebuilding, and rebuilt were reported in the annual SAFE document, *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025). Approaching an overfished condition relies on current year preseason forecasts and Council adopted fishing regulations for the upcoming season in order to calculate projected spawning escapement. In this report, because the actual regulations for the upcoming season are not yet known, the calculations are based on preseason forecasts and Council-adopted regulations from the year prior. Thus, the stock status in this

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report is described as being *at risk* of approaching an overfished condition. Once the regulations for the upcoming season are adopted and spawning escapement is projected, the status description will be updated and provided in the Preseason-III report. All SDC rely on the most recent estimates available, which in some cases may be a year or more in the past because of incomplete broods or data availability; however, some status descriptions reported in the SAFE document may be updated if more recent spawning escapement or exploitation rate estimates become available between the time the SAFE document and this document are published.

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

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

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

Production Source and Stock								
or Stock Group		2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
Vashington Coast		0.0		0.4	0.0	0.5	0.0	D-t/
Willapa Bay Fall	Natural	2.9	3.9	3.1	2.8	3.5	2.3	Return/spawner adjusted for recent model performance.
	Hatchery	28.3	30.5	30.1	27.5	27.3	33.4	Return/spawner adjusted for recent model performance.
Grays Harbor Fall	Natural	15.0	15.5	17.9	15.0	14.3	14.2	Combination of geometric mean of recent year returns and linear relationships of sibling recruits per spawner.
	Hatchery	6.9	7.6	8.6	5.9	5.3	3.9	Recent 5-year geometric mean of returns per release.
Quinault Spring/Summer	Natural	NA	NA	NA	NA	NA	NA	
	Hatchery	NA	NA	NA	NA	NA	NA	
Quinault Fall	Natural	4.2	6.0	3.2	4.0	4.3	4.1	Recent 10-year geometric mean for age 3-5 returns and recent 10 year average return for age 6.
	Hatchery	4.5	4.9	5.6	7.6	3.4	4.6	Recent 5-year mean terminal return rates (return/smolt release) for age 3-6 adult returns, adjusted by brood performance.
Queets Spring/Sum	Natural	0.6	0.6	0.6	0.4	0.4	0.6	Recent 3-year (2022-2024) geometric mean terminal run size.
Queets Fall	Natural	0.0	4.3	5.3	4.3	2.6	3.3	Recent year mean return/spawner rates.
		4.1						·
	Hatchery	0.7	0.6	0.5	0.8	0.4	0.6	Recent year return/smolt release adjusted by brood performance.
Hoh Spring/Summer	Natural	0.8	1.0	0.7	1.0	1.1	1.2	5-year mean recruit/spawner adjusted by previous performance.
Hoh Fall	Natural	2.6	2.6	3.4	2.6	3.5	2.5	5-year mean recruit/spawner adjusted by previous performance.
Quillayute Spring/Summer	Hatchery	2.4	2.6	3.0	2.8	2.5	2.4	Recent 5-year mean return/spawner, adjusted by previous year brood performance.
Quillayute Sum/Fall	Natural	9.8	9.6	8.8	11.3	10.1	8.1	Recent 5-year mean return/spawner, adjusted by previous year brood performance.
Hoko <sup>c/</sup>	Natural	2.6	1.3	0.9	2.8	3.9	1.9	Escapement without fishing, includes supplemental. Sibling regressions using data from return years 1988-2023.
North Coast Totals								10910001010 doing data from fotally yours 1000-2020.
Spring/Summer	Natural	1.4	1.5	1.3	1.4	1.5	1.8	
Fall	Natural	20.6	22.5	20.7	22.1	20.5	18.0	
Spring/Summer	Hatchery	2.4	2.6	3.0	2.8	2.5	2.4	
Fall	Hatchery	5.2	5.5	6.1	8.4	3.8	5.1	

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

Production Source and Sto						`		
or Stock Group		2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
Puget Sound summer/fal		40.0						
Nooksack/Samish	Hatchery	18.2	18.9	28.1	41.2	40.9	53.7	Three year average return rate
East Sound Bay	Hatchery	0.3	0.6	0.4	0.2	0.2	1.0	Three year average return rate
Skagit	Natural	12.9	10.5	12.5	12.2	10.4	9.7	Natural: Hierarchical Bayesian model to estimate the spawner-
	Hatchery	0.5	0.5	0.5	0.5	0.6	0.5	recruit dynamics. Hatchery: One year ahead forecasts generated using Chinook run sizes and GAM and ARIMA models.
Stillaguamish	Natural	0.9	0.9	0.9	1.2	0.9	1.1	Age-specific return rates predicted by linear regressions and generalized linear models that incorporate environmental variables (SCODEN model).
Snohomish	Natural	3.0	2.9	2.4	3.4	2.7	2.9	Age specific forecast models.
	Hatchery	6.8	6.1	6.0	7.5	8.4	11.4	Average return at age by lifestage.
Tulalip	Hatchery	6.0	5.8	7.7	5.5	5.9	4.9	Suite of naïve and sibling regression models for individual age components.
South Puget Sound	Natural	5.8	7.0	6.9	7.0	7.3	8.5	Natural: Lake Washington; 2-yr avg recruit per spawner for age 3, 3-
	Hatchery	100.7	78.8	90.3	90.4	90.5	94.4	yr avg sibling ratios for ages 4 & 5. Green; 5-yr average return rate for age 3 and 3-yr average return rates for ages 4 and 5. Puyallup; NPGO climate prediction for age 3 RPS, SAR sibling relationship for age 4, and 5 year average for age 5. Nisqually; 5-yr average recruit per spawner for ages 3 and 5, sibling relationships for age 4. Hatchery: Variety of recent year average return rates or sibling relationships.
Hood Canal	Natural	4.6	5.7	5.4	3.2	4.3	5.2	Includes hatchery strays to spawning grounds in Skokomish River. Proportioned using Hood Canal terminal run reconstruction-based relative contribution of the individual management units for 2019-2023 return years. Area 12B derived by 5-year average return (2020-2024).
	Hatchery	67.6	64.1	51.9	53.6	56.3	54.5	Brood 2020 fingerling lbs released from WDFW facilities in 2021, multiplied by the average of post-season estimated terminal area return rates for the last 5 years (2020-2024).
Strait of Juan de Fuca Including Dungeness spring run	Natural	5.0	5.5	5.0	3.7	4.3	5.2	Natural and hatchery. Elwha: recent 5-yr mean return rates adjusted by previous brood perfomance for hatchery, 13-yr average hatchery/wild proportion for wild. Dungeness: recent 5-yr mean return rates adjusted by previous brood perfomance.

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

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

c/ Expected spawning escapement without fishing.

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

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

Production Source		z ztock			31 1101	<sub>(</sub> . ugo	/	
and Stock or Stock Group	_	2020	2021	2022	2023	2024	2025	Methodology for 2025 Prediction and Source
OPI Area Total Abundance (California, Oregon Coasts,		268.7	1,732.9	1,225.9	1,135.7	636.3	601.6	Abundance of all OPI components based on post-season coho FRAM runs; prior to 2008 only fishery impacts south of Leadbetter Point were
and Columbia River)								used (traditional OPI accounting). OPITT, see Chapter III for details.
OPI Public	Hatchery	185.7	1607.9	1003.5	896.9	403.1	312.6	OPIH: ARIMA-based MAPE weighted ensemble forecast. Columbia
Columbia River Early		130.7	1014.0	592.5	481.8	227.5	214.1	early/late and Coastal proportions based on jacks; Coastal N/S
Columbia River Late		50.3	576.0	404.7	404.3	173.6	89.7	proportions based on smolts.
Coastal N. of Cape Bland	0	2.4	6.4	1.9	3.0	0.6	3.3	
Coastal S. of Cape Bland	0	2.3	11.5	4.4	7.8	1.4	5.5	
Lower Columbia River (LCN)	Natural	24.8	39.2	65.7	45.5	87.8	72.0	Oregon: recent three year average return; Washingtion: natural smolt production multiplied by 2022 brood marine survival rate. Abundance is subset of early/late hatchery abundance above.
Oregon Coast (OCN)	Natural	83.0	125.0	222.4	238.8	233.2	289.0	Rivers: Generalized additive model (GAM) relating ocean recruits to parental spawners and marine environmental variables. See text in Chapter III for details. Lakes: recent three year average abundance.
Washington Coast								
Willapa	Natural	17.9	19.0	35.8	42.7	29.5	28.0	Washington Coast stocks: A variety of methods were used, primarily
	Hatchery	51.8	61.6	74.7	111.0	91.5	93.7	based on smolt production and survival. See text in Chapter III for details.
Grays Harbor	Natural	50.0	44.8	120.8	103.2	74.9	62.2	
	Hatchery	42.3	31.7	78.3	111.4	68.2	87.8	
Quinault	Natural	17.5	15.0	19.4	23.6	25.3	21.1	
	Hatchery	27.0	24.6	42.7	30.6	34.7	37.3	
Queets	Natural	7.8	3.9	18.3	12.5	12.8	9.0	
	Hatchery	10.9	11.8	22.2	14.9	18.9	9.7	
Hoh	Natural	4.2	3.0	4.7	6.6	4.9	5.4	

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

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

## SECTION II. DESCRIPTION AND ANALYSIS OF THE NO-ACTION ALTERNATIVE

The No-Action Alternative consists of the preseason management measures adopted by the Council and approved by the Secretary of Commerce for the 2024 ocean salmon season between the U.S./Canada border and the U.S./Mexico border. The management measures relate to three fishery sectors: non-Indian commercial (Table V-1), recreational (Table V-2), and treaty Indian (Table V-3). A description of the 2024 preseason management measures and analyses of their projected effects on the biological and socioeconomic environment are presented in Preseason Report III (PFMC 2024c). A description of the 2024 management measures as implemented, including inseason modifications, and an analysis of their effects on the environment, including a historical perspective, is presented in the SAFE document - *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025).

## ANALYSIS OF EFFECTS ON THE ENVIRONMENT OF THE NO-ACTION ALTERNATIVE

#### Overview

Table V-4 provides a summary, where possible, of Salmon FMP stock spawning escapement and exploitation rate projections for 2025 under the No-Action Alternative (2024 regulations), as well as postseason estimates of these quantities for earlier years, which are compared to FMP conservation objectives. For some stocks, postseason estimates of these metrics were either incomplete or unavailable when the *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025) was published. A preliminary determination of stock status under the FMP Status Determination Criteria (SDC) was available for some of these stocks in time for this report; however, some estimates remain unavailable.

Chinook escapements and fishery impacts were forecast using the Sacramento Harvest Model, the Winter Run Harvest Model, and the Klamath Ocean Harvest Model for SRFC, SRWC, and KRFC, respectively. Assessment of effects under the No-Action Alternative for Oregon Coast Chinook are not available. Columbia River Chinook stock assessments were based on qualitative assessment of the magnitude of forecasts, if available, in relation to escapement goals.

Coho escapements and fishery impacts were forecast using the Coho FRAM. Abundance forecasts for 2025 were updated for Washington and Oregon stocks, but forecasts for Canadian stocks are unchanged from those employed for 2024 planning. Updated forecasts for Canadian stocks are expected to become available in March 2025. To provide information on the effects of changes in abundance forecasts, the final 2024 preseason regulatory package for ocean and inside fisheries was applied to 2025 projections of abundance.

#### Sacramento River Fall Chinook Stock

A repeat of 2024 regulations would be expected to result in an escapement of 133,281 hatchery and natural area SRFC adult spawners (fish spawning in both hatchery and natural areas). This projection is greater than the minimum escapement level specified by the control rule for 2025, which is  $S_{MSY}$  (122,000), and greater than the 2025 preseason  $S_{ACL}$  (79,514); Tables V-4 and V-5). The geometric mean of the 2023 and 2024 spawning escapement estimates and the 2025 forecast spawning escapement under the No-Action Alternative is greater than the MSST but lower than  $S_{MSY}$  (Table V-4). The predicted SRFC exploitation rate under the No-Action Alternative is 20 percent, which is below the MFMT (58 percent; Table V-4) and the maximum allowable rate specified by the control rule for 2025 (26.4 percent). If the ocean fisheries were closed from January through August 2025 between Cape Falcon and the U.S./Mexico border, and Sacramento Basin fisheries were closed in 2025, the expected number of hatchery and natural area adult spawners would be 165,499.

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The 2024 estimate of SRFC escapement was 99,274 hatchery and natural area adults, which is greater than the 2024 postseason S<sub>ACL</sub> of 30,890 and the S<sub>OFL</sub> of 22,652 (Table V-5).

#### Sacramento River Winter Chinook Stock

A repeat of 2024 regulations would be expected to result in an age-3 impact rate of 0.0 percent for the area south of Point Arena, California. The 2025 forecast age-3 impact rate under the No-Action Alternative is lower than the 2025 maximum allowable rate of 20.0 percent.

#### Klamath River Fall Chinook Stock

A repeat of 2024 regulations, which included a river recreational harvest allocation of 89.9 percent of the non-tribal harvest and a tribal allocation of 50 percent of the overall adult harvest, would be expected to result in 12,080 natural area adult spawners. This projection is lower than the minimum escapement level specified by the control rule for 2025 (18,687), S<sub>MSY</sub> (40,700), and greater than the 2025 preseason S<sub>ACL</sub> (6,644; Tables V-4 and V-5). The geometric mean of the 2023 and 2024 natural area adult spawner escapement estimates and the 2025 forecast spawning escapement under the No-Action Alternative is lower than the MSST and S<sub>MSY</sub> (Table V-4). The predicted KRFC exploitation rate under the No-Action Alternative is 41.8 percent, which is lower than the MFMT (71.0 percent; Table V-4) but higher than the maximum allowable rate specified by the control rule for 2025 (10.0 percent). If the ocean fisheries were closed from January through August 2025 between Cape Falcon and Point Sur, and the Klamath Basin fisheries (tribal and recreational) were closed in 2025, the expected number of natural area adult spawners would be 20,763.

The 2024 estimate of KRFC escapement was 24,032 natural area adults, which exceeds the 2024 postseason S<sub>ACL</sub> (Table V-5).

#### California Coastal Chinook Stocks

The NMFS ESA consultation standard restricts the KRFC age-4 ocean harvest rate to no more than 16.0 percent to limit impacts on these stocks. The postseason estimate of this rate for 2024 is 2.4 percent. Applying 2024 regulations to the 2025 KRFC abundance results in an age-4 ocean harvest rate forecast of 2.1 percent. If the ocean fisheries were closed from January through August 2025 between Cape Falcon and Point Sur, the expected age-4 ocean harvest rate would be 0 percent (0 age-4 KRFC were harvested during the September through November 2024 period).

#### **Oregon Coast Chinook Stocks**

The FMP conservation objective for the northern and central Oregon coast Chinook stock complexes is based on a total goal of 150,000 to 200,000 natural area adult spawners. For these two stock complexes, attainment of goals is assessed using peak spawner counts observed in standard index reaches for the respective complexes. For the southern Oregon coast Chinook stock complex, the FMP conservation objective is assessed using the escapement estimate at Huntley Park on the Rogue River. Forecasts are not available for all these stocks, but given recent trends, the escapement goals may not be met for all stocks in 2025 under 2024 fishing seasons (Table V-4).

#### Columbia River Chinook Stocks

The 2025 forecasts for most Columbia River spring Chinook originating from both below and above Bonneville dam are greater than the 2024 forecasts. The 2025 forecasts for all fall Chinook stocks (LRW, LRH, MCB, SCH, and URB) are greater than their 2024 forecasts, whereas the 2025 forecast for summer Chinook is less than the 2024 forecast. The 2025 aggregate forecast for fall Chinook (717,100) is greater than the 2024 aggregate forecast (547,800). Given these differences in the stock-specific forecasts for 2025

relative to 2024, applying 2024 regulations to the forecasted 2025 abundance of Columbia River Chinook should result in ocean escapements meeting spawning escapement goals for all summer and fall Chinook stocks (Table V-4).

#### **Washington Coast and Puget Sound Chinook Stocks**

Council fisheries north of Cape Falcon have a negligible impact on Washington coast Chinook stocks and a minor impact on stocks that originate in Puget Sound. These stocks have northerly marine distribution patterns and are therefore impacted primarily by Canadian and Alaskan fisheries. Thus, an evaluation of 2024 Council area management measures on projected 2025 abundance would not provide a useful comparison of fishery impacts in relation to conservation objectives.

#### **Oregon Production Index Area Coho Stocks**

Projected exploitation rates of LCN, OCN, and SONCC coho, under Council-adopted 2024 regulations and preliminary 2025 preseason forecasts are presented in Table V-7. The 2025 allowable LCN coho exploitation rate is expected to be 23.0 percent and the allowable OCN coho exploitation rate is 30.0 percent. Under 2024 regulations, fishery impact rates increase for LCN coho, slightly decrease for OCN coho, and slightly increase for SONCC coho when compared to 2024 preseason projections. LCN coho total impacts rise to 27.1 percent, over the expected 23 percent maximum allowable exploitation rate for 2025. SONCC coho total ocean exploitation is projected at 2.1 percent, a slight increase from the 2.0 percent in 2024. The OCN coho projected total exploitation under this scenario is 23.8 percent, lower than the expected 2025 maximum allowable exploitation rate of 30 percent. Predicted ocean escapements (after Buoy 10) into the Columbia River in 2025 show that under 2024 ocean regulations, Columbia River early and late coho would be expected to meet hatchery return goals (Table V-6).

#### Washington Coast, Puget Sound, and Canadian Coho Stocks

Exploitation rate and ocean escapement expectations in relation to management goals for select naturally spawning coho stocks, given 2025 preseason abundance forecasts and 2024 preseason projections for fishing patterns, are presented in Table V-6. The 2025 forecasts for Canadian coho stocks are not available but are assumed to be at 2024 levels for this analysis. More detailed fishery management goals for Council area coho stocks are listed in Appendix A.

Based on the geometric mean of the two most recent spawning escapement estimates and the 2025 forecasted spawning escapement under the No-Action Alternative, there are no coho stocks that meet the criteria for being at risk of approaching an overfished condition (Table V-4).

Under the No-Action Alternative, FMP exploitation rate conservation objectives applicable for 2025 would be met for all Puget Sound natural coho stocks with the exception of Hood Canal. Ocean escapements for Washington Coast natural coho stocks are above FMP spawning escapement conservation objectives. Management objectives for U.S. Puget Sound natural coho stocks subject to the PST are identical to FMP objectives and would be met under 2024 regulations for all stocks, with the exception of Hood Canal; all Washington Coast natural stocks, with the exception of Grays Harbor; also meet PST management objectives under 2024 regulations.

The exploitation rate by U.S. fisheries south of the Canadian border on Interior Fraser (B.C.) coho is projected to be 10.3 percent, which is above the anticipated 10.0 percent allowable exploitation rate under the 2019 PST Southern Coho Management Plan. This includes Puget Sound fisheries, and the Council area fisheries portion would be 4.8 percent.

#### **Summary**

The effects of projected impacts (where available) under 2024 fishery regulations and 2025 abundance forecasts are as follows:

- The projected SRFC exploitation rate under the No Action Alternative is lower than the maximum level specified by the control rule for 2025.
- SRFC are not at risk of approaching an overfished condition.
- For SRWC, the predicted age-3 impact rate is lower than the maximum allowable rate specified by the control rule.
- The projected KRFC exploitation rate under the No Action Alternative is higher than the maximum level specified by the control rule.
- KRFC are at risk of approaching an overfished condition (and currently overfished).
- All Puget Sound and Washington Coast natural coho stocks, with the exception of Hood Canal and Grays Harbor, would achieve S<sub>MSY</sub> spawning escapement objectives.
- No Puget Sound or Washington Coast natural coho stocks would be at risk of approaching an overfished condition.
- OCN coho would have a projected exploitation rate that complies with ESA consultation standard.
- LCN coho would have a projected exploitation rate that does not comply with anticipated ESA consultation standard.
- SONCC coho would have projected exploitation rates that comply with anticipated ESA consultation standard.
- All coho stocks would have exploitation rates below the MFMT.
- All Puget Sound coho stocks, with the exception of Hood Canal, would have exploitation rates that
  comply with the annual rates allowed under the FMP harvest rate matrix and the allowable levels under
  the 2019 PST Southern Coho Management Plan.
- All Washington coastal coho stocks, with the exception of Grays Harbor, would have exploitation rates that comply with the annual rates allowed under the 2019 PST Southern Coho Management Plan.

#### Conclusion

The No-Action Alternative would not meet the Purpose and Need for the proposed action because:

- Lower coho abundance forecasts in 2025 relative to 2024 could not support the fishery regulations of 2024, likely resulting in some coho stocks that would exceed their exploitation rate limits or not achieve their spawning escapement objectives.
- The projected exploitation rate for KRFC under the No Action Alternative is greater than the maximum allowable exploitation rate for 2025. Consequently, the projected natural-area adult escapement is lower than the minimum level of 18,687 natural-area adult spawners.

The No-Action Alternative does not reflect consideration of changes in the status of salmon stocks from the previous year; therefore, over- or under- harvest of some salmon stocks would occur if this alternative were implemented. The analysis of the No-Action Alternative does, however, provide perspective that is useful in the planning process for 2025 ocean salmon fishery management measures. An understanding of stock shortfalls and surpluses under the No-Action Alternative helps managers, advisors, and constituents construct viable alternatives to the status-quo management measures.

TABLE V-I. 2024 Commercial troll management measures for non-Indian ocean salmon fisheries - Council adopted. (Page 1 of 6)

#### A. SEASON DESCRIPTIONS

#### North of Cape Falcon

#### **Supplemental Management Information**

- 1. Overall non-Indian TAC: 82,000 Chinook and 95,000 coho marked with a healed adipose fin clip (marked).
- 2. Non-Indian commercial troll TAC: 41,000 Chinook and 15,200 marked coho.
- 3. For fisheries scheduled <u>prior</u> to May 16, 2024: See 2023 management measures, which are subject to inseason action and the 2024 season description described below.

Model run: Coho-2425, Chinook-2527

#### U.S./Canada Border to Cape Falcon

• May 16 through the earlier of June 29, or 24,600 Chinook

Catch limits in place for the following areas (C.8):

-U.S./Canada border to Queets River -

No more than 5.600 Chinook.

-Leadbetter Pt. to Cape Falcon -

No more than 5,710 Chinook.

Landing and possession limits in place for the following areas. Landing week is Thursday through Wednesday (C.1, C.6, C.8). Landing limits will be evaluated weekly inseason.

Landing and possession limit of 150 Chinook per vessel combined across all subareas per landing week.

-U.S./Canada border to Queets River -

60 Chinook per vessel per landing week.

-Queets River to Leadbetter Pt. -

150 Chinook per vessel per landing week.

-Leadbetter Pt. to Cape Falcon -

60 Chinook per vessel per landing week.

Open seven days per week (C.1). 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).

If the Chinook quota is exceeded, the excess will be deducted from the all-salmon season (C.8).

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.

#### U.S./Canada Border to Cape Falcon

- U.S./Canada Border to Leadbetter Point: July 1 through the earlier of September 15, or the U.S./Canada Border to Cape Falcon quotas of 16,400 Chinook or 15,200 marked coho (C.8).
- Leadbetter Point to Cape Falcon: July 1 through the earlier of September 30, or the U.S./Canada Border to Cape Falcon quotas of 16,400 Chinook or 15,200 marked coho (C.8).

Open seven days per week. 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).

July 1-10: Landing possession limits of 70 Chinook and 100 marked coho per vessel for the open period.

Beginning July 11: Landing possession limits of 120 Chinook and 100 marked coho per vessel per landing week (Thurs.-Wed.).

Landing limits will be evaluated weekly, inseason (C.1, C.8.f).

#### For all commercial troll fisheries north of Cape Falcon:

Mandatory closed areas include Salmon Troll Yelloweye Rockfish Conservation Area, Cape Flattery, and Columbia Control Zone. Grays Harbor Control Zone closed beginning August 12 (C.5.a, C.5.b, C.5.c, C.5.d).

Vessels must land and deliver their salmon within 24 hours of any closure of this fishery (C.6).

Vessels may not land fish east of the Sekiu River or east of Tongue Point, Oregon.

Vessels fishing for 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 WDFW 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).

#### A. SEASON DESCRIPTIONS North of Cape Falcon (continued)

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 (C.11). 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.).

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 (C.11). 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).

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).

Vessels fishing in a subarea north of Cape Falcon with a higher limit may transit through and land in a subarea with a lower limit. Prior to crossing the subarea line at Leadbetter Point or Queets River, vessels must notify WDFW at 360-249-1215 with area fished, total Chinook, coho, and halibut catch aboard, and destination with approximate time of delivery (C.11).

#### A. SEASON DESCRIPTIONS

#### South of Cape Falcon

#### **Supplemental Management Information**

- 1. Sacramento River fall Chinook spawning escapement of 180,061 hatchery and natural area adults.
- 2. Sacramento Index exploitation rate of 15.7%.
- 3. Klamath River recreational fishery allocation: 4,999 adult Klamath River fall Chinook.
- 4. Klamath tribal allocation: 6.434 adult Klamath River fall Chinook.
- 5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 0% / 100%.
- 6. Overall commercial troll coho TAC: 2,500.

#### Cape Falcon to Humbug Mt.

- April 16-May 29;
- June 1-5; 12-16; 26-30;
- July 26-30;
- August 4-8:
- September 1-October 31 (C.9.a).

Open seven days per week. All salmon, except coho (C.4, C.7) except for in the non-mark selective coho fishery described below. Chinook minimum size limit of 28 inches total length, coho minimum size limit of 16 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).

#### Non-mark-selective coho fishery

September 1 through the earlier of September 30 or a 2,500 coho quota, no more than 25 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). Mandatory reporting required as described below:

Under state law, vessels must report their catch on a state fish receiving ticket. Oregon State regulations require all fishers landing coho in Oregon from any fishery between Cape Falcon, OR and Humbug Mountain, OR 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.

Beginning September 1, no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.). Vessel limits may be modified inseason (C.8.f).

In 2025, the season will open March 15 for all salmon except coho (C.4, C.7). 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).

#### A. SEASON DESCRIPTIONS South of Cape Falcon

#### Humbug Mt. to OR/CA Border (Oregon KMZ)

• April 16-30.

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).

In 2025, the season will open March 15 for all salmon except coho (C.4, C.7). 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.

#### OR/CA Border to Humboldt South Jetty (California KMZ)

Closed

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). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). 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.

#### Humboldt South Jetty to Latitude 40°10' N

· Closed.

#### Latitude 40°10' N. to Point Arena (Fort Bragg)

Closed.

In 2025, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits may be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March or April 2025 meeting.

#### Pt. Arena to Pigeon Pt. (San Francisco)

Closed.

In 2025, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits may be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March or April 2025 meeting.

#### Pigeon Point to U.S./Mexico Border (Monterey)

Closed.

In 2025, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits may be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March or April 2025 meeting.

When the fishery is closed from Humbug Mountain to the OR/CA Border 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).

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).

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

	Chir	nook	Co	ho	
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
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	-	-	-	-	-
Latitude 40°10' N. to Pt. Arena	-	-	-	-	-
Pt. Arena to Pigeon Pt.	-	-	-	-	-
Pigeon Pt. to U.S./Mexico Border	-	-	-	-	-

#### C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. <u>Compliance with Minimum Size or Other Special Restrictions</u>: 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. <u>Vessel Operation in Closed Areas with Salmon on Board</u>:

- 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.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°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.).

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

- 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 Humbug Mt. (50 CFR 660.71 (o) (12)-(62), when in place.

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45°46.00' N. lat., 124°04.49' W. long.;
                                          44°44.96′ N. lat., 124°14.39′ W. long.;
                                                                                    43°40.49' N. lat., 124°15.74' W. long.;
45°44.34' N. lat., 124°05.09' W. long.;
                                          44°43.44′ N. lat., 124°14.78′ W. long.;
                                                                                    43°38.77′ N. lat., 124°15.64′ W. long.;
45°40.64′ N. lat., 124°04.90′ W. long.;
                                          44°42.26′ N. lat., 124°13.81′ W. long.;
                                                                                    43°34.52' N. lat., 124°16.73' W. long.;
                                          44°41.68' N. lat., 124°15.38' W. long.;
45°33.00′ N. lat., 124°04.46′ W. long.;
                                                                                    43°28.82' N. lat., 124°19.52' W. long.;
45°32.27′ N. lat., 124°04.74′ W. long.;
                                          44°34.87' N. lat., 124°15.80' W. long.;
                                                                                    43°23.91' N. lat., 124°24.28' W. long.;
45°29.26' N. lat., 124°04.22' W. long.;
                                          44°33.74′ N. lat., 124°14.44′ W. long.;
                                                                                    43°20.83' N. lat., 124°26.63' W. long.;
45°20.25' N. lat., 124°04.67' W. long.;
                                          44°27.66′ N. lat., 124°16.99′ W. long.;
                                                                                    43°17.96' N. lat., 124°28.81' W. long.;
45°19.99' N. lat., 124°04.62' W. long.;
                                          44°19.13' N. lat., 124°19.22' W. long.;
                                                                                    43°16.75' N. lat., 124°28.42' W. long.;
45°17.50′ N. lat., 124°04.91′ W. long.;
                                          44°15.35′ N. lat., 124°17.38′ W. long.;
                                                                                    43°13.97' N. lat., 124°31.99' W. long.;
45°11.29′ N. lat., 124°05.20′ W. long.;
                                          44°14.38′ N. lat., 124°17.78′ W. long.;
                                                                                    43°13.72′ N. lat., 124°33.25′ W. long.;
45°05.80' N. lat., 124°05.40' W. long.;
                                          44°12.80′ N. lat.. 124°17.18′ W. long.:
                                                                                    43°12.26' N. lat., 124°34.16' W. long.;
45°05.08' N. lat., 124°05.93' W. long.;
                                          44°09.23' N. lat., 124°15.96' W. long.;
                                                                                    43°10.96′ N. lat., 124°32.33′ W. long.;
                                          44°08.38' N. lat., 124°16.79' W. long.;
                                                                                    43°05.65′ N. lat., 124°31.52′ W. long.;
45°03.83′ N. lat., 124°06.47′ W. long.;
45°01.70′ N. lat., 124°06.53′ W. long.;
                                          44°08.30′ N. lat., 124°16.75′ W. long.;
                                                                                    42°59.66′ N. lat., 124°32.58′ W. long
44°58.75′ N. lat., 124°07.14′ W. long.;
                                          44°01.18' N. lat., 124°15.42' W. long.;
                                                                                    42°54.97′ N. lat., 124°36.99′ W. long
44°51.28′ N. lat., 124°10.21′ W. long.;
                                          43°51.61' N. lat., 124°14.68' W. long.;
                                                                                    42°53.81′ N. lat., 124°38.57′ W. long.;
44°49.49' N. lat., 124°10.90' W. long.;
                                          43°42.66′ N. lat., 124°15.46′ W. long.;
                                                                                    42°50.00' N. lat., 124°39.68' W. long.;
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C.6. <u>Notification When Unsafe Conditions Prevent Compliance with Regulations</u>: 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. <u>Incidental Pacific Halibut Harvest</u>: 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 as quota is available. 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. 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 1 Pacific halibut per 2 Chinook, except one Pacific halibut may be possessed or landed without meeting the ratio requirement, and no more than 35 halibut may be possessed or landed per trip.

Preseason I Table 1

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

a. "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:

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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°04' 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.
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- C.8. <u>Inseason Management</u>: 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 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.
  - b. 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.
  - c. 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.
  - d. 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.
  - e. 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.
  - f. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.
  - g. Deviations from the allocation of allowable ocean harvest of coho salmon in the area south of Cape Falcon may be allowed to meet consultation standards for ESA-listed stocks (FMP 5.3.2). Therefore, any rollovers resulting in a deviation from the south of Cape Falcon coho allocation schedule would fall underneath this exemption.
- C.9. State Waters Fisheries: Consistent with Council management objectives:
  - a. The State of Oregon may establish additional late-season fisheries in state waters.
  - b. The State of California may establish limited fisheries in selected state waters.
  - c. 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. <u>Latitudes for geographical reference of major landmarks along the west coast</u>. 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. <u>California 24-hour reporting requirements</u>: 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 <a href="https://etix.psmfc.org">https://etix.psmfc.org</a>

TABLE V-2. 2024 Recreational management measures for non-Indian ocean salmon fisheries - Council adopted.

(Page 1 of 5)

#### A. SEASON DESCRIPTIONS

#### North of Cape Falcon

#### **Supplemental Management Information**

- 1. Overall non-Indian TAC: 82,000 Chinook and 95,000 coho marked with a healed adipose fin clip (marked).
- 2. Recreational TAC: 41,000 Chinook and 79,800 marked coho; all retained coho must be marked with a healed adipose fin clip.
- 3. Buoy 10 fishery opens August 1 with an expected landed catch of 25,000 marked coho in August and September.

#### U.S./Canada Border to Cape Alava (Neah Bay Subarea)

 June 22 through earlier of September 15, or 8,300 marked coho subarea quota, with a subarea guideline of 9,430 Chinook (C.5).

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). Chinook minimum size limit of 24 inches total length (B).

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).

Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery.

#### Cape Alava to Queets River (La Push Subarea)

• June 22 through earlier of September 15, or 2,070 marked coho subarea quota, with a subarea guideline of 1,630 Chinook (C.5).

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). Chinook minimum size limit of 24 inches total length (B).

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).

#### Queets River to Leadbetter Point (Westport Subarea)

- June 30 July 11 open five days per week (Sun.- Thurs.);
- July 14 through earlier of September 15, or 29,530 marked coho subarea quota, with a subarea guideline of 17,430 Chinook open seven days per week (C.5).

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).

Prior to September 16, possession of salmon on board a vessel is prohibited on days when the subarea is closed to salmon retention.

Grays Harbor Control Zone closed beginning August 12 (C.4.b).

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).

#### Leadbetter Point to Cape Falcon (Columbia River Subarea)

 June 22 through earlier of September 30, or 39,900 marked coho subarea quota, with a subarea guideline of 12,510 Chinook (C.5).

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).

Columbia Control Zone closed (C.4.c). 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).

TABLE 2. 2024 Recreational management measures for non-tribal ocean salmon fisheries - Council adopted.

(Page 2 of 5)

#### A. SEASON DESCRIPTIONS

#### South of Cape Falcon

#### Supplemental Management Information

- 1. Sacramento River fall Chinook spawning escapement of 180,061 hatchery and natural area adults.
- 2. Sacramento Index exploitation rate of 15.7%.
- 3. Klamath River recreational fishery allocation: 4,999 adult Klamath River fall Chinook.
- 4. Klamath tribal allocation: 6,434 adult Klamath River fall Chinook.
- 5. Overall recreational coho TAC: 45,000 coho marked with a healed adipose fin clip (marked), and 25,000 coho in the non-mark selective coho fishery.

#### Cape Falcon to Humbug Mt.

• March 15-October 31 (C.6).

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).

Beginning October 1, the fishery is only open shoreward of the 40-fathom management line (C.4.g).

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.

#### Cape Falcon to OR/CA Border

Mark-selective coho fishery:

- Cape Falcon to Humbug Mt.: June 15 through the earlier of August 18, or the Cape Falcon to OR/CA border quota of 45,000 marked coho (C.6).
- Humbug Mt. to OR/CA Border: June 15 through the earlier of August 4, or the Cape Falcon to OR/CA border quota of 45,000 marked coho (C.6).

Open seven days per week. All salmon, two salmon per day (C.1). 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).

Any remainder of the mark-selective coho quota may be transferred inseason on an impact neutral basis to the September non-mark-selective coho fishery from Cape Falcon to Humbug Mountain (C.5).

#### Cape Falcon to Humbug Mt.

Non-mark-selective coho fishery:

• September 1 through the earlier of September 30, or 25,000 coho quota (C.6). Open days may be modified inseason (C.5).

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).

#### Humbug Mt. to OR/CA Border (Oregon KMZ)

May 16-August 31 (C.6).

Open seven days per week. All salmon except coho, except as provided above during the mark-selective coho fishery from Cape Falcon to the OR/CA border (June 15-August 4), two salmon per day (C.1.). See minimum size limits (B). See gear restrictions and definitions (C.2, C.3).

For Recreational Fisheries from Cape Falcon to Humbug Mt.: 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).

#### A. SEASON DESCRIPTIONS

#### OR/CA Border to latitude 40°10' N. (California KMZ)

Closed.

In 2025, the 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). Gear restrictions same as in 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2025 meeting.

#### Latitude 40°10' N. to Point Arena (Fort Bragg)

· Closed.

In 2025, the 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). Gear restrictions same as in 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2025 meeting.

#### Point Arena to Pigeon Point (San Francisco)

· Closed.

In 2025, the 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). Gear restrictions same as in 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when total sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2025 meeting.

#### Pigeon Point to U.S./Mexico Border (Monterey)

Closed.

In 2025, the 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). Gear restrictions same as in 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when total sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2025 meeting.

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).

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

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

#### C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. <u>Compliance with Minimum Size and Other Special Restrictions</u>: 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. <u>Gear Restrictions</u>: 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.
  - a. *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.

b. 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:

- a. 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.
- b. *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.
- c. 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:

- a. 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.).
- c. 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.
- d. Stonewall Bank Yelloweye Rockfish Conservation Area: The area defined by the following coordinates in the order listed:

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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.
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- 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 offshore); and, on the south by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- g. Waypoints for the 40 fathom regulatory line from Cape Falcon to Humbug Mt. (50 CFR 660.71 (o) (12)-(62), when in place.

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

- C.5. <u>Inseason Management</u>: 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:
  - 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.
  - f. Deviations from the allocation of allowable ocean harvest of coho salmon in the area south of Cape Falcon may be allowed to meet consultation standards for ESA-listed stocks (FMP 5.3.2). Therefore, any rollovers resulting in a deviation from the south of Cape Falcon coho allocation schedule would fall underneath this exemption.
- C.6. <u>Additional Seasons in State Territorial Waters</u>: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.

TABLE V-3. 2024 Treaty Indian ocean troll management measures for ocean salmon fisheries - Council adopted. (Page 1 of 2)

#### A. SEASON ALTERNATIVE DESCRIPTIONS

#### **Supplemental Management Information**

- 1. Overall treaty-Indian TAC: 42,500 Chinook and 42,500 coho.
- 2. In 2025, the season will open May 1, consistent with all preseason regulations in place for treaty Indian ocean troll fisheries during May 16-June 30, 2024. All catch in May 2025 applies against the 2025 treaty Indian ocean troll fisheries quota. This opening could be modified following Council review at its March and/or April 2025 meetings.
- May 1 through the earlier of June 30 or 21,250 Chinook quota.

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).

• July 1 through the earlier of September 15, or 21,250 Chinook quota or 42,500 coho quota.

All salmon. See size limit (B) and other restrictions (C).

#### **B. MINIMUM LENGTH (TOTAL INCHES)**

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
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. <u>Tribe and Area Boundaries</u>. 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.

<u>S'KLALLAM</u> - 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 220-301-0301).

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.

<u>HOH</u> - 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 the earlier of 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. The treaty Indian ocean troll tribes may conduct an experimental fishery through the month of September for gathering genetic stock identification (GSI) data to inform potential impacts in future years of the treaty Indian ocean troll fishery. Potential impacts from this non-retention experimental fishery are accounted for in the modeling associated with the treaty Indian ocean troll fishery.

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

		Estimated A	dult Spawnir	ng Escapeme	ent											
						Forecast	3-yr Geo					Total E	Exploitatio	n Rate		
	2020	2021	2022	2023 <sup>a/</sup>	2024 <sup>b/</sup>	2025 <sup>b/</sup>	Mean	MSST	S <sub>MSY</sub>	2020	2021	2022 <sup>a/</sup>	2023 <sup>b/</sup>	2024 <sup>b/</sup>	2025 <sup>b/</sup>	MFMT
Chinook																
Sacramento Fall	138,091	105,584	61,862	133,783	99,274	133,281	120,967	91,500	122,000	0.61	0.68	0.76	0.04	0.00	0.20	0.58 <sup>g/</sup>
Klamath River Fall	26,185	29,942	21,956	41,370	24,032	12,080	22,901	30,525	40,700	0.30	0.38	0.46	0.04	0.23	0.42	0.71
Southern Oregon <sup>c/</sup>	29,387	48,979	17,609	29,555	53,342	NA	30,279	20,500	34,992	NA	NA	NA	NA	NA	NA	0.54
Central and Northern ORd/	137	85	105	118	123	NA	115	30 fish/mi	60 fish/mi	0.38	0.44	0.49	NA	NA	NA	0.78
Upper River Bright - Fall <sup>d/</sup>	98,401	86,644	53,961	64,450	57,580	101,666	72,259	19,812	39,625	0.37	0.46	0.44	NA	NA	NA	0.86
Upper River - Summer <sup>d/</sup>	70,654	52,076	64,497	49,410	41,142	42,428	44,183	6,071	12,143	0.31	0.42	0.52	NA	NA	NA	0.75
Willapa Bay - Fall <sup>e/</sup>	3,585	2,966	2,351	2,095	NA	NA	2,445	1,697	3,393	0.57	0.70	0.63	NA	NA	NA	0.78
Grays Harbor Fall <sup>d/e/</sup>	20,879	13,207	14,259	10,943	NA	NA	12,726	6,663	13,326	0.59	0.68	0.61	NA	NA	NA	0.63
Grays Harbor Spring	2,828	2,573	1,348	2,175	NA	NA	1,961	700	1,400	NA	NA	NA	NA	NA	NA	0.78
Queets - Fall <sup>d/</sup>	3,622	3.364	1.784	2,246	NA	NA	2,380	1,250	2,500	0.74	0.76	0.86	NA	NA	NA	0.87
Queets - Sp/Su	342	280	434	540	NA	NA	403	350	700	NA	NA	NA	NA	NA	NA	0.78
Hoh - Fall <sup>d/e/</sup>	2,273	2,622	1,866	2,323	NA	NA	2,248	600	1,200	0.70	0.74	0.65	NA	NA	NA	0.90
Hoh Sp/Su	1,248	817	1,055	980	NA	NA	945	450	900	NA	NA	NA	NA	NA	NA	0.78
Quillayute - Fall <sup>d/e/</sup>	8,672	5,568	8,369	6,682	5,378	NA	6,700	1,500	3,000	0.61	0.68	0.63	NA	NA	NA	0.87
Quillayute - Sp/Su	942	1,082	1,574	2,087	1,275	NA	1,612	600	1,200	NA	NA	NA	NA	NA	NA	0.78
Hoko -Su/Fa <sup>d/</sup>	2,102	1,165	1,386	4,393	NA	NA	1,921	425	850	0.34	0.14	0.21	NA	NA	NA	0.78
Coho																
Willapa Bay <sup>f/</sup>	16,476	31,369	24,197	18,693	NA	18,412	20,270	8,600	17,200	0.33	0.24	0.31	0.27	NA	0.55	0.74
Grays Harbor <sup>f/h/</sup>	23,814	62,789	61,057	49,877	NA	31,947	45,993	18,320	24,426	0.29	0.23	0.29	0.26	NA	0.55	0.65
Queets	4,181	5,752	12,083	4,375	NA	5,958	6,804	4,350	5,800	0.22	0.10	0.32	0.41	NA	0.35	0.65
Hoh	2,840	6,396	8,224	3,879	NA	2,516	4,313	1,890	2,520	0.49	0.18	0.30	0.41	NA	0.53	0.65
Quillayute Fall	7,695	9,938	16,643	7,734	NA	8,036	10,113	4,725	6,300	0.16	0.04	0.22	0.29	NA	0.26	0.59
Juan de Fuca	8,548	20,837	16,977	13,887	NA	12,307	14,263	7,000	11,000	0.07	0.07	0.08	0.07	NA	0.13	0.60
Hood Canal	16,832	34,388	9,192	32,934	NA	9,659	14,300	10,750	14,350	0.29	0.25	0.54	0.34	NA	0.49	0.65
Skagit	23,808	75,532	92,306	54,443	NA	36,516	56,826	14,857	25,000	0.43	0.33	0.26	0.27	NA	0.45	0.60
Stillaguamish	21,555	38,176	53,828	37,962	NA	19,250	34,009	6,100	10,000	0.13	0.11	0.10	0.18	NA	0.30	0.50
Snohomish	42,675	97,523	85,692	63,042	NA	40,660	60,336	31,000	50,000	0.11	0.11	0.08	0.21	NA	0.31	0.60

a/ Preliminary.

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

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

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

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

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

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

h/ 2023 Grays Harbor natural coho postseason return is preliminary

TABLE V-5. Postseason  $S_{ACL}$ ,  $S_{OFL}$ , and spawner escapement estimates for Sacramento River fall Chinook (SRFC), Klamath River fall Chinook (KRFC) and Wilapa Bay coho. For the current year,  $S_{ACL}$  and  $S_{OFL}$  are preseason values. Current year spawner escapements are preseason values based on current abundance forecasts and the previous year fishing regulations. Bolded values indicate instances where the season part is lower than the  $S_{CR}$  and  $S_{CR}$  and  $S_{CR}$  and  $S_{CR}$  are preseason.

indicate instances where the escapement is lower than the  $S_{\text{ACL}}$  and/or the  $S_{\text{OFL}}$ .

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

a/ S<sub>ACL</sub> = S<sub>ABC</sub>.

b/ Hatchery and natural area adult spawners.

c/ Natural area adult spawners.

TABLE V-6. Comparison of projected ocean escapements and exploitation rates for critical natural and Columbia River hatchery coho stocks (thousands of fish) resulting from application of 2024 Council-adopted regulations to 2024 and 2025 ocean abundance forecasts.<sup>a/</sup>

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

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

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

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

d/ Assumed exploitation rate based on preliminary abundance forecasts.

e/ Pending confirmation of 2025 ESA consultation standard.

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

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

promiting 2020 pressessor abunda		Harvest Mortali	ity and Exploita	tion Rate		Exploitat		
_	LC	CN	0	CN		SONCC	Natural	
Fishery	Number	Percent	Number	Percent	Trinity	Klamath	Rogue	Other
SOUTHEAST ALASKA	0	0	0	0	0.0%	0.0%	0.0%	0.0%
BRITISH COLUMBIA	162	0	1,432	0	0.5%	0.5%	0.5%	0.5%
PUGET SOUND/STRAITS	138	0	84	0.0%	0.0%	0.0%	0.0%	0.0%
NORTH OF CAPE FALCON								
Recreational	5,659	7.8%	4,090	1.4%	0.1%	0.1%	0.1%	0.1%
Treaty Indian Troll	1,574	2.2%	1,478	0.5%	0.0%	0.0%	0.0%	0.0%
Non-Indian Troll	1,325	1.8%	1,180	0.4%	0.0%	0.0%	0.0%	0.0%
SOUTH OF CAPE FALCON								
Recreational:								
Cape Falcon to Humbug Mt.	4,114	0	35,820	12.3%	0.8%	0.8%	0.8%	0.8%
Humbug Mt. to Latitude 40°10' N. (KM	74	0	1,158	0.4%	0.8%	0.8%	0.8%	0.8%
Fort Bragg	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%
South of Pt. Arena	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%
Troll:								
Cape Falcon to Humbug Mt.	404	0.6%	1,991	0.7%	0.1%	0.1%	0.1%	0.1%
Humbug Mt. to Latitude 40°10' N. (KM	0	0.0%	1	0.0%	0.0%	0.0%	0.0%	0.0%
Fort Bragg	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0.0%
South of Pt. Arena	0	0.0%	0	0.0%	0.0%	0.0%	0.0%	0.0%
BUOY 10	2,868	3.9%	648	0.2%	0.0%	0.0%	0.0%	0.0%
ESTUARY/FRESHWATER	3,359	4.6%	21,390	7.4%	13.5%	5.9%	4.9%	0.0%
TOTAL	19,677	27.1%	69,272	23.8%	15.7%	8.0%	7.0%	2.1%

Preseason I Table V-7

TABLE V-8. Maximum allowable fishery impact rate for OCN coho under Amendment 13 matrix and the revised OCN work group matrix based on parent escapement levels by stock component and marine survival category.<sup>a/</sup>

	OCN Coh	o Spawners	by Stock C	omponent	Marine Sur	vival Indicator	Ame	endment 13 M	1atrix	OCN W	ork Group M	atrix <sup>a/</sup>
Fishery Year (t)	Parent Spawner Year (t-3)	Northern	North- Central	South- Central	Jack Survival Rate (t-1)	OCN Adult Survival Rate	Marine Survival Category	Parental Spawner Category	Maximum Allowable Impacts	Marine Survival Category <sup>b/c/</sup>	Parental Spawner Category	Maximum Allowable Impacts
1998	1995	3,900	13,600	36,500	0.04%	-	Low	Very Low	≤10-13%	Extremely Low	Very Low	≤8%
1999	1996	3,300	18,100	52,600	0.10%	-	Med	Very Low	≤15%	Low	Critical	0-8%
2000	1997	2,100	2,800	18,400	0.12%	-	Med	Very Low	≤15%	Low	Critical	0-8%
2001	1998	2,600	3,300	25,900	0.27%	-	Med	Very Low	≤15%	Medium	Critical	0-8%
2002	1999	8,900	11,800	29,200	0.09%	-	Med	Low	≤15%	Low	Low	≤15%
2003	2000	17,900	14,300	36,500	0.20%	-	Med	Low	≤15%	Med	Low	≤15%
2004	2001	33,500	25,200	112,000	0.14%	-	Med	Low	≤15%	Med	Low	≤15%
2005	2002	52,500	104,000	104,100	0.11%	-	Med	High	≤20%	Low	High	≤15%
2006	2003	59,600	68,900	99,800	0.12%	-	Med	High	≤20%	Low	High	≤15%
2007	2004	28,800	42,100	101,900	0.17%	-	Med	Med	≤20%	Med	Med	≤20%
2008	2005	16,500	51,400	86,700	0.07%	-	Low	High	≤15%	Extremely Low	High	≤8%
2009	2006	24,100	21,200	83,500	0.27%	-	Med	Low	≤15%	Med	Low	≤15%
2010	2007	17,500	12,300	36,500	0.12%	-	Med	Low	≤15%	Low	Low	≤15%
2011	2008	25,600	68,100	86,000	0.12%	-	Med	High	≤20%	Low	High	≤15%
2012	2009	48,100	86,400	128,200	0.09%	-	Med	High	≤20%	Low	High	≤15%
2013	2010	55,000	56,500	171,900	0.14%	6.8%	Med	High	≤20%	Med	High	≤30%
2014	2011	45,900	119,100	191,300	0.26%	7.1%	Med	High	≤20%	Med	High	≤30%
2015	2012	7,500	33,800	57,800	0.20%	7.5%	Med	Low	≤15%	Med	Low	≤15%
2016	2013	11,000	39,700	73,700	0.10%	6.2%	Med	Med	≤20%	Med	Med	≤20%
2017	2014	67,400	121,900	170,400	0.13%	5.6%	Med	High	≤30%	Med	High	≤30%
2018	2015	6,700	22,700	27,700	0.11%	4.3%	Low	Low	≤15%	Low	Low	≤15%
2019	2016	18,700	26,500	30,700	0.27%	3.80%	Low	Low	≤15%	Low	Low	≤15%
2020	2017	13,600	22,800	24,900	0.09%	4.10%	Low	Low	≤15%	Low	Low	≤15%
2021	2018	8,000	22,000	44,500	0.45%	7.72%	High	Low	≤15%	Med	Low	≤15%
2022	2019	22,300	20,100	52,800	0.31%	6.98%	Med	Low	≤15%	Med	Low	≤15%
2023	2020	21,500	30,800	57,600	0.30%	7.87%	Med	Med	≤20%	Med	Med	≤20%
2024 <sup>d/</sup>	2021	42,800	88,600	110,800	0.38%	7.79%	High	High	≤35%	Med	High	≤30%
2025 <sup>d/</sup>	2022	53,000	71,900	45,100	0.25%	7.48%	Med	High	≤30%	Med	High	≤30%
2026 <sup>d/</sup>	2023	35,100	42,600	75,300	-	-	-	High	-	-	High	-
2027 <sup>d/</sup>	2024	32,800	71,700	51,300	-	-	-	High	-	-	High	-

a/ Developed by the OCN Coho Work Group as a result of the 2000 Review of Amendment 13. See Appendix A, tables A-2 and A-4 for details

b/ OCN workgroup matrix was modified during the 2012 methodology review. For 2013, the marine survival category is determined by a predicted OCN adult survival rate that is based on the natural smolt to jack relationship at Mill Creek in the Yaquina River basin.

c/ OCN workgroup matrix was modified during the 2013 methodology review. Beginning in 2014, the marine survival category is determined by a predicted OCN adult survival rate that is based on biologic and oceanographic indicators.

d/ Preliminary.

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## APPENDIX A. SUMMARY OF COUNCIL STOCK MANAGEMENT GOALS

The following tables reflect the current management practices as of 2025 and may not reflect the values in the current FMP through Amendment 24. Pending FMP updates include:

- Sacramento River fall Chinook F<sub>MSY</sub> from 0.78 to 0.58, adopted in 2024
- Southern Oregon Chinook MFMT from 0.78 to 0.54, adopted in 2015

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TABLE A-1. Conservation objectives and reference points governing harvest control rules and status determination criteria for salmon stocks and stock complexes<sup>al</sup> (Page 1 of 6)

	CHINOOK				
Stocks In The Fishery	Conservation Objective	S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL
Sacramento River Fall Indicator stock for the Central Valley fall (CVF) Chinook stock complex.	122,000-180,000 natural and hatchery adult spawners (MSY proxy adopted 1984). This objective is intended to provide adequate escapement of natural and hatchery production for Sacramento and San Joaquin fall and late-fall stocks based on habitat conditions and average run-sizes as follows: Sacramento River 1953-1960; San Joaquin River 1972-1977 (ASETF 1979; PFMC 1984; SRFCRT 1994). The objective is less than the estimated basin capacity of 240,000 spawners (Hallock 1977), but greater than the 118,000 spawners for maximum production estimated on a basin by basin basis before Oroville and Nimbus Dams (Reisenbichler 1986).	122,000	91,500	58% Proxy (SRWG 2024) (Current value; FMP update pending)	Based on F <sub>ABC</sub> and annual ocean abundance. F <sub>ABC</sub> is F <sub>MSY</sub> reduced by Tier 2 (10%) uncertainty
Central Valley Spring ESA Threatened	NMFS ESA consultation standard/recovery plan: Conform to Sacramento River Winter Chinook ESA consultation standard (no defined objective for ocean management prior to listing).	Undefined	Undefined	Undefined	
Sacramento River Winter ESA Endangered  California Coastal Chinook	NMFS ESA consultation standard/recovery plan: Recreational seasons: Point Arena to Pigeon Point between the first Saturday in April and the second Sunday in November; Pigeon Point 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. Commercial seasons: Point Arena to the U.S./Mexico border between May 1 and September 30, except Point Reyes to Point San Pedro between October 1 and 15 (Monday through Friday). Minimum size limit ≥ 26 inches total length. Guidance from NMFS in 2010 and 2011 required implementation of additional closures and/or increased sized limits in the recreational fishery South of Point Arena. The winter-run management framework and consultation standard is an abundance based age-3 impact rate control rule established in 2018 (NMFS 2018) which sets the maximum allowable age-3 impact rate based on the forecast age-3 escapement in the absence of fisheries: above 3,000, the allowable, impact rate is fixed at 20 percent; between 3,000 and 500, the allowable impact rate declines linearly from 20 percent to 10 percent; between 500 and 0, the allowable impact rate declines linearly from 10 percent to 0 percent.	Undefined	Undefined	Undefined	ESA consultation standard applies.
ESA Threatened  Klamath River Fall Indicator stock for the Southern Oregon Northern California (SONC) Chinook stock complex.	a 16.0% age-4 ocean harvest rate on Klamath River fall Chinook.  At least 32% of potential adult natural spawners, but no fewer than 40,700 naturally spawning adults in any one year. Brood escapement rate must average at least 32% over the long-term, but an individual brood may vary from this range to achieve the required tribal/nontribal annual allocation. Natural area spawners to maximize catch estimated at 40,700 adults (STT 2005).	40,700	30,525	71% (STT 2005)	Based on F <sub>ABC</sub> and annual ocean abundance. F <sub>ABC</sub> is F <sub>MSY</sub> reduced by Tier 1 (5%) uncertainty
Klamath River - Spring Smith River	Undefined Undefined	Undefined Undefined	Undefined Undefined	Undefined 78% Proxy (SAC 2011a)	Component stock of SONC complex; ACL indicator stock is KRFC

TABLE A-1. Conservation objectives and reference points governing harvest control rules and status determination criteria for salmon stocks and stock complexes (Page 2 of 6)

	CHINOO	K				
Stocks In The Fishery	Conservation Objective		S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL
Southern Oregon	41,000 escapement at Huntley Park, Gold Beach, Oregon		34,992	20,500	54% Proxy (ODFW 2014) (Current value; FMP update pending)	Indicator stock is KRFC
Central and Northern Oregon	Unspecified portion of an aggregate 150,000 to 200,000 natural for Oregon coast (Thompson 1977 and McGie 1982) measured per mile in index streams. ODFW developing specific conservation for spring and fall stocks that may be implemented without plupon approval by the Council.	d by 60-90 fish ation objectives an amendment	60 Fish per mile in index streams	30 Fish per mile in index streams	78% Proxy (SAC 2011a)	Component stock(s) of FNMC complex; international exception applies, ACLs are not
Willapa Bay Fall	Undetermined in FMP. WDFW spawning escapement objective	of 4,350.	3,393	1,697	78% Proxy (SAC 2011a)	applicable
Grays Harbor Fall Indicator stock for the Far North Migrating Coastal (FNMC) Chinook stock complex	13,326 natural adult spawners - MSP based on full seeding of spawning and rearing habitat (QDNR & WDFW 2014).		13,326	6,663	63%	
Queets Fall Indicator stock for the FNMC Chinook stock complex	Manage terminal fisheries for 40% harvest rate, but no less than 2,500 natural adult spawners, the MSY level estimated by Cooney (1984).	Annual natural spawning	2,500	1,250	87% (Cooney 1984)	ENIMOl.
Hoh Fall Indicator stock for the FNMC Chinook stock complex	Manage terminal fisheries for 40% harvest rate, but no less than 1,200 natural adult spawners, the MSY level estimated by Cooney (1984).	escapement targets may vary from FMP conservation	1,200	600	90% (Cooney 1984)	FNMC complex; international exception applies, ACLs are not
Quillayute Fall Indicator stock for the FNMC Chinook stock complex	Manage terminal fisheries for 40% harvest rate, but no less than 3,000 natural adult spawners, the MSY level estimated by Cooney (1984).	objectives if agreed to by WDFW and treaty tribes	3,000	1,500	87% (Cooney 1984)	applicable.
Hoko Summer/Fall Indicator stock for the FNMC Chinook stock complex	850 natural adult spawners, the MSP level estimated by Ames and Phinney (1977). May include adults used for supplementation program.	under the provisions of Hoh v. Baldrige and	850	425	78% Proxy (SAC 2011a)	
Grays Harbor Spring	1,400 natural adult spawners.	subsequent U.S. District	1,400	700	78% Proxy (SAC 2011a)	
Queets Sp/Su	Manage terminal fisheries for 30% harvest rate, but no less than 700 natural adult spawners.	Court orders.	700	350	78% Proxy (SAC 2011a)	FNMC complex; international
Hoh Spring/Summer	Manage terminal fisheries for 31% harvest rate, but no less than 900 natural adult spawners.		900	450	78% Proxy (SAC 2011a)	exception applies, ACLs are not applicable.
Quillayute Spring/Summer	1,200 natural adult spawners for summer component (MSY).	1	1,200	600	78% Proxy (SAC 2011a)	арриосыо.

TABLE A-1. Conservation objectives and reference points governing harvest control rules and status determination criteria for salmon stocks and stock complexes<sup>al</sup> (Page 3 of 6)

	CHINOOK				rage 3 or 0)
Stocks In The Fishery	Conservation Objective	S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL
Willapa Bay Fall (hatchery)	8,200 adult return to hatchery. WDFW spawning escapement objective of 9,800 hatchery spawners.		Not applicab	le to hatchery	stocks.
Quinault Fall (hatchery)	Hatchery production.	]	• • • • • • • • • • • • • • • • • • • •	,	
North Lewis River Fall	NMFS consultation standard/recovery plan. McIsaac (1990) stock-recruit analysis supports MSY objective of 5,700 natural adult spawners.	5,700		76%	
Snake River Fall	NMFS consultation standard/recovery plan. No more than 70.0% of 1988-1993 base period AEQ exploitation rate for all ocean fisheries.	Undefined	ESA consultation	Undefined	ESA consultation
Upper Willamette Spring	NMFS consultation standard/recovery plan. Not applicable for ocean fisheries.	Undefined	standard	Undefined	standard applies.
Columbia Upper River Spring	NMFS consultation standard/recovery plan. Not applicable for ocean fisheries.	Undefined	applies.	Undefined	5-3-1-3-1-3-1-4-1-1-1-1-1-1-1-1-1-1-1-1-1
Snake River Spring/Summer	NMFS consultation standard/recovery plan. Not applicable for ocean fisheries.	Undefined		Undefined	
Columbia Lower River Hatchery Fall	12,600 adults for hatchery egg-take.				
Columbia Lower River Hatchery Spring	2,700 adults to meet Cowlitz, Kalama, and Lewis Rivers broodstock needs.				
Columbia Mid-River Bright Hatchery Fall	4,700 adults for Bonneville Hatchery and 2,000 for Little White Salmon Hatchery egg-take.		Not applicab	le to hatchery s	stocks.
Columbia Spring Creek Hatchery Fall	7,000 adults to meet hatchery egg-take goal.				
Columbia Upper River Bright Fall	40,000 natural bright adults above McNary Dam (MSY proxy adopted in 1984 based on CRFMP). The management goal has been increased to 60,000 by Columbia River managers in recent years.	39,625 (Langness and Reidinger 2003)	19,812	85.91% (Langness and Reidinger 2003)	International exception applies,
Columbia Upper River Summer	Hold ocean fishery impacts at or below base period; recognize CRFMP objective – MSY proxy of 80,000 to 90,000 adults above Bonneville Dam, including both Columbia and Snake River stocks (state and tribal management entities considering separate objectives for these stocks).	12,143 (CTC 1999)	6,071	75% (CTC 1999)	ACLs are not applicable.

TABLE A-1. Conservation objectives and reference points governing harvest control rules and status determination criteria for salmon stocks and stock complexes at (Page 4 of 6)

	CHINOOK						
Stocks In The Fishery	Conservation Objective		S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL	
Eastern Strait of Juan de Fuca Summer/Fall	NMFS consultation standard/recovery plan. No more than 10.0% Southern U.S. (SUS) Rebuilding Exploitation Rate (RER) for the Elwha River and for the Dungeness River. 2011 comanagers Resource Management Plan (RMP)		Undefined		Undefined		
Skokomish Summer/Fall	NMFS consultation standard/recovery plan. No more than 50.0% total RER. 2011 comanagers RMP	Annual	Undefined		Undefined		
Mid Hood Canal Summer/Fall	NMFS consultation standard/recovery plan. No more than 15.0% preterminal SUS CERC. 2011 comanagers RMP	natural spawning escapement targets may vary from FMP conservatio n objectives if agreed to by WDFW	spawning	Undefined		Undefined	
Nooksack Spring early	NMFS consultation standard/recovery plan. No more than 7.0% SUS CERC. 2011 comanagers RMP		Undefined	ESA consultati on standard	Undefined		
Skagit Summer/Fall	NMFS consultation standard/recovery plan. No more than 50.0% total RER. 2011 comanagers RMP		Undefined		Undefined		
Skagit Spring	NMFS consultation standard/recovery plan. No more than 38.0% total RER. 2011 comanagers RMP		Undefined		Undefined	ESA Consultation	
Stillaguamish Summer/Fall	NMFS consultation standard/recovery plan. No more than 25.0% total RER. 2011 comanagers RMP	and treaty tribes under	Undefined		Undefined	standard applies.	
Snohomish Summer/Fall	NMFS consultation standard/recovery plan. No more than 15.0% SUS RER. 2011 comanagers RMP	the provisions of	Undefined	applies	Undefined	.,	
Cedar River Summer/Fall	NMFS consultation standard/recovery plan. No more than 20.0% SUS RER. 2011 comanagers RMP	U.S. v. Washington and	Undefined		Undefined		
White River Spring	NMFS consultation standard/recovery plan. No more than 20.0% total RER. 2011 comanagers RMP	subsequent U.S. District	Undefined		Undefined		
Green River Summer/Fall	NMFS consultation standard/recovery plan. No more than 15.0% preterminal SUS RER, at least 5,800 adult spawners.	Court orders.	Undefined	1	Undefined		
Nisqually River Summer/Fall	NMFS consultation standard/recovery plan. No more than 65.0% total RER. 2011 comanagers RMP	]	Undefined		Undefined		
Puyallup Summer/Fall	NMFS consultation standard/recovery plan. No more than 50.0% total RER. 2011 comanagers RMP		Undefined		Undefined		

TABLE A-1. Conservation objectives and reference points governing harvest control rules and status determination criteria for salmon stocks and stock complexes<sup>a/</sup> (Page 5 of 6)

	СОНО				<u>,                                     </u>
Stocks In The Fishery	Conservation Objective	S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL
Central California Coast ESA Threatened	NMFS ESA consultation standard/recovery plan: No retention of coho south of the OR/CA border.	Undefined		Undefined	
Southern Oregon/Northern California Coast ESA Threatened	A total fishery (marine and freshwater) exploitation rate (ER) limit of 15% for all populations within the SONCC Evolutionary Significant Unit, except the Trinity River coho population unit (Upper Trinity River, Lower Trinity River, SF Trinity River) which has a total fishery ER limit of 16%, including landed and non-landed mortality of age-3 adult SONCC coho salmon in any individual year. No retention of coho in the EEZ south of the OR/CA border. Freshwater impacts determined using projections provided by co-managing agencies and tribes (i.e., the Oregon Department of Fish and Wildlife, Yurok Tribe, Hoopa Valley Tribe, California Department of Fish and Wildlife).	Undefined	ESA consultation standard applies	Undefined	ESA consultation standard applies.
Oregon Coastal Natural ESA Threatened	NMFS ESA consultation standard/recovery plan: Total AEQ exploitation rate limit based on parental seeding level and marine survival matrix in FMP Table 3-2.	Undefined		Undefined	
Lower Columbia Natural ESA Threatened	NMFS ESA consultation standard/recovery plan: AEQ exploitation rate limit on ocean and mainstem Columbia fisheries identified in annual NMFS guidance.	Undefined		Undefined	
Oregon Coast Hatchery	Hatchery production.				
Columbia River Late Hatchery	Hatchery rack return goal of 14,200 adults.				
Columbia River Early Hatchery	Hatchery rack return goal of 6,200 adults.				
Willapa Bay - Hatchery	Hatchery rack return goal of 6,100 adults.		Not applicable	to hatchery stoc	ks
Quinault - Hatchery	Hatchery production.				
Quillayute - Summer Hatchery	Hatchery production.				
South Puget Sound Hatchery	Hatchery rack return goal of 52,000 adults.				
Willapa Bay Natural	17,200 natural-area spawners.	17,200	8,600	74%	Based on F <sub>ABC</sub> and annual ocean abundance. F <sub>ABC</sub> is F <sub>MSY</sub> reduced by Tier 1 (5%) uncertainty

TABLE A-1. Conservation objectives and reference points governing harvest control rules and status determination criteria for salmon stocks and stock complexes<sup>a/</sup> (Page 6 of 6)

	bjectives and reference points governing harvest control rules and status  COHO									
Stocks In The Fishery	Conservation Objective		S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL				
Grays Harbor	35,400 natural adult spawners (MSP based on WDF [1979])		24,426 S <sub>MSP</sub> (FMP) *F <sub>SMY</sub> (SAC 2010b)	18,320 (Johnstone et al. 2011)	MFMT=65% (Johnstone et al. 2011) F <sub>MSY</sub> =69% (SAC 2011b)	7.02				
Queets	MSY range of 5,800 to 14,500 natural adult spawners (Lestelle et al 1984)	Annual natural spawning escapement targets may vary from FMP conservation objectives if agreed to by	Annual natural spawning escapement targets may vary from FMP conservation	natural spawning	natural spawning	natural spawning	5,800 (Johnstone et al. 2011)	4,350 (Johnstone et al. 2011)	MFMT=65% (Johnstone et al. 2011) F <sub>MSY</sub> =68% (SAC 2011b)	
Hoh	MSY range of 2,000 to 5,000 natural adult spawners (Lestelle et al. 1984)			2,520 (SAC 2010b)	1,890 S <sub>MSY</sub> *0.75	MFMT=65% (Johnstone et al. 2011) F <sub>MSY</sub> =69% (SAC 2011b)				
Quillayute - Fall	MSY range of 6,300 to 15,800 natural adult spawners (Lestelle et al. 1984)		6,300 (Johnstone et al. 2011)	4,725 (Johnstone et al. 2011)	MFMT=59%; F <sub>MSY</sub> =59% (SAC 2011b)	International exception applies, ACLs				
Strait of Juan de Fuca	Total allowable MSY exploitation rate of: 0.60 for ocean age-3 abundance > 27,445; 0.40 for ocean age-3 abundance > 11,679 and ≤27,445; 0.20 for ocean age-3 abundance ≤11,679	under the provisions of Hoh v.	11,000 (Bowhay et al. 2009)	7,000 (Bowhay et al. 2009)	60% (Bowhay et al. 2009)	are not applicable.				
Hood Canal	Total allowable MSY exploitation rate of: 0.65 for ocean age-3 abundance > 41,000; 0.45 for ocean age-3 abundance > 19,545 and ≤41,000; 0.20 for ocean age-3 abundance ≤19,545	Baldrige, U.S. v. Washington,	14,350 (Bowhay et al. 2009)	10,750 (Bowhay et al. 2009)	65% (Bowhay et al. 2009)					
Skagit	Total allowable MSY exploitation rate of: 0.60 for ocean age-3 abundance > 62,500; 0.35 for ocean age-3 abundance > 22,857 and ≤62,500; 0.20 for ocean age-3 abundance ≤22,857	or subsequent U.S. District	25,000 (Bowhay et al. 2009)	14,857 (Bowhay et al. 2009)	60% (Bowhay et al. 2009)					
Stillaguamish	Total allowable MSY exploitation rate of: 0.50 for ocean age-3 abundance > 20,000; 0.35 for ocean age-3 abundance >9,385 and ≤20,000; 0.20 for ocean age-3 abundance ≤9,385	Court orders	10,000 (Bowhay et al. 2009)	6,100 (Bowhay et al. 2009)	50% (Bowhay et al. 2009)					
Snohomish	Total allowable MSY exploitation rate of: 0.60 for ocean age-3 abundance > 125,000; 0.40 for ocean age-3 abundance >51,667 and ≤125,000; 0.20 for ocean age-3 abundance ≤51,667		50,000 (Bowhay et al. 2009)	31,000 (Bowhay et al. 2009)	60% (Bowhay et al. 2009)					
	PINK (odd-numbered	years)								
Stocks In The Fishery	Conservation Objective		S <sub>MSY</sub>	MSST	MFMT (F <sub>MSY</sub> )	ACL				
Puget Sound	900,000 natural spawners or consistent with provisions of the Pacific (Fraser River Panel).	Salmon Treaty	900,000	450,000	Undefined	International exception applies, ACLs are not applicable.				

a/ Some hatchery goals and ESA consultation standards have been updated relative to the version of this table in the FMP.

TABLE A-2. Allowable fishery impact rate criteria for OCN coho stock components under the Salmon Fishery Management Plan Amendment 13

Amendment	: 13.					
					ARINE SURVIVAL I	
				,	return of jacks per h	
				Low	Medium	High
	DADENT OD MANUED			(<0.0009)	(0.0009 to 0.0034)	
	PARENT SPAWNER			Allowa	ble Total Fishery In	npact Rate
High:	Parent spawners achieved Leve grandparent spawners achieved		riteria;	≤15%	≤30% <sup>a/</sup>	≤35% <sup>a/</sup>
Medium:	Parent spawners achieved Leve	el #1 or greater re	≤15%	≤20% <sup>a/</sup>	≤25% <sup>a/</sup>	
Low:	Parent spawners less than Leve	el #1 rebuildina ci	riteria	≤15%		
	•	≤10-13% <sup>b/</sup>	≤15%	≤15%		
				310-1370		
			OCN Coho	Spawners by	Stock Component	
	Rebuilding Criteria	Northern	North-Centra	I South-	Central Southe	rn Total
Full Seeding at Low Marine Survival:		21,700	55,000	50,000 5,400		132,100
Level #2 (75% of full seeding):		16,400	41,300	37,500 4,10		99,300
Lev	/el #1 (50% of full seeding):	10,900	27,500	25,000 2,70		66,100
38% of	Level #1 (19% of full seeding):	4,100	10,500	9,500 1,00		25,100
	Stock Component	F			at Low Marine Surv	/ival
	(Boundaries)			mber of Adult	<u> </u>	
/NI !	Northern:	Nehalem	Tillamook	Nestucca	Ocean Tribs.	
(ivecani	cum River to Neskowin Creek)	17,500	2,000	1,800	400	
	North-Central:	Siletz	Yaquina	Alsea	Siuslaw	Ocean Tribs.
(Salı	mon River to Siuslaw River)	4,300	7,100	15,100	22,800	5,700
South-Central:		Umpqua	Coos	Coquille	Coastal Lakes	
(Sil	tcoos River to Sixes River)	29,400	7,200	5,400	8,000	
	Southern:	Rogue	_			
(Ell	k River to Winchuck River)	5,400				

a/ When a stock component achieves a medium or high parent spawner status under a medium or high marine survival index, but a major basin within the stock component is less than 10% of full seeding, (1) the parent spawner status will be downgraded one level to establish the allowable fishery impact rate for that component, and (2) no coho-directed harvest impacts will be allowed within that particular basin.

b/ This exploitation rate criteria applies when (1) parent spawners are less than 38% of the Level #1 rebuilding criteria, or (2) marine survival conditions are projected to be at an extreme low as in 1994-1996 (<0.0006 jack per hatchery smolt). If parent spawners decline to lower levels than observed through 1998, rates of less than 10% would be considered, recognizing that there is a limit to further bycatch reduction opportunities.

TABLE A-3. Fishery impact rate criteria for OCN coho stock components based on the harvest matrix resulting from the OCN work

group 2000 review of Amendment 13.

group 2000 review of Amendment 13		Marine Survival Index (based on return of jacks per hatchery smolt)							
	Extremely Low	Lo	•		dium	High			
Parent Spawner Status al	(<0.0008)	(0.0008 to	0.0014)	(>0.00141	to 0.0040)	(>0.0	040)		
High	E	,	J		0		<del>i</del> : : : : : :		
Parent Spawners > 75% of full seeding	≤8%	<u>&lt;</u> 1	5%	<u>&lt;</u> 3	80%	<u>≤</u> 45%.			
Medium	D				N		S:::::::		
Parent Spawners > 50% & ≤ 75% of full seeding	≤8%	<u>&lt;</u> 1	5%	<u>&lt;</u> 20%		<u>&lt;</u> 3	8%		
Low	С	ŀ	1		М		₹::::::		
Parent Spawners > 19% & <_ 50% of full seeding	≤8%	<u>≤</u> 1	5%	<u>&lt;</u> 15%		<u>≤</u> 2	5%		
Very Low	В	· · · · · · · · · · · · · · · · · · ·		L		Q			
Parent Spawners > 4 fish per mile & ≤ 19% of full seeding	≤8%	≤ 11%		≤11%		≤ 11%			
Critical <sup>b/</sup>	Α			K		Р			
Parental Spawners ≤ 4 fish per mile	0 - 8%	0 -	8%	0 - 8%		0 -	8%		
Sub-a	aggregate and Basi	in Specific	Spawne	r Criteria	Data				
			"Crit	tical"	Very Low, L	.ow, Mediu	m & High		
Sub-aggregate	Miles of Available Spawning Habitat	100% of Full Seeding	4 Fish per Mile	12% of Full Seeding	19% of Full Seeding	50% of Full Seeding	75% of full Seeding		
Northern	899	21,700	3,596	NA	4,123	10,850	16,275		
North - Central	1,163	55,000	4,652	NA	10,450	27,500	41,250		
South - Central	1,685	50,000	6,740	NA	9,500	25,000	37,500		
Southern	450	5,400	NA	648	1,026	2,700	4,050		
Coastwide Total	4,197	132,100	15,	636	25,099	66,050	99,075		

a/ Parental spawner abundance status for the OCN aggergate assumes the status of the weakest sub-aggregate.

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b/ "Critical" parental spawner status is defined as 4 fish per mile for the Northern, North-Central, and South-Central subaggergates. Because the ratio of high quality spawning habitat to total spawning habitat in the Rogue River Basin differs significantly from the rest of the basins on the coast, the spawner density of 4 fish per mile does not represent "Critical" status for that basin. Instead. "Critical" status for the Rogue Basin (Southern Sub-aggergate) is estimated as 12% of full seeding of high quality

TABLE A-4. Fishery impact rate criteria for OCN coho stock components based on the harvest matrix resulting from the OCN work group 2000 review of Amendment 13 including modifications to the marine survival index adopted during the 2012 and 2013 methodology reviews.

ethodology reviews:									
Parent Spawner Status <sup>a/</sup>		(Wild adult	Marine Survival Index (Wild adult coho salmon survival as predicted by the two-variable GAM ensemble forecast)						M ensemble
		Extreme	ely		Low	Mediur	n		High
	Low <2%		2	%-4.5%	>4.5%-8	196		>8%	
High		Е			J	0			Т
Parent Spawne of full seeding	ers > 75%	≤ 8%		:	≤ 15%	≤ 30%			≤ 45%
Medlum		D			I	N			S
Parent Spawne ≤ 75% of full se		≤ 8%			≤ 15%	≤ 20%			≤ 38%
Low	С			Н	М			R	
Parent Spawners > 19% & ≤ 50% of full seeding		≤ 8%		:	£ 15%	≤ 15%	,	≤ 25%	
Very Low	В			G	L		Q		
Parent Spawners > 4 fish per mile & ≤ 19% of full seeding		≤ 8%		:	11%	≤ 11%	5	≤ 11%	
Critical		A			F	К		Р	
Parent Spawne mile	rs ≤4 fish per	0 – 8%		0 – 8%		0 – 8%	6		0 – 8%
	Sub-agg	regate and	Basin	Speci	fic Spawne	r Criteria Da	ıta		
	Miles of	100%		"Crit	ical"	Very Low,	Low, M	ledium	& High
Sub-aggregate	Available Spawning Habitat	of Full Seeding	ı	h per lile	12% of Full Seeding	19% of Full Seeding	50% Fu Seed	ıll	75% of Full Seeding
Northern	899	21,700		3,596	NA	4,123	10	0,850	16,275
North-Central	1,163	55,000		4,652	NA	10,450	27	7,500	41,250
South-Central 1,685		50,000		6,740	NA	9,500	25	5,000	37,500
Southern (Remo	ved per adoption (	of Amendmer	nt 16)						
Coastwide Total	3,747	126,700		14,9	988	24,073	63	3,350	95,025

a/ Parental spawner abundance status for the OCN aggregate assumes the status of the weakest sub-aggregate.

TABLE A-5. Council adopted management objectives for Puget Sound natural coho management units, expressed as exploitation rate ceilings for critical, low and normal abundance based status categories, with runsize breakpoints (abundances expressed as

ocean age-3).

	Management Unit							
Status	Strait of Juan de Fuca	Hood Canal	Skagit	Stillaguamish	Snohomish			
Critical/Low Runsize Breakpoint	11,679	19,545	22,857	9,385	51,667			
Critical Exploitation Rate	0.2	0.2	0.2	0.2	0.2			
Low/normal runsize breakpoint	27,445	41,000	62,500	20,000	125,000			
Low Exploitation Rate	0.4	0.45	0.35	0.35	0.4			
Normal Exploitation Rate	0.6	0.65	0.6	0.5	0.6			

TABLE A-6. Council recommended management objectives for Lower Columbia River natural tule Chinook, expressed as exploitation rate ceilings for abundance based status categories, with runsize forecast bins expressed as adult river mouth return forecasts of Lower Columbia River hatchery tule Chinook.

Runsize Forecast Bins	<30,000	30,000 to 40,000	40,00o to 85,000	>85,000
Maximum Exploitation Rate	0.30	0.35	0.38	0.41

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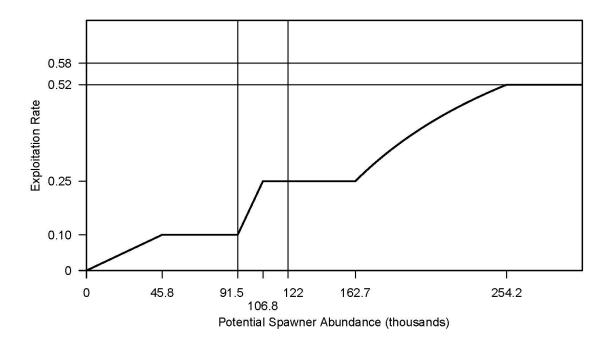


FIGURE A-1. Sacramento River fall Chinook control rule. Potential spawner abundance is the predicted hatchery and natural area adult spawners in the absence of fisheries, which is equivalent to the Sacramento Index. See the salmon FMP, Section 3.3.6, for control rule details.

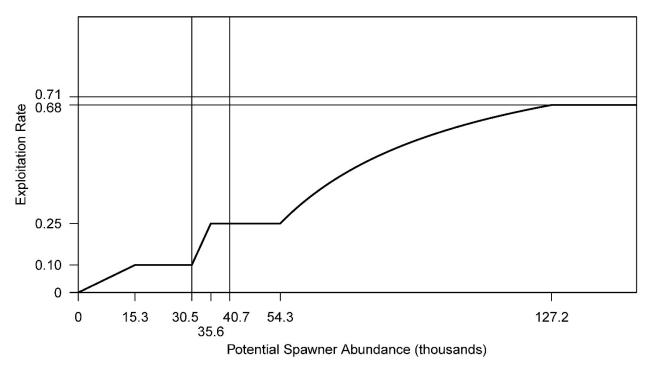


FIGURE A-2. Klamath River fall Chinook control rule. Potential spawner abundance is the predicted natural area adult spawners in the absence of fisheries. See the salmon FMP, Section 3.3.6, for control rule details.

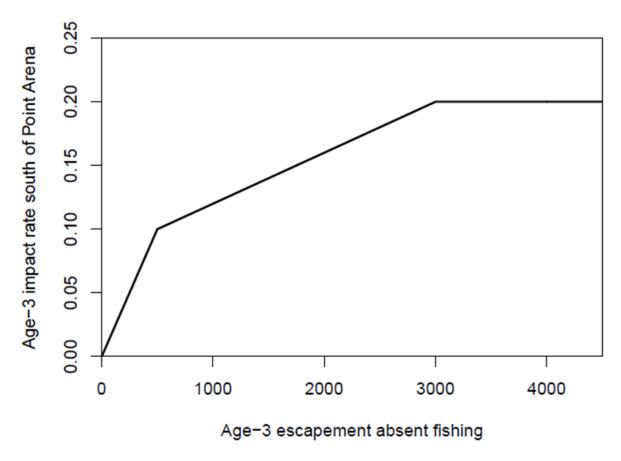


FIGURE A-3. Sacramento River winter Chinook impact rate control rule. The maximum forecast age-3 impact rate for the area south of Point Arena, California, is determined by the forecasted age-3 escapement absent fishing.

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# **APPENDIX B. SALMON HARVEST ALLOCATION SCHEDULES**

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#### 5.3 ALLOCATION

to the Council.

"A Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges."

Magnuson-Stevens Act, National Standard 4

Harvest allocation is required when the number of fish is not adequate to satisfy the perceived needs of the various fishing industry groups and communities, to divide the catch between non-Indian ocean and inside fisheries and among ocean fisheries, and to provide federally recognized treaty Indian fishing opportunity. In allocating the resource between ocean and inside fisheries, the Council considers both in-river harvest and spawner escapement needs. The magnitude of in-river harvest is determined by the states in a variety of ways, depending upon the management area. Some levels of in-river harvests are designed to accommodate federally recognized in-river Indian fishing rights, while others are established to allow for non-Indian harvests of historical magnitudes. Several fora exist to assist this process on an annual basis. The North of Cape Falcon Forum, a state and tribal sponsored forum, convenes the pertinent parties during the Council's preseason process to determine allocation and conservation recommendations for fisheries north of Cape Falcon. The individual states also convene fishery industry meetings to coordinate their input

# 5.3.1 Commercial (Non-Tribal) and Recreational Fisheries North of Cape Falcon

#### 5.3.1.1 Goal, Objectives, and Priorities

Harvest allocations will be made from a total allowable ocean harvest, which is maximized to the largest extent possible but still consistent with PST and treaty-Indian obligations, state fishery needs, and spawning escapement requirements, including consultation standards for stocks listed under the ESA. The Council shall make every effort to establish seasons and gear requirements that provide troll and recreational fleets a reasonable opportunity to catch the available harvest. These may include single-species directed fisheries with landing restrictions for other species.

The goal of allocating ocean harvest north of Cape Falcon is to achieve, to the greatest degree possible, the objectives for the commercial and recreational fisheries as follows:

- Provide recreational opportunity by maximizing the duration of the fishing season while minimizing daily and area closures and restrictions on gear and daily limits.
- Maximize the value of the commercial harvest while providing fisheries of reasonable duration.

The priorities listed below will be used to help guide establishment of the final harvest allocation while meeting the overall commercial and recreational fishery objectives.

At total allowable harvest levels up to 300,000 coho and 100,000 Chinook:

• Provide coho to the recreational fishery for a late June through early September all-species season. Provide Chinook to allow (1) access to coho and, if possible, (2) a minimal Chinook-only fishery prior to the all-species season. Adjust days per week and/or institute area restrictions to stabilize season duration.

• Provide Chinook to the troll fishery for a May and early June Chinook season and provide coho to (1) meet coho hooking mortality in June where needed and (2) access a pink salmon fishery in odd years. Attempt to ensure that part of the Chinook season will occur after June 1.

At total allowable harvest levels above 300,000 coho and above 100,000 Chinook:

- Relax any restrictions in the recreational all-species fishery and/or extend the all-species season beyond Labor Day as coho quota allows. Provide Chinook to the recreational fishery for a Memorial Day through late June Chinook-only fishery. Adjust days per week to ensure continuity with the all-species season.
- Provide coho for an all-salmon troll season in late summer and/or access to a pink fishery. Leave adequate Chinook from the May through June season to allow access to coho.

# 5.3.1.2 Allocation Schedule Between Gear Types

Initial commercial and recreational allocation will be determined by the schedule of percentages of total allowable harvest as follows:

	Coho		Chinook			
Harvest		ercentage <sup>a/</sup>	Harvest	Percentage <sup>a/</sup>		
(thousands of fish)	Troll	Recreational	(thousands of fish)	Troll	Recreational	
0-300	25	75	0-100	50	50	
>300	60	40	>100-150	60	40	
			>150	70	30	

TABLE 5-1. Initial commercial/recreational harvest allocation schedule north of Cape Falcon.

This allocation schedule should, on average, allow for meeting the specific fishery allocation priorities described above. The initial allocation may be modified annually by preseason and inseason trades to better achieve (1) the commercial and recreational fishery objectives and (2) the specific fishery allocation priorities. The final preseason allocation adopted by the Council will be expressed in terms of quotas, which are neither guaranteed catches nor inflexible ceilings. Only the total ocean harvest quota is a maximum allowable catch.

To provide flexibility to meet the dynamic nature of the fisheries and to assure achievement of the allocation objectives and fishery priorities, deviations from the allocation schedule will be allowed as provided below and as described in Section 6.5.3.2 for certain selective fisheries.

- 1. Preseason species trades (Chinook and coho) that vary from the allocation schedule may be made by the Council based upon the recommendation of the pertinent recreational and commercial SAS representatives north of Cape Falcon. The Council will compare the socioeconomic impacts of any such recommendation to those of the standard allocation schedule before adopting the allocation that best meets FMP management objectives.
- 2. Inseason transfers, including species trades of Chinook and coho, may be permitted in either direction between recreational and commercial fishery allocations to allow for uncatchable fish in one fishery to

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a/ The allocation must be calculated in additive steps when the harvest level exceeds the initial tier.

be reallocated to the other. Fish will be deemed "uncatchable" by a respective commercial or recreational fishery only after considering all possible annual management actions to allow for their harvest which meet framework harvest management objectives, including single species or exclusive registration fisheries. Implementation of inseason transfers will require (1) consultation with the pertinent recreational and commercial SAS members and the STT, and (2) a clear establishment of available fish and impacts from the transfer.

- 3. An exchange ratio of four coho to one Chinook shall be considered a desirable guideline for preseason trades. Deviations from this guideline should be clearly justified. Inseason trades and transfers may vary to meet overall fishery objectives. (The exchange ratio of four coho to one Chinook approximately equalizes the species trade in terms of average ex-vessel values of the two salmon species in the commercial fishery. It also represents an average species catch ratio in the recreational fishery.)
- 4. Any increase or decrease in the recreational or commercial total allowable catch (TAC), resulting from an inseason restructuring of a fishery or other inseason management action, does not require reallocation of the overall north of Cape Falcon non-Indian TAC.
- 5. The commercial TACs of Chinook and coho derived during the preseason allocation process may be varied by major subareas (i.e., north of Leadbetter Point and south of Leadbetter Point) if there is a need to do so to decrease impacts on weak stocks. Deviations in each major subarea will generally not exceed 50 percent of the TAC of each species that would have been established without a geographic deviation in the distribution of the TAC. Deviation of more than 50 percent will be based on a conservation need to protect weak stocks and will provide larger overall harvest for the entire fishery north of Cape Falcon than would have been possible without the deviation. In addition, the actual harvest of coho may deviate from the initial allocation as provided in Section 6.5.3.2 for certain selective fisheries.
- 6. The recreational TACs of Chinook and coho derived during the preseason allocation process will be distributed among four major recreational port areas as described for coho and Chinook distribution in Section 5.3.1.3. The Council may deviate from subarea quotas (1) to meet recreational season objectives based on agreement of representatives of the affected ports and/or (2) in accordance with Section 6.5.3.2 with regard to certain selective fisheries. Additionally, based on the recommendations of the SAS members representing the ocean sport fishery north of Cape Falcon, the Council will include criteria in its preseason salmon management recommendations to guide any inseason transfer of coho among the recreational subareas to meet recreational season duration objectives. Inseason redistributions of quotas within the recreational fishery or the distribution of allowable coho catch transfers from the commercial fishery may deviate from the preseason distribution.

#### 5.3.1.3 Recreational Subarea Allocations

#### Coho

The north of Cape Falcon preseason recreational TAC of coho will be distributed to provide 50 percent to the area north of Leadbetter Point and 50 percent to the area south of Leadbetter Point. The distribution of the allocation north of Leadbetter point will vary, depending on the existence and magnitude of an inside fishery in Area 4B, which is served by Neah Bay.

In years with no Area 4B fishery, the distribution of coho north of Leadbetter Point (50 percent of the total recreational TAC) will be divided to provide 74 percent to the area between Leadbetter Point and the Queets River (Westport), 5.2 percent to the area between Queets River and Cape Flattery (La Push), and 20.8

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percent to the area north of the Queets River (Neah Bay). In years when there is an Area 4B (Neah Bay) fishery under state management, the allocation percentages north of Leadbetter Point will be modified to maintain more equitable fishing opportunity among the ports by decreasing the ocean harvest share for Neah Bay. This will be accomplished by adding 25 percent of the numerical value of the Area 4B fishery to the recreational TAC north of Leadbetter Point prior to calculating the shares for Westport and La Push. The increase to Westport and La Push will be subtracted from the Neah Bay ocean share to maintain the same total harvest allocation north of Leadbetter Point. Table 5-2 displays the resulting percentage allocation of the total recreational coho catch north of Cape Falcon among the four recreational port areas (each port area allocation will be rounded to the nearest hundred fish, with the largest quotas rounded downward if necessary to sum to the TAC).

TABLE 5-2.	Percentage allocation of total allowable coho harvest among the four recreational	
port areas nor	h of Cape Falcon <sup>a/</sup>	

Port Area	Without Area 4B Add-on	With Area 4B Add-on		
Columbia River	50.0%	50.0%		
Westport	37.0%	37.0%	plus 17.3% of the Area 4B add-on	
La Push	2.6%	2.6%	plus 1.2% of the Area 4B add-on	
Neah Bay	10.4%	10.4%	minus 18.5% of the Area 4B add-on	

a/ The Council may deviate from these percentages as described under #6 in Section 5.3.1.2.

TABLE 5-3. Example distributions of the recreational coho TAC north of Leadbetter Point.

Sport TAC North of Cape Falcon	Without Area 4B Add-On					With Area 4B Add-On <sup>a/</sup>					
	Columbia	Westport	La Push	Neah	Columbia	Columbia River Westport	La Push	Neah Bay			
	River	Westport	La Tush	Bay	River			Ocean	Add-on	Total	
50,000	25,000	18,500	1,300	5,200	25,000	19,900	1,400	3,700	8,000	11,700	
150,000	75,000	55,500	3,900	15,600	75,000	57,600	4,000	13,600	12,000	25,600	
300,000	150,000	111,000	7,800	31,200	150,000	114,500	8,000	27,500	20,000	47,500	

a/ The add-on levels are merely examples. The actual numbers in any year would depend on the particular mix of stock abundances and season determinations.

#### Chinook

Subarea distributions of Chinook will be managed as guidelines and shall be calculated by the STT with the primary objective of achieving all-species fisheries without imposing Chinook restrictions (i.e., area closures or bag limit reductions). Chinook in excess of all-species fisheries needs may be utilized by directed Chinook fisheries north of Cape Falcon or by negotiating a Chinook/coho trade with another fishery sector.

Inseason management actions may be taken by the NMFS NW Regional Administrator to assure that the primary objective of the Chinook harvest guidelines for each of the four recreational subareas north of Cape Falcon are met. Such actions might include closures from 0 to 3, or 0 to 6, or 3 to 200, or 5 to 200 nautical miles from shore; closure from a point extending due west from Tatoosh Island for 5 miles, then south to a point due west of Umatilla Reef Buoy, then due east to shore; closure from North Head at the Columbia River mouth north to Leadbetter Point; change species that may be landed; or other actions as prescribed in the annual regulations.

## 5.3.2 Commercial and Recreational Fisheries South of Cape Falcon

The allocation of allowable ocean harvest of coho salmon south of Cape Falcon has been developed to provide a more stable recreational season and increased economic benefits of the ocean salmon fisheries at varying stock abundance levels. When coupled with various recreational harvest reduction measures or the timely transfer of unused recreational allocation to the commercial fishery, the allocation schedule is designed to help secure recreational seasons extending at least from Memorial Day through Labor Day when possible, assist in maintaining commercial markets even at relatively low stock sizes, and fully utilize available harvest. Total ocean catch of coho south of Cape Falcon will be treated as a quota to be allocated between troll and recreational fisheries as provided in Table 5-4.

(Note: The allocation schedule provides guidance only when coho abundance permits a directed coho harvest, not when the allowable impacts are insufficient to allow coho retention south of Cape Falcon. At such low levels, allocation of the allowable impacts will be accomplished during the Council's preseason process.)

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TABLE 5-4. Allocation of allowable ocean harvest of coho salmon (thousands of fish) south of Cape Falcon. allocation of allowable ocean harvest of coho salmon (thousands of fish) south of Cape Falcon.

	Recreational Al	location	Commercial Allocation		
Total Allowable Ocean Harvest	Number	Percentage	Number	Percentage	
#100	1//	1/	b/	b/	
	#100 <sup>b/c/</sup>	$100^{b/}$		<b>h</b> /	
200	167 <sup>b/c/</sup>	84 <sup>b/</sup>	33 <sup>b/</sup>	17 <sup>b/</sup>	
300	200	67	100	33	
350	217	62	133	38	
400	224	56	176	44	
500	238	48	262	52	
600	252	42	348	58	
700	266	38	434	62	
800	280	35	520	65	
900	290	32	610	68	
1,000	300	30	700	70	
1,100	310	28	790	72	
1,200	320	27	880	73	
1,300	330	25	970	75	
1,400	340	24	1,060	76	
1,500	350	23	1,150	77	
1,600	360	23	1,240	78	
1,700	370	22	1,330	78	
1,800	380	21	1,420	79	
1,900	390	21	1,510	79	
2,000	400	20	1,600	80	
2,500	450	18	2,050	82	
3,000	500	17	2,500	83	

a/ The allocation schedule is based on the following formula: first 150,000 coho to the recreational base (this amount may be reduced as provided in footnote b); over 150,000 to 350,000 fish, share at 2:1, 0.667 to troll and 0.333 to recreational; over 350,000 to 800,000 the recreational share is 217,000 plus 14% of the available fish over 350,000; above 800,000 the recreational share is 280,000 plus 10% of the available fish over 800,000.

Note: The allocation schedule provides guidance only when coho abundance permits a directed coho harvest, not when the allowable impacts are insufficient to allow general coho retention south of Cape Falcon. At such low levels, allocation of the allowable impacts will be determined in the Council's preseason process. Deviations from the allocation may also be allowed to meet consultation standards for ESA-listed stocks (e.g., the 1998 biological opinion for California coastal coho requires no retention of coho in fisheries off California).

The allocation schedule is designed to give sufficient coho to the recreational fishery to increase the probability of attaining no less than a Memorial Day to Labor Day season as stock sizes increase. This increased allocation means that, in many years, actual catch in the recreational fishery may fall short of its allowance. In such situations, managers will make an inseason reallocation of unneeded recreational coho to the south of Cape Falcon troll fishery. The reallocation should be structured and timed to allow the commercial fishery sufficient opportunity to harvest any available reallocation prior to September 1, while still assuring completion of the scheduled recreational season (usually near mid-September) and, in any event, the continuation of a recreational fishery through Labor Day. This reallocation process will occur

b/ If the commercial allocation is insufficient to meet the projected hook-and-release mortality associated with the commercial all-salmon-except-coho season, the recreational allocation will be reduced by the number needed to eliminate the deficit.

c/ When the recreational allocation is 167,000 coho or less, special allocation provisions apply to the recreational harvest distribution by geographic area (unless superseded by requirements to meet a consultation standard for ESA-listed stocks); see text of FMP as modified by Amendment 11 allocation provisions.

no later than August 15 and will involve projecting the recreational fishery needs for the remainder of the summer season. The remaining projected recreational catch needed to extend the season to its scheduled closing date will be a harvest guideline rather than a quota. If the guideline is met prior to Labor Day, the season may be allowed to continue if further fishing is not expected to result in any considerable danger of impacting the allocation of another fishery or of failing to meet an escapement goal.

The allocation schedule is also designed to assure there are sufficient coho allocated to the troll fishery at low stock levels to ensure a full Chinook troll fishery. This hooking mortality allowance will have first priority within the troll allocation. If the troll allocation is insufficient for this purpose, the remaining number of coho needed for the estimated incidental coho mortality will be deducted from the recreational share. At higher stock sizes, directed coho harvest will be allocated to the troll fishery after hooking mortality needs for Chinook troll fishing have been satisfied.

The allowable harvest south of Cape Falcon may be further partitioned into subareas to meet management objectives of the FMP. Allowable harvests for subareas south of Cape Falcon will be determined by an annual blend of management considerations including:

- 1. Abundance of contributing stocks
- 2. Allocation considerations of concern to the Council
- 3. Relative abundance in the fishery between Chinook and coho
- 4. Escapement goals
- 5. Maximizing harvest potential

Troll coho quotas may be developed for subareas south of Cape Falcon consistent with the above criteria. California recreational catches of coho, including projections of the total catch to the end of the season, would be included in the recreational allocation south of Cape Falcon, but the area south of the Oregon-California border would not close when the allocation is met; except as provided below when the recreational allocation is at 167,000 or fewer fish.

When the south of Cape Falcon recreational allocation is equal to or less than 167,000 coho:

- 1. The recreational fisheries will be divided into two major subareas, as listed in #2 below, with independent quotas (i.e., if one quota is not achieved or is exceeded, the underage or overage will not be added to or deducted from the other quota; except as provided under #3 below).
- 2. The two major recreational subareas will be managed within the constraints of the following impact quotas, expressed as a percentage of the total recreational allocation (percentages based on avoiding large deviations from the historical harvest shares):
  - a. Central Oregon (Cape Falcon to Humbug Mountain) 70 percent
  - b. South of Humbug Mountain 30 percent

In addition.

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(1) Horse Mountain to Point Arena will be managed for an impact guideline of 3 percent of the south of Cape Falcon recreational allocation, and

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- (2) There will be no coho harvest constraints south of Point Arena. However, the projected harvest in this area (which averaged 1,800 coho from 1986-1990) will be included in the south of Humbug Mountain impact quota.
- 3. Coho quota transfers can occur on a one-for-one basis between subareas if Chinook constraints preclude access to coho.

#### 5.3.3 Tribal Indian Fisheries

#### 5.3.3.1 California

On October 4, 1993 the Solicitor, Department of Interior, issued a legal opinion in which he concluded that the Yurok and Hoopa Valley Indian tribes of the Klamath River Basin have a federally protected right to the fishery resource of their reservations sufficient to support a moderate standard of living or 50 percent of the total available harvest of Klamath-Trinity basin salmon, whichever is less. The Secretary of Commerce recognized the tribes' federally reserved fishing right as applicable law for the purposes of the MSA (58 FR 68063, December 23, 1993). The Ninth Circuit Court of Appeals upheld the conclusion that the Hoopa Valley and Yurok tribes have a federally reserved right to harvest fish in Parravano v. Babbitt and Brown, 70 F.3d 539 (1995) (Cert. denied in Parravano v. Babbitt and Brown 110, S.Ct 2546 [1996]). The Council must recognize the tribal allocation in setting its projected escapement level for the Klamath River.

#### 5.3.3.2 Columbia River

Pursuant to a September 1, 1983 Order of the U.S. District Court, the allocation of harvest in the Columbia River was established under the "Columbia River Fish Management Plan" which was implemented in 1988 by the parties of <u>U.S. v. Oregon</u>. This plan replaced the original 1977 plan (pages 16-20 of the 1978 FMP). Since the Columbia River Fishery Management Plan expired on December 31, 1998, fall Chinook in Columbia River fisheries were managed through 2007 under the guidance of annual management agreements among the <u>U.S. v. Oregon</u> parties. In 2008, a new 10 year management agreement was negotiated through the <u>U.S. v. Oregon</u> process, which included revisions to some in-river objectives. A second 10-year plan was negotiated and is in effect for 2018-2027. The 2018-2027 <u>U.S. v. Oregon</u> Management Agreement provides a framework within which the relevant parties may exercise their sovereign powers in a coordinated and systematic manner in order to protect, rebuild, and enhance upper Columbia River fish runs while providing harvest for both treaty Indian and non-Indian fisheries. The parties to the agreement are the United States, the states of Oregon, Washington, and Idaho, and four Columbia River treaty Indian tribes-Warm Springs, Yakama, Nez Perce, and Umatilla.

#### 5.3.3.3 U.S. v. Washington Area

Treaty Indian tribes have a legal entitlement to the opportunity to take up to 50 percent of the harvestable surplus of stocks which pass through their usual and accustomed fishing areas. The treaty Indian troll harvest which would occur if the tribes chose to take their total 50 percent share of the weakest stock in the ocean, is computed with the current version of the Fishery Regulation Assessment Model (FRAM), assuming this level of harvest did not create conservation or allocation problems on other stocks. A quota may be established in accordance with the objectives of the relevant treaty tribes concerning allocation of the treaty Indian share to ocean and inside fisheries. The total quota does not represent a guaranteed ocean harvest, but a maximum allowable catch.

The requirement for the opportunity to take up to 50 percent of the harvestable surplus determines the treaty shares available to the inside/outside Indian and all-citizen fisheries. Ocean coho harvest ceilings off the Washington coast for treaty Indians and all-citizen fisheries are independent within the constraints that (1)

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where feasible, conservation needs of all stocks must be met; (2) neither group precludes the other from the opportunity to harvest its share, and; (3) allocation schemes may be established to specify outside/inside sharing for various stocks.

#### 6.5 SEASONS AND QUOTAS

For each management area or subarea, the Council has the option of managing the commercial and recreational fisheries for either coho or Chinook using the following methods: (1) fixed quotas and seasons; (2) adjustable quotas and seasons; and (3) seasons only. The Council may also use harvest guidelines within quotas or seasons to trigger inseason management actions established in the preseason regulatory process.

Quotas provide very precise management targets and work best when accurate estimates of stock abundance and distribution are available, or when needed to ensure protection of depressed stocks from potential overfishing. The Council does not view quotas as guaranteed harvests, but rather the maximum allowable harvest, which assures meeting the conservation objective of the species or stock of concern. While time and area restrictions are not as precise as quotas, they allow flexibility for effort and harvest to vary in response to abundance and distribution.

#### 6.5.1 Preferred Course of Action

Because of the need to use both seasons and quotas, depending on the circumstances, the Council will make the decision regarding seasons and quotas annually during the preseason regulatory process, subject to the limits specified below. Fishing seasons and quotas also may be modified during the season as provided under Section 10.2.

### 6.5.2 Procedures for Calculating Seasons

Seasons will be calculated using the total allowable ocean harvest determined by procedures described in Chapter 5, and further allocated to the commercial and recreational fishery in accordance with the allocation plan presented in Section 5.3, and after consideration of the estimated amount of effort required to catch the available fish, based on past seasons.

Recreational seasons will be established with the goal of encompassing Memorial Day and/or Labor Day weekends in the season, if feasible. Opening dates will be adjusted to provide reasonable assurance that the recreational fishery is continuous, minimizing the possibility of an in-season closure.

Criteria used to establish commercial seasons, in addition to the estimated allowable ocean harvests, the allocation plan, and the expected effort during the season, will be: (1) bycatch mortality; (2) size, poundage, and value of fish caught; (3) effort shifts between fishing areas; (4) harvest of pink salmon in odd-numbered years; and (5) protection for weak stocks when they frequent the fishing areas at various times of the year.

# 6.5.3 Species-Specific and Other Selective Fisheries

#### 6.5.3.1 Guidelines

In addition to the all-species and single or limited species seasons established for the commercial and recreational fisheries, other species-limited fisheries, such as "ratio" fisheries and fisheries selective for marked or hatchery fish, may be adopted by the Council during the preseason regulatory process. In adopting such fisheries, the Council will consider the following guidelines:

- 1. Harvestable fish of the target species are available.
- 2. Harvest impacts on incidental species will not exceed allowable levels determined in the management plan.

- 3. Proven, documented, selective gear exists (if not, only an experimental fishery should be considered).
- 4. Significant wastage of incidental species will not occur, or a written economic analysis demonstrates the landed value of the target species exceeds the potential landed value of the wasted species.
- 5. The selective fishery will occur in an acceptable time and area where wastage can be minimized and target stocks are maximally available.
- 6. Implementation of selective fisheries for marked or hatchery fish must be in accordance with U.S. v. Washington stipulation and order concerning co-management and mass marking (Case No. 9213, Subproceeding No. 96-3) and any subsequent stipulations or orders of the U.S. District Court, and consistent with international objectives under the PST (e.g., to ensure the integrity of the codedwire tag program).

# 6.5.3.2 Selective Fisheries Which May Change Allocation Percentages North of Cape Falcon

As a tool to increase management flexibility to respond to changing harvest opportunities, the Council may implement deviations from the specified port area allocations and/or gear allocations to increase harvest opportunity through mark-selective fisheries. The benefits of any mark-selective fishery will vary from year to year and fishery to fishery depending on stock abundance, the mix of marked and unmarked fish, projected hook-and-release mortality rates, and public acceptance. These factors should be considered on an annual and case-by-case basis when utilizing mark-selective fisheries. The deviations for mark-selective fisheries are subordinate to the allocation priorities in Section 5.3.1.1 and may be allowed under the following management constraints:

- 1. Mark-Selective fisheries will first be considered during the months of May and/or June for Chinook and July through September for coho. However, the Council may consider mark-selective fisheries at other times, depending on year to year circumstances identified in the preceding paragraph.
- 2. The total impacts within each port area or gear group on the critical natural stocks of management concern are not greater than those under the original allocation without the mark-selective fisheries.
- 3. Other allocation objectives (i.e., treaty Indian, or ocean and inside allocations) are satisfied during negotiations in the North of Cape Falcon Forum.
- 4. The mark-selective fishery is assessed against the guidelines in Section 6.5.3.1.
- 5. Mark-selective fishery proposals need to be made in a timely manner in order to allow sufficient time for analysis and public comment on the proposal before the Council finalizes its fishery recommendations.

If the Council chooses to deviate from specified port and/or gear allocations, the process for establishing a mark-selective fishery would be as follows:

- 1. Allocate the TAC among the gear groups and port areas according to the basic FMP allocation process described in Section 5.3.1 without the mark-selective fishery.
- 2. Each gear group or port area may utilize the critical natural stock impacts allocated to its portion of the TAC to access additional harvestable, marked fish, over and above the harvest share established in step one, within the limits of the management constraints listed in the preceding paragraph.

# 6.5.4 Procedures for Calculating Quotas

Quotas will be based on the total allowable ocean harvest and the allocation plan as determined by the procedures of Chapter 5.

To the extent adjustable quotas are used, they may be subject to some or all of the following inseason adjustments:

- 1. For coho, private hatchery contribution to the ocean fisheries in the OPI area.
- 2. Unanticipated loss of shakers (bycatch mortality of undersized fish or unauthorized fish of another species that have to be returned to the water) during the season. (Adjustment for coho hooking mortality during any all-salmon-except-coho season will be made when the quotas are established.)
- 3. Any catch that take place in fisheries within territorial waters that are inconsistent with federal regulations in the EEZ.
- 4. If the ability to update inseason stock abundance is developed in the future, adjustments to total allowable harvest could be made, where appropriate.
- 5. The ability to redistribute quotas between subareas depending on the performance toward achieving the overall quota in the area.

Changes in the quotas as a result of the inseason adjustment process will be avoided unless the changes are of such magnitude that they can be validated by the STT and Council, given the precision of the original estimates.

The basis for determining the private hatchery contribution in (1) above will be either coded-wire tag analysis or analysis of scale patterns, whichever is determined by the STT to be more accurate, or another more accurate method that may be developed in the future, as determined by the STT and Council.

In reference to (4) and (5) above, if reliable techniques become available for making inseason estimates of stock abundance, and provision is made in any season for its use, a determination of techniques to be applied will be made by the Council through the Salmon Methodology Review process and discussed during the preseason regulatory process.

#### 6.5.5 Procedures for Regulating Ocean Harvests of Pink and Sockeye

Sockeye salmon are only very rarely caught in Council-managed ocean salmon fisheries and no specific procedures have been established to regulate their harvest. Procedures for pink salmon are as follows:

- 1. All-species seasons will be planned such that harvest of pink salmon can be maximized without exceeding allowable harvests of Chinook and/or coho and within conservation and allocation constraints of the pink stocks.
- 2. Species specific or ratio fisheries for pink salmon will be considered under the guidelines for species specific fisheries presented in Section 6.5.3, and allocation constraints of the pink stocks.

# **APPENDIX C. OREGON PRODUCTION INDEX DATA**

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TABLE C-1. Millions of coho smolts <sup>a/</sup> released annually into the OPI area by geographic area and rearing agency.

	Columbia River					<u> </u>	<u> </u>	Oregon Coast				
Year or			Washington	า			Private			_		
Average	Oregon	Early	Late	Combined	Federal	Total	ODFW <sup>b/</sup>	Yearlings	Total	California	Total OPI	
1960-1965	5.6	-	-	6.1	4.5	16.2	2.0	-	2.0	0.4	18.6	
1966-1970	6.0	10.2	4.9	15.1	6.5	27.6	2.9	0.0	2.9	1.3	31.8	
1971-1975	6.8	10.7	6.8	17.5	4.5	28.8	3.9	0.0	3.9	1.2	33.9	
1976-1980	8.0	7.3	10.1	17.4	4.7	30.1	3.8	1.4	5.2	0.7	36.0	
1981-1985	7.1	4.3	14.4	18.7	3.2	29.0	3.9	3.3	7.2	0.7	36.9	
1986-1990	7.3	3.1	15.6	18.7	4.1	30.1	5.2	1.9	7.1	1.4	38.6	
1991-1995	9.8	3.6	13.9	17.5	3.5	30.8	4.9	-	4.9	0.9	36.6	
1996-2000	7.2	4.5	10.9	15.4	4.3	26.9	2.0	-	2.0	0.6	29.4	
2001	7.6	4.2	9.7	13.9	3.7	25.2	0.9	-	0.9	0.6	26.7	
2002	7.5	3.3	8.6	11.9	4.3	23.7	1.0	-	1.0	0.6	25.3	
2003	8.2	3.3	8.7	12.0	3.1	23.3	0.8	-	0.8	0.5	24.6	
2004	6.7	3.0	8.8	11.8	3.6	22.1	0.8	-	8.0	0.6	23.5	
2005	6.1	2.5	9.1	11.6	2.8	20.6	0.8	-	8.0	0.6	22.0	
2006	6.1	2.8	9.0	11.7	2.6	20.4	0.8	-	0.8	0.6	21.8	
2007	6.2	3.1	9.0	12.1	3.1	21.4	0.7	-	0.7	0.6	22.6	
2008	6.9	2.8	9.2	12.0	2.9	21.9	0.4	-	0.4	0.5	22.8	
2009	6.9	2.5	8.3	10.8	3.2	20.9	0.4	-	0.4	0.6	21.8	
2010	5.9	2.0	7.5	9.5	3.1	18.6	0.3	-	0.3	0.5	19.4	
2011	5.8	1.8	8.4	10.2	3.0	19.0	0.4	-	0.4	0.5	19.8	
2012	5.9	2.2	7.4	9.7	2.7	18.2	0.4	-	0.4	0.6	19.3	
2013	6.0	2.0	7.8	9.8	2.9	18.6	0.4	-	0.4	0.6	19.5	
2014	6.5	1.5	7.4	8.9	3.0	18.4	0.4	-	0.4	0.6	19.4	
2015	5.7	2.1	7.4	9.5	3.0	18.2	0.3	-	0.3	0.4	18.9	
2016	5.7	2.2	6.9	9.1	3.0	17.7	0.3	-	0.3	0.3	18.3	
2017	5.5	1.7	7.6	9.2	1.9	16.7	0.3	-	0.3	0.3	17.2	
2018	6.1	2.1	7.3	9.4	3.6	19.2	0.3	-	0.3	0.3	19.8	
2019	5.3	1.3	7.9	9.2	3.2	17.8	0.3	-	0.3	0.2	18.3	
2020	5.6	1.2	8.2	9.4	3.6	18.5	0.3	-	0.3	0.4	19.2	
2021	5.9	1.0	7.6	8.6	3.4	17.9	0.3	-	0.3	0.4	18.6	
2022	4.7	0.9	8.0	8.9	3.5	17.1	0.3	-	0.3	0.4	17.7	
2023	5.9	1.3	8.3	9.6	4.2	19.7	0.2	-	0.2	0.3	20.2	
2024 <sup>c/</sup>	5.3	2.2	9.1	11.2	3.1	19.6	0.3	-	0.3	0.2	20.2	

a/ Defined here as 30 fish per pound or larger and released in February or later.

b/ Beginning in 1989, does not include minor releases from STEP projects.

c/ Preliminary.

TABLE C-2. Data sets used in predicting Oregon production index hatchery (OPIH) adult coho. Adults and jacks shown in thousands of fish and smolts in millions of fish. All environmental data in year of ocean entry (t-1) except WSST-ONDJ, which is January of adult return year (t)

	Adults (t)		Jacks (t-1)			Columbia River Smolts (t-1)			Environmental Index-Month(s) <sup>k/l/</sup>								
Year (t) or	F	Post-season	Total OPIc/	Columbia	OR Coast/	Normal		Delayed Smolt	NPGO	PDO	WSST-	PDO-	MEI-	UWI-	STT-	SSH-	UWI-
	OPIH <sup>a/</sup>	FRAM <sup>b/</sup>		River <sup>d/</sup>	CA <sup>e/</sup>	Timed <sup>f/</sup>	Delayed <sup>g/</sup>	Adjustmenth/	(logge	ed, t-1)	ONDJ	MJJ	OND	JAS	AMJ	AMJ	SON
Average																	
1970-1975	2,432.6	-	119.0	113.3	5.7	26.4	1.3	4.7	-								
1976-1980	1,879.5	-	91.7	81.5	10.2	27.4	2.8	6.4									
1981-1985 <sup>i/</sup>	867.9	-	47.2	40.6	6.6	22.6	6.3	8.3									
1986-1990	1,486.2	1,459.0	60.6	50.6	10.0	21.0	8.9	15.5									
1991-1995	605.9	581.2	27.7	22.6	5.0	26.3	5.5	4.5									
1996-2000	320.2	329.2	22.4	18.3	4.0	22.3	3.4	2.5									
2001-2005	620.0	865.1	44.6	36.6	8.0	23.7	1.3	1.9									
2006-2010	618.5	674.1	32.3	26.4	5.9	22.0	1.0	1.1									
2011	442.3	454.2	23.3	22.2	1.1	18.2	0.3	0.4	1.29	-0.74	0.09	-0.37	-2.09	34.21	11.68	-30.63	-32.89
2012	182.3	183.1	17.9	13.9	4.0	18.1	0.9	0.7	0.79	-1.57	-0.12	-0.77	-1.22	29.33	10.70	-27.63	-26.30
2013	316.9	335.1	26.3	24.1	2.2	17.1	1.1	1.5	1.42	-1.41	-0.08	-0.79	-0.11	53.55	11.02	-15.10	-29.90
2014	1,263.6	1,316.5	51.4	49.4	2.0	18.0	0.6	1.6	0.36	-0.93	-0.40	-0.86	-0.15	35.30	10.66	-86.57	-7.81
2015	251.7	268.9	39.6	37.0	2.6	16.9	1.5	3.0	-0.20	0.53	1.57	-0.65	0.25	41.26	11.17	-9.27	-40.11
2016	233.8	247.7	19.7	18.6	1.0	16.9	1.3	1.3	-1.38	0.81	0.89	-0.10	2.05	40.41	10.28	-95.53	-7.85
2017	284.8	291.8	22.9	22.4	0.4	16.5	1.3	1.6	-0.16	0.63	0.84	0.54	-0.51	47.98	11.58	-106.00	-68.23
2018	149.4	182.8	19.2	18.5	0.7	16.0	0.7	0.8	-0.86	-0.06	0.40	0.84	-0.61	46.09	11.19	-47.17	-36.18
2019	300.5	340.7	47.4	46.7	0.8	18.6	0.5	1.2	-1.96	-0.30	0.73	0.67	0.43	41.06	10.83	-101.90	-12.37
2020	369.6	387.7	15.2	14.9	0.3	16.8	0.2	0.2	-2.28	-0.04	-0.07	0.52	0.39	20.07	10.47	-83.77	4.07
2021	-	841.3	92.3	89.1	3.2	18.1	0.4	1.9	-1.84	-1.04	0.46	0.07	-1.15	25.56	11.40	-68.43	-18.89
2022	-	695.6	63.7	62.4	1.3	17.6	0.3	1.0	-0.91	-1.58	-0.15	-0.42	-1.43	40.85	10.97	-120.23	-64.07
2023	-	514.2	52.7	51.9	0.8	16.8	0.3	0.9	-1.26	-1.78	-0.05	-0.82	-1.63	33.83	11.47	-87.23	-6.61
2024	-	742.3	75.2	74.3	0.8	19.6	0.2	0.7	-1.72	-1.88	1.20	-1.40	0.70	22.84	10.40	-58.47	-28.15
2025 <sup>j/</sup>	-	312.6	50.7	49.4	1.3	19.6	0.4	1.1	-1.89	-2.11	0.51	-1.81	-0.60	42.63	10.82	-154.60	-34.90

a/ Adult OPIH = Harvest impacts plus escapement for public hatchery stocks originating in the Columbia River, Oregon coastal rivers, and the Klamath River, California.

b/ Adult post-season FRAM = Harvest impacts plus escapement for public hatchery stocks originating in the Columbia River, Oregon coastal rivers, and the Klamath River. Estimates derived from the post-season FRAM and used for prediction beginning in 2008.

c/ Jack OPI = Total Jack CR and Jack OC.

d/ Jack CR = Columbia River lack returns corrected for small adults.

e/ Jack OC = Oregon coastal and California hatchery jack returns corrected for small adults.

f/ Sm CR = Total Columbia River smolt releases.

g/ Sm D = Columbia River delayed smolt releases

h/ Correction term for delayed smolts released from Col. R. hatcheries (Col. R. Jacks\*(Delayed Smolts/Col. R. Smolts)).

i/ Subsequent to 1983 data not used in predictions due to El Niño impacts.

i/ For Post-season FRAM: Preseason predicted adults.

k/ Beginning in 2024, the OPIH forecast was derived using an ARIMA MAPE-weighted ensemble approach that utalized the most recent 15 years of environmental data within the model.

I/ Environmental Index descriptions:

NPGO - North Pacific Gyre Oscillation

PDO - Pacific Decadal Oscillation

WSST - Winter sea surface temperature, average of October - January

MEI - Multivariate ENSO index

UWI - Upwelling wind index (mean upwelling winds index in months of ocean migration year at 42° N 125° W)

SST - Sea surface temperature

TABLE C-3. Estimated coho salmon natural spawner abundance in Oregon coastal basins for each OCN coho management component.

component.								
	2001-	2006-	2011-	2016-				
Component	2005	2010	2015	2020				
and Basin <sup>a/</sup>	Ave.	Ave.	Ave.	Ave.	2021 <sup>b/</sup>	2022 <sup>b/</sup>	2023	2024 <sup>d/</sup>
NORTHERN								
Necanicum	2,534	2,102	2,079	639			1,637	1,559
Nehalem	20,159	19,364	11,296	7,402			14,388	16,752
Tillamook	6,563	9,408	9,355	4,006			13,325	9,402
Nestucca	7,287	2,063	3,590	3,145			3,894	4,202
Ind. Tribs.	573	1,132	1,375	446			1,893	918
TOTAL	37,116	34,068	27,695	15,638	42,811	52,956	35,137	32,833
NORTH CENTRA	۱L							
Salmon	506	672	1,822	456	571	1,324	1,249	3,352
Siletz	6,902	11,678	13,392	4,198	15,428	16,466	5,410	10,864
Yaquina	10,571	7,618	11,375	3,586	16,721	6,484	5,833	16,529
Beaver Ck.	3,487	1,885	2,636	1,143	2,483	2,058	943	1922
Alsea	8,344	8,353	15,626	5,445	13,633	19,141	7,653	12,208
Siuslaw	24,138	16,700	20,679	7,197	38,031	24,892	21,391	24,628
Ind. Tribs.	3,279	2,017	1,931	839	1,747	1,568	83	2242
TOTAL	57,227	48,922	67,461	22,862	88,614	71,933	42,562	71,745
SOUTH CENTRA	۱L							
Umpqua	37,165	39,149	44,750	19,965	49,266	9,632	30,796	14,530
Coos	26,572	16,423	13,841	6,974		7,370	24,020	17,438
Coquille	15,571	19,437	26,046	7,916		19,078	7,707	10,644
Floras Ck.	3,568	3,352	3,252	792		871	369	1,084
Sixes R.	157	140	303	130		113	19	97
Coastal Lakes	18,205	22,557	15,920	6,641	19,664	8,049	12,396	7,518
Ind. Tribs.	-	224	58	8		0	0	14
TOTAL	101,238	101,282	104,171	42,425	114,897	45,113	75,307	51,325
SOUTH								
Rogue <sup>c/</sup>	12,349	3,140	6,066	5,218	8,992	7,865	3,565	9,056
	•	•	-	•	•	•	•	•
COASTWIDE	207,930	187,412	205,393	86,143	255,314	177,867	156,571	164,959

a/ The sum of the individual basins may not equal the aggregate totals due to the use of independent estimates at different geographic scales. The average data may include years when no data was available.

b/ (--) Estimates were not made due to low survey rates and sampling levels.

c/ Mark recapture estimate based on seining at Huntley Park in the lower Rogue River.

d/ Preliminary.

TABLE C-4. Data set used in predicting Oregon coastal natural river (OCNR) coho ocean recruits with random survey sampling and Mixed Stock Model (MSM) accounting. All environmental data in year of ocean entry (t-1) except SST-J, which is January of adult return year (t). Spawners is parent brood (t-3). Recruits shown in thousands of fish.

	Re	cruits			E	nvironmental l	ndex-Montl	h(s) <sup>a/</sup>		·
Year (t)	Adults	Spawners	PDO-MJJ	UWI-JAS	UWI-SON	SSH-AMJ	SST-AM		MEI-ON	SPR.TRN
1970-1975	237.5	112.3	-0.7	35.5	-19.7	-95.3	11.6	9.0	-0.7	98.3
1976-1980	204.3	30.7	-0.4	26.4	-29.2	-120.0	11.1	9.9	-0.1	86.0
1981-1985	148.9	26.8	-0.2	28.4	-30.0	-102.4	11.4	10.4	0.3	85.0
1986-1990	153.8	28.9	0.1	29.6	-39.2	-95.9	11.6	10.4	0.1	82.0
1991-1995	150.7	27.0	0.3	29.3	-40.8	-82.0	11.6	10.4	0.4	89.0
1996-2000	131.8	25.2	0.6	31.2	-49.0	-65.1	11.7	10.8	0.3	94.8
2000	156.6	21.5	0.0	35.8	-26.8	-45.7	11.4	10.2	-0.7	72.0
2001	246.1	34.7	-0.7	47.1	-38.2	-114.9	10.7	10.1	-0.3	61.0
2002	227.3	61.0	-0.9	50.5	-25.9	-136.6	10.1	11.0	0.8	80.0
2003	164.0	143.1	-0.4	55.5	-26.4	-50.7	11.1	10.3	0.3	112.0
2004	146.3	236.4	-0.2	27.0	4.3	-49.2	11.9	10.2	0.5	110.0
2005	113.3	213.3	0.2	51.8	-9.0	-11.5	12.5	11.5	-0.7	145.0
2006	64.9	154.1	0.5	53.6	-14.1	-21.5	11.2	9.8	0.9	112.0
2007	157.0	139.9	0.5	27.5	-9.9	-108.1	10.6	8.9	-1.1	74.0
2008	262.9	104.7	0.2	32.7	-10.7	-96.9	9.6	9.4	-1.0	89.0
2009	255.6	57.3	-0.1	24.3	-47.1	-78.9	10.5	10.8	0.8	82.0
2010	352.4	156.1	-0.4	34.2	-32.9	-30.6	11.7	10.1	-2.1	100.0
2011	98.1	245.4	-0.8	29.3	-26.3	-27.6	10.7	9.2	-1.2	100.0
2012	130.2	244.7	-0.8	53.6	-29.9	-15.1	11.0	9.9	-0.1	121.0
2013	377.4	336.0	-0.9	35.3	-7.8	-86.6	10.7	9.1	-0.1	100.0
2014	64.6	80.2	-0.7	41.3	-40.1	-9.3	11.2	12.3	0.2	101.0
2015	74.3	110.8	-0.1	40.4	-7.9	-95.5	10.3	11.0	2.0	92.0
2017	67.4	337.7	0.5	48.0	-68.2	-106.0	11.6	9.9	-0.5	85.0
2018	74.0	52.4	8.0	46.1	-36.2	-47.2	11.2	11.0	-0.6	116.0
2019	99.2	67.9	0.7	41.1	-12.4	-101.9	10.8	11.1	0.4	107.0
2020	100.3	60.1	0.5	20.1	4.1	-83.8	10.5	10.5	0.4	103.0
2021	251.3	67.8	0.1	25.6	-18.9	-68.4	11.4	10.3	-1.2	140.0
2022	190.7	87.7	-0.4	40.8	-64.1	-120.2	11.0	10.2	-1.4	80.0
2023 <sup>b/</sup>	171.0	100.2	-0.8	33.8	-6.6	-87.2	11.5	10.6	-1.6	84.0
2024 <sup>b/</sup>	190.8	222.5	-1.4	22.8	-28.1	-58.5	10.6	11.4	0.7	114.0

a/ Environmental Index descriptions:

PDO - Pacific Decadal Oscillation (4-year moving average)

UWI - Upwelling wind index (mean upwelling winds index in months of ocean migration year at 42° N 125° W)

SSH - Sea surface height (South Beach, OR at 44° 37.5′ N, 124 ° 02.6′ W)

SST - Sea surface temperature (mean sea surface temperature in January of return year at Charleston, OR)

MEI - Multi-variate ENSO index

SPR.TRN - Spring transition date (Julian)

b/ Adult recruits is a forecasted number.

c/ PDO-MJJ values from 1970-2024 are from ERSST V5. Prior to 2024, data used in OCNR forecasting and published in Preseason Report I was retrieved from UW-JISAO which is no longer being updated.

d/ SSH-AMJ & MEI-OND changes minorly every year to account for long term trends. Further information can be found in Rupp et al., 2012.

TABLE C-5. Models used in the 2025 ensemble Oregon Production Index Hatchery (OPIH) Adult coho forecast model with their predictive ranking, variables included, weight in the ensemble model, and ARIMA structure.

		_	Α	RIMA Order	/
Model Rank	Variables	Weight	Auto- regressive	Differ- encing	Moving Average Structure
1	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + MEI.OND + UWI.JAS	0.103	0,0	0,0	1,0
2	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + MEI.OND + SST.AMJ	0.102	0,0	0,0	1,0
3	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + UWI.JAS	0.101	0,0	0,0	1,0
4	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + PDO.MJJ + UWI.JAS	0.100	0,0	0,0	1,0
5	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + UWI.JAS + SST.AMJ	0.098	0,0	0,0	1,0
6	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + SST.AMJ	0.102	1,1	0,0	0,0
7	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A	0.098	1,1	0,0	0,0
8	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + SST.AMJ + UWI.SON	0.098	1,1	0,0	0,0
9	lag1_log_JackOPI + lag1_log_SmAdj + lag1_NPGO + lag1_PDO + WSST_A + SST.AMJ	0.099	1,1	0,0	0,0
10	lag1_log_JackOPI + lag1_NPGO + lag1_PDO + WSST_A + MEI.OND	0.098	1,1	0,0	0,0

a/ The general component is represented by the number before the comma. The seasonal component is represented by the number after the comma. For

TABLE C-6. The 2025 Ensemble Mean of the six predictors based on environmental conditions and spawners used to forecast the Oregon Coast Natural River (OCNR) systems.

	Variable	es	Prediction	r <sup>2</sup>	OCV <sup>a/</sup>
PDO	Spring Transition (Julian date; t-1)	Log Spawners (t-3)	304	0.54	0.43
PDO	Multivariate ENSO Index (Oct-Dec; t-1)	Upwelling (July-Sept; t-1)	234	0.61	0.49
PDO	Spring Transition (Julian date; t-1)	Multivariate ENSO Index (Oct-Dec; t-1)	259	0.58	0.49
PDO	Upwelling (July-Sept; t-1)	Sea Surface Temperature (May-Jul; t-1)	287	0.57	0.43
PDO	Sea Surface Height (Apr-June; t-1)	Upwelling (July-Sept; t-1)	340	0.62	0.46
PDO	Upwelling (Sept-Nov, t-1)	Sea Surface Temperature (Jan; t)	255	0.57	0.43
	Ensemble	Mean	278	0.63	0.51
	(90% prediction	intervals)	(112.884 - 682.101)		

a/ OCV - ordinary cross-validation score

## APPENDIX D. UPDATED SACRAMENTO RIVER FALL CHINOOK FMSY PROXY

Several recommendations relevant to salmon assessment and management were presented at the 2024 Salmon Methodology Review, and again at the November 2024 PFMC meeting. The November 2024 Decision Summary Document (<a href="https://www.pcouncil.org/november-2024-decision-summary-document/">https://www.pcouncil.org/november-2024-decision-summary-document/</a>) identified timelines for implementation of Council-adopted Methodology Review topics. The STT has prepared this appendix to describe what aspects of the PFMC's preseason process will change in 2025, given the outcomes from the Methodology Review.

Two topics were reviewed by the Salmon Technical Team (STT) and Scientific and Statistical Committee Salmon Subcommittee (SSC-SC) at the 2024 Methodology Review held on October 24, 2024. These included:

- 1. Updated F<sub>MSY</sub> Proxy and S<sub>MSY</sub>/S<sub>MP</sub> ratio for Sacramento River fall Chinook
- 2. Consider a cohort reconstruction for SRFC Salmon and Comparison with the Sacramento Index

Regarding Item 1, the Council adopted the updated  $F_{MSY}$  proxy value of 0.58 for SRFC. Because  $F_{MSY}$  was not directly estimated for SRFC, the  $F_{MSY}$  proxy for SRFC (a tier 2 stock) is reduced by 10% to account for scientific uncertainty. This yields an allowable exploitation rate associated with the Acceptable Biological Catch ( $F_{ABC}$ ) of 0.52. Both the Council-adopted SRFC  $F_{MSY}$  proxy of 0.58 and the reduced  $F_{ABC}$  value of 0.52 are incorporated into the updated Harvest Control Rule below. The STT will implement this  $F_{MSY}$  proxy prior to and during the 2025 preseason fishery planning process. Implementation could affect status determinations (e.g., overfishing) and allowable exploitation rates for SRFC. With regard to the harvest control rule, implementation of the updated  $F_{MSY}$  proxy value of 0.58 will reduce the maximum allowable exploitation rate at moderate to high abundances but will not affect allowable exploitation rates at lower abundances (Figure 1). In addition to updating the  $F_{MSY}$  proxy value for SRFC, the Council specified that a review of the newly adopted  $F_{MSY}$  proxy should occur in 2028 to potentially consider and incorporate any new stock-recruit data that may be available at that time.

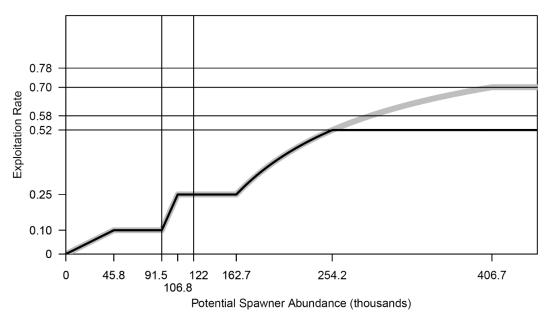


Figure D-1. Harvest control rule for SRFC under the  $F_{MSY}$  proxy value of 0.58 (black line) and the prior harvest control rue (grey line). The black line obscures the most of the grey line when the allowable exploitation rates are identical.

Regarding Item 2, the Council approved the cohort reconstruction and identified that full implementation will take time and coordination. The Council specified that postseason estimates of exploitation rates derived from the cohort reconstruction, as available, should be used for stock status determinations beginning in 2025. At the time of writing, exploitation rates derived from cohort reconstruction are only available for run years 2010 - 2019. Due to the time lag between the years of cohort reconstruction data available and the years of data needed to inform Status Determination Criteria (SDC), data derived from cohort reconstruction will not inform the SDC relevant to 2024 and 2025 ocean salmon fisheries assessment and planning. In order use exploitation rates derived from cohort reconstruction, the cohort reconstruction model needs to be updated annually, either prior to, or in the year following the preseason management cycle. The STT will report status determinations in the 2025 preseason reports against the newly adopted  $F_{MSY}$  proxy. The STT will also continue to develop the means to provide estimates of SRFC harvest impacts from north of Cape Falcon.

## APPENDIX E. UPDATE TO COHO FRAM BASE PERIOD AND CODE CORRECTION

The STT was notified by the Washington co-managers that they have updated the Coho FRAM base period data and corrected an error in the FRAM software code in the calculations for encounters. First, the previous Coho base period did not include base period information for the Makah Wild stock, and did not have a place for the new Hoko Falls hatchery program. The new base period includes base period information for both stocks. Second, the bias-correction for mark-selective fisheries was not correctly incorporated for the calculation of encounters. This has been corrected such that it is correctly aligned with a previously approved methodology change. More detailed information about these changes can be found in Appendix E1 and Appendix E2 which were provided to the STT by the Washington co-managers.

The STT has reviewed these changes, and agreed they are an improvement. The STT expresses gratitude to the co-managers for their work on these changes.

#### APPENDIX E1.

#### State/Tribal Co-Manager<sup>1</sup> Memorandum: Coho FRAM Base Period Update (Round 28)

Stephanie Thurner (NWIFC, sthurner@nwifc.org) and Ty Garber (WDFW, Tyler.Garber@dfw.wa.gov)
February 27, 2025

The Fishery Regulation Assessment Model (<u>FRAM</u>) is an application used to assess the impacts of fisheries on Chinook and Coho stocks along the West Coast. It has two primary uses in the management process, which are pre-season planning and post-season evaluation. Analyses conducted using FRAM require the use of a base period.

A base period is a range of years from which coded-wire tag (CWT) data are used to estimate exploitation rates and other parameters, such as fishery stock composition, maturation rates, base period abundance, and model stock proportions, through a process of cohort reconstruction. Resulting base period reference parameters are used to populate the FRAM to predict annual stock and fishery specific impacts. Since 2001, the set of years used to develop the Coho base period are catch years 1986 through 1992. The base period continues to receive extensive technically review and there have been multiple refinements to the core data used. These updates are referred to as new rounds or versions. Unfortunately, there is no published historical record of Coho FRAM base period update and changes associated with those updates available.

Key base period outputs<sup>2</sup> can be affected when changes or corrections are made to the data used to develop a base period, such as but not limited to coded wire tags used, catch estimates, release estimates, fishery parameters, abundance information, and growth or maturation information,. Changes to FRAM or base period development algorithms can also affect base period outputs. Updated base period outputs can cause pre- and post-season runs to produce different estimates of stock-specific fishery impacts, escapement, and exploitation rate, even when using the same annual abundance and fishery inputs. Moreover, there are occasionally updates to historical data, such as catch and abundance, provided by regional experts to the Salmon Management Analytical Work Group (SMAWG) that can cause annual runs to differ irrespective of base period.

For future use, the SMAWG have approved and recommend using FRAM base period round 28 for all Coho modeling exercises. Base period round 28 differs from the last officially approved base period round (round 27, used through post-season 2024) for two stocks: Makah Wild and Hoko Hatchery. The Makah Wild stock (FRAM stock 123/124) did not have base period information in base period round 27, so we have incorporated the same base period information for the Makah Wild stock as is used for the Makah Hatchery stock (FRAM stock 125/126). The new Hoko Falls hatchery program did not have a place in FRAM. These fish are descendants of wild JDF Coho, so we changed the unused Port Angeles net pens FRAM stock (FRAM stock 119/120) to be a Hoko Hatchery stock by renaming the stock and changing the base period information to be the same as SJDF Wild – West (Stock 117/118). More details about the changes made in round 28 are available in Appendix A.

Table 1 below shows the impact of the above base period changes on the 2024 model run by comparing three different model runs. Model 1 is the final 2024 pre-season model run, which used base period 27.

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<sup>&</sup>lt;sup>1</sup> United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974)

<sup>&</sup>lt;sup>2</sup> Some examples include base period exploitation rates, growth functions, base cohort, base catch, base size limit, and natural mortality rates.

Model 2 is the 2024 model with no changes to the pre-season forecasts, but with base period round 28. Model 3 is the 2024 model run with base period 28, as well as the Hoko hatchery and Tsoo-Yess wild forecasts moved into the new, correct stocks, and removed them from where they were modeled during the final 2024 model run. The changes between base period round 27 and round 28 do not impact exploitation rates for Puget Sound Coho, coastal Coho, or Thompson and Upper Fraser Coho.

Regarding PFMC review, and according to <a href="Council Operating Procedure 15">Council Operating Procedure 15</a>:

"During the March and April meetings or at other appropriate times, the SSC, in conjunction with the STT, will identify methodology issues which need documentation and/or merit a full review. The SSC is responsible for reviewing new or changed methodology as opposed to specific applications of the methodology. Examples of issues that could merit a full review include new model algorithms, methods for incorporating base data into models, forecasting methods for major PFMC stocks, experimental design of proposed experimental fisheries, and technical changes to stock complexes or conservation objectives. Examples of issues that do not merit full review include updating existing data sets in models, changing coded-wire-tag representation for modeled stocks, adding new stocks to models, and changing data ranges used to estimate parameters in models. Issues in this latter category will be reviewed within the STT, and can be implemented without formal review by the SSC and approval of the Council; provided both the Council and SSC receive updates on such changes; however, if warranted, the Council may require additional review by the SSC."

Based on the above language, the SMAWG recommends that changes described in Appendix A warrant review by the STT. Please contact the SMAWG (via Ty Garber and Stephanie Thurner) if you have any feedback or questions.

#### Table 1.

Model Run 1: 2024 Final Model Run, base period 27

Model Run 2: 2024 Final Model Run Inputs with base period 28

Model Run 3: 2024 Final Model Run with base period 28 and Hoko hatchery and Tsoo-Yess wild forecasts moved to the appropriate model stocks. The following forecasts were corrected:

- West JDF Miscellaneous Wild UnMarked (Stock 117) changed from 17,790 JA3 to 17,770 JA3
- West JDF Miscellaneous Wild Marked (Stock 118) changed from 2911 JA3 to 0 JA3
- Hoko Hatchery Unmarked (Stock 119) change from 0 JA3 to 20 JA3
- Hoko Hatchery Marked (Stock 120) changed from 0 JA3 to 2911 JA3
- Makah Coastal Wild UnMarked (Stock 123) changed from 0 JA3 to 35 JA3
- Makah Coastal Hatchery UnMarked (Stock 125) change from 35 JA3 to 0 JA3

	Model 1: Coho 2425 with BP 27	Model 2: Coho 2425 with BP 28	Model 3: Coho 2425 with BP 28 and corrected forecast
Puget Sound			
Skagit Wild Total ER	45.2%	45.2%	45.2%
Stilly Wild Total ER	38.1%	38.1%	38.1%
Sno Wild Total ER	39.5%	39.5%	39.5%
HC Wild Total ER	44.7%	44.7%	44.7%
JDF Wild SUS ER	10.3%	10.3%	9.5%
Coast			
Quill Fall Esc	9,608	9,608	9,608
Hoh Wild Esc	4,117	4,117	4,117
Queets Wild Esc	10,623	10,623	10,623
GH Wild Esc	68,518	68,518	68,518
Other			
Thompson SUS ER	10.0%	10.0%	10.0%
LCN Total ER	23.0%	23.0%	23.0%
OCN Total ER	24.9%	24.9%	24.9%

#### Appendix A.

Change 1: Update base period information for Tsoo-Yess Wild stock

Historically, co-managers have only forecasted hatchery Coho and not wild Coho in the Tsoo-Yess watershed due to a lack of data. For the past few years, Makah staff have been sampling and marking Coho fry in tributaries in the upper watershed, and then sampling out-migrating smolts in the lower part of the river. This data can be used to produce a natural origin forecast. However, there was no place in the Coho FRAM to put this forecast since the Makah Wild stock (FRAM stock 123/124) does not have base period information in base period round 27. Since these natural origin fish are likely descendants of Makah National fish hatchery Coho, it makes sense to assume that the wild stock would have the same base period information as their hatchery counterpart. We input the same base period information for the Makah Wild stock as is used for the Makah Hatchery stock (FRAM stock 125/126).

## Change 2: Include Hoko Hatchery stock

There have now been three years of returns from the new Hoko Falls hatchery program, which is enough for co-managers to begin producing forecasts. However, this stock did not have a place in FRAM base period round 27. In 2024, these fish were included as part of the "western JDF wild marked stock" in Coho FRAM (SJDF Wild – West, Stock 117/118) because these fish are descendants of wild JDF Coho; we expect a similar base period distribution and there is not a comparable hatchery stock to combine them with. However, since the Hoko Falls hatchery program is not a wild stock, it was not a good fit long term. Within this region, the Port Angeles net pens FRAM stock (FRAM stock 119/120) is unused. We changed stock IDs 119/120 to be a Hoko Hatchery Stock by renaming the stock and changing the base period information to be the same as SJDF Wild – West (Stock 117/118).

#### APPENDIX E2.

# State/Tribal Co-Manager<sup>4</sup> Memorandum: FRAM Coho MSF Bias Encounters Correction

Ty Garber (WDFW, Tyler.Garber@dfw.wa.gov) and Stephanie Thurner (NWIFC, sthurner@nwifc.org)
February 27, 2025

When a mark-selective fishery (MSF) occurs, it creates a bias in the unmarked-to-marked ratio. Mark-selective fisheries removing only marked fish yield an increased number of unmarked fish available in the pool to be encountered and/or retained in other fisheries, resulting in an underestimate of unmarked fish in subsequent fisheries. Conrad, Hagen-Breaux and Yuen<sup>5</sup> explored this bias and offered a bias-correction, which went through the PFMC methodology review in November 2012<sup>6</sup>. The correction was approved to be incorporated into the FRAM source code. This bias-correction was correctly incorporated into the FRAM source code for estimated *mortality and non-retention*, but the bias was not addressed for *encounters* at the time<sup>7</sup>. Because of this, encounters have been calculated incorrectly for marked and unmarked fish. Exploitation rates are the primary method of evaluating fishing activity on stocks and are calculated as the sum of all fishery-related mortalities divided by that sum plus escapement. FRAM calculations of mortalities and encounters are independent, so calculations of exploitation rates should not have been affected by the incorrect encounter calculations. Encounters are often used in secondary calculations of mark rates, which would be marginally incorrect, and largely incorrect if there was a stock fishery rate scaler applied.

The current, incorrect, FRAM calculation for encounters is as follows:

```
MSFEncounters(s, a, f, t)
= Cohort(s, a, f, t) \times BPER(s, a, f, t) \times MSFFisheryScaler(s, a, f, t)
```

Where s = stock, a = age, f = fishery, and t = time-step.

This calculation does not correct for MSF bias and fails to address applied stock fishery rate scalers.

The correct, but still MSF biased, equation accounting for the stock fishery rate scaler would be as follows:

```
MSFEncounters(s, a, f, t)
= Cohort(s, a, f, t) \times BPER(s, a, f, t) \times MSFFisheryScaler(s, a, f, t)
\times StockFisheryRateScaler(s, a, f, t).
```

In March 2023, it was identified that the current calculation for encounters was not accounting for stock fishery rate scalers. Although accounting for stock fishery rate scalers partially solves the problem, it does not correct for the bias created in MSF fisheries. In October of 2024, a fix to this was developed

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<sup>&</sup>lt;sup>4</sup>United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974)

Shttps://www.researchgate.net/profile/Robert-Conrad-4/publication/271750694 Unbiased Methods for Calculating Mortality in Mark-Selective Fisheries Models for Ocean Salmon/links/5731f3a208ae298602da2c50/Unbiased-Methods-for-Calculating-Mortality-in-Mark-Selective-Fisheries-Models-for-Ocean-Salmon.pdf

<sup>&</sup>lt;sup>6</sup>https://www.pcouncil.org/documents/2012/11/c-salmon-management-november-2012.pdf/

https://framverse.github.io/fram\_doc/calcs\_data\_coho.html#45\_Bias\_Corrected\_Mark-Selective\_Fishery\_Equations\_for\_Coho

<sup>8</sup>https://github.com/FRAMverse/FRAM/issues/5

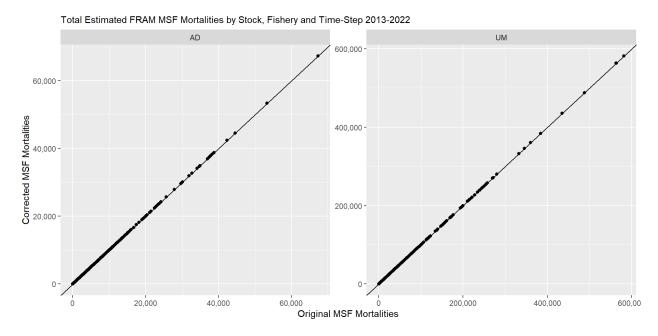
and incorporated into the FRAM software that accounts for both the MSF bias and stock fishery rates scalers<sup>9</sup>. MSF encounters are now calculated as:

$$MSFEncounters(s, a, f, t) = MSFLandedCatch(s, a, f, t) + \frac{MSFNonRetention(s, a, f, t)}{MarkSelectiveMortRate(s, a, f, t)}$$

where **MSFLandedCatch** and **MSFNonRentention** have both MSF bias corrections and stock fishery rate scalers applied in previous calculations. In addition to resolving the stock fishery rate scaler bug and addressing MSF bias corrections for the MSF encounter calculation, this fix will ensure that our encounter calculations always align with landed catch and non-retention.

On December 10, 2024 this correction was presented to co-management staff at their annual FRAM Software Meeting. Co-managers approved a new FRAM software with the correction incorporated to be used for salmon management starting in 2025.

Additional information on MSF bias and bias corrected MSF calculations for Coho FRAM can be found in Section 4.5 of the online FRAM documentation<sup>10</sup>.



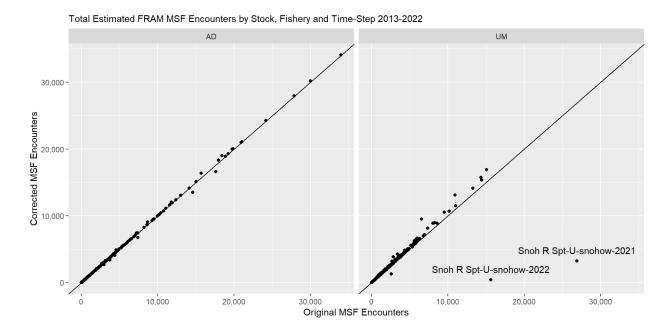
**Figure 1** Comparison of post-season FRAM estimated mortalities between the proposed software fix "Corrected MSF Mortalities" vs. current software "Original MSF Mortalities" by year, stock fishery and time step.

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<sup>9</sup> https://github.com/FRAMverse/FRAM/issues/6

<sup>&</sup>lt;sup>10</sup> Salmon modeling and analysis workgroup. 2023. Coho Model Detail in FRAM Documentation. <a href="https://framverse.github.io/fram\_doc/">https://framverse.github.io/fram\_doc/</a> built September 21, 2023.



**Figure 2** Comparison of post-season FRAM estimated encounters between the proposed software fix "Corrected MSF Mortalities" vs. current software "Original MSF Mortalities" by year, stock fishery and time step. Note: Snohomish river sport fisheries in 2021 and 2022 had a stock fishery rate scaler applied to an unmarked stock which was not being applied to estimated encounters. Because the original version of FRAM ignored the stock fishery rate scaler, these two stock show a large difference in encounters between "Original' and "Corrected" encounters.

# APPENDIX F. AFFECTED ENVIRONMENT - CHINOOK, COHO, AND PINK ASSESSMENT

#### AFFECTED ENVIRONMENT - CHINOOK SALMON ASSESSMENT

## CHINOOK STOCKS SOUTH OF CAPE FALCON

## **Sacramento River Fall Chinook**

The SRFC stock comprises a large proportion of the Chinook spawners returning to Central Valley streams and hatcheries. SRFC is designated as the indicator stock for the Central Valley fall Chinook stock complex, which was established under FMP Amendment 16 to facilitate setting and assessing compliance with ABC and ACLs, as required by the 2006 revision of the MSA. The Sacramento Index (SI) is the aggregate-age index of adult SRFC ocean abundance.

## Predictor Description

The SI is the sum of (1) adult SRFC ocean fishery harvest south of Cape Falcon, OR between September 1 and August 31, (2) adult SRFC impacts from non-retention ocean fisheries when they occur, (3) the recreational harvest of adult SRFC in the Sacramento River Basin, and (4) the SRFC adult spawner escapement (Table II-1, Figure II-1).

The SI forecasting approach uses jack escapement estimates to predict the SI and accounts for autocorrelated errors. In practice, this means that if, in the previous year, the modeled SI value was larger than the SI postseason estimate for that year, the current year forecast is adjusted downward to account for that error. Conversely, if the modeled SI value in the previous year was less than the postseason estimate of the SI for that year, the current year SI forecast would be adjusted upward to compensate for that error.

The forecast of the log-transformed SI was made using the model

$$\log SI_t = \beta_0 + \beta_1 \log J_{t-1} + \rho \varepsilon_{t-1},$$

where  $\log \operatorname{SI}_t$  and  $\log \operatorname{J}_{t-1}$  are log-transformed SI and jack escapement values, respectively; t is the year for which the SI is being forecast;  $\beta_0$  is the intercept;  $\beta_1$  is the slope;  $\rho$  is the autocorrelation coefficient; and  $\varepsilon_{t-1}$  is the difference between the modeled value of the  $\log \operatorname{SI}$  for year t-1 and the postseason estimate of  $\log \operatorname{SI}$  in year t-1. The  $\log \operatorname{SI}_t$  is then back-transformed to the arithmetic scale

$$SI_t = e^{\log SI_t}$$
.

A more detailed description of the general forecast approach can be found in Appendix E of the 2014 Preseason Report I (PFMC 2014).

## Predictor Performance

The performance of past SI forecasts is displayed graphically in Appendix F Figure II-4. For 2024, the preseason forecast of the SI (213,622) was 207 percent of the postseason estimate (102,965).

A control rule, adopted as part of Amendment 16 to the salmon FMP, is used annually to specify the maximum allowable exploitation rate on SRFC (Appendix A, Figure A-1). The allowable exploitation rate is determined by the predicted number of potential adult spawners in the absence of fisheries, which is defined for SRFC as the forecast SI. The FMP allows for any ocean and river harvest allocation that meets the exploitation rate constraints defined by the control rule. The regulations adopted in 2024 were expected

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to result in 180,061 hatchery and natural area adult spawners and an exploitation rate of 15.7 percent. Postseason estimates of these quantities were 99,274 hatchery and natural area adult spawners and an exploitation rate of 3.6 percent (Table II-1).

#### Stock Forecast and Status

Sacramento Index forecast model parameters were estimated from SI data for years 1983-2024 and jack escapement data for years 1982-2023. A total of 19,165 SRFC jacks were estimated to have escaped to Sacramento River basin hatcheries and natural spawning areas in 2024. This jack escapement and the estimated parameters.

```
\beta_o = 7.470592,
\beta_1 = 0.5440117,
\rho = 0.789333,
\epsilon_{t-1} = -1.035485,
\sigma^2 = 0.1459895.
```

result in a 2025 SI forecast of 165,655.

Figure II-2 graphically displays the SI forecast. The model fit (line in Figure II-2) was higher than the 2024 postseason estimate of the SI. As a result, the 2025 SI forecast value is adjusted downward from the fitted model.

The forecast SI applied to the SRFC control rule (Appendix A, Figure A-1) results in an allowable exploitation rate of 26.4 percent which produces, in expectation, 122,000 hatchery and natural area adult spawners. Therefore, fisheries impacting SRFC must be crafted to achieve, in expectation, a minimum of 122,000 adult spawners in 2025.

## OFL, ABC, and ACL

The OFL, ABC, and ACL are defined in terms of spawner escapement ( $S_{OFL}$ ,  $S_{ABC}$ , and  $S_{ACL}$ ), and are calculated using potential spawner abundance forecasts and established exploitation rates. For SRFC,  $F_{MSY} = 0.58$ . The SRFC  $F_{MSY}$  proxy of 0.58 was adopted by the Council in November 2024, following the 2024 Methodology Review. The OFL for SRFC is  $S_{OFL} = 165,655 \times (1-0.58) = 69,575$ . Because SRFC is a Tier-2 stock,  $F_{ABC} = F_{MSY} \times 0.90 = 0.52$ , and  $F_{ACL} = F_{ABC}$ . The ABC for SRFC is  $S_{ABC} = 165,655 \times (1-0.52) = 79,514$ , with  $S_{ACL} = S_{ABC}$ . These preseason estimates will be recalculated with postseason abundance estimates (when available) to assess ACL and OFL compliance.

#### Sacramento River Winter Chinook

ESA-listed endangered Sacramento River winter Chinook salmon (SRWC) are harvested incidentally in ocean fisheries, primarily off the central California coast. A two-part consultation standard for endangered SRWC was first implemented in 2012 and later updated in 2018.

The first component of the consultation standard is the season and size limit provisions that have been in place since the 2004 Biological Opinion. These provisions state that the recreational salmon fishery between Point Arena and Pigeon Point shall open no earlier than the first Saturday in April and close no later than the second Sunday in November. The recreational salmon fishery between Pigeon Point and the U.S.—Mexico Border shall open no earlier than the first Saturday in April and close no later than the first Sunday in October. The minimum size limit shall be at least 20 inches total length. The commercial salmon fishery between Point Arena and the U.S.—Mexico border shall open no earlier than May 1 and close no later than September 30, with the exception of an October fishery conducted Monday through Friday

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between Point Reyes and Point San Pedro, which shall end no later than October 15. The minimum size limit shall be at least 26 inches total length.

The second component of the consultation standard is specified by a control rule that limits the maximum age-3 impact rate (allowable as a preseason forecast) for the area south of Point Arena, California (Appendix A, Figure A-3). The control rule specifies the maximum allowable age-3 impact rate on the basis of a forecast of the SRWC age-3 escapement in the absence of fisheries.

## **Predictor Description**

From 2018-2023 the forecast of the age-3 escapement absent fishing (abundance) was made using a stochastic SRWC life cycle model that is stratified by age, sex, and origin (hatchery and natural). Beginning in 2024, the forecast of SRWC age-3 escapement absent fishing was made using a Gaussian process model, which is a form of nonparametric regression. The model relates covariates directly to postseason estimates of the SRWC age-3 escapement absent fishing. This approach was reviewed at the 2023 Salmon Methodology Review and documentation of the approach can be found in the reports prepared for the Methodology https://www.pcouncil.org/documents/2023/10/2023-salmonincluding: methodology-review-material.pdf/ and https://www.pcouncil.org/documents/2023/10/d-3-supplementalattachment-3-final-additional-material-requested-at-the-2023-salmon-methodology-review-meeting.pdf/. In November 2023, the Council adopted the Gaussian process model referred to as GP-1. The GP-1 model forecasts the age-3 escapement absent fishing using two predictors: the number of parental female spawners in the river (natural and hatchery origin) and a river temperature covariate (degree days above 12°C from May 15-October 31 at Clear Creek Gage). Predictors were for the brood year three years prior to the return year to be forecasted.

#### Predictor Performance

Forecasts of the SRWC age-3 escapement absent fishing, and postseason-estimated values, can be found in Table II-2.

# Stock Forecast and Status

The forecast of SRWC age-3 escapement absent fishing is 4,507. Application of the control rule results in a maximum age-3 impact rate of 20.0 percent for the area south of Point Arena in 2025 (Appendix F Table II-2).

## Klamath River Fall Chinook

#### Predictor Description

For KRFC, linear regressions are used to relate September 1 ocean abundance estimates of age-3, age-4, and age-5 fish to that year's river run size estimates of age-2, age-3, and age-4 fish, respectively (Appendix F Table II-3). Historical abundance estimates were derived from a cohort analysis of coded wire tag (CWT) information. The y-intercept of the regressions is constrained to zero, which gives the biologically reasonable expectation that a river run size of zero predicts an ocean abundance remainder of zero for the same cohort. The abundance of age-2 fish is not forecasted because no precursor to age-2 fish of that brood is available. Ocean fisheries harvest nominal numbers of age-2 KRFC.

The KRFC age-specific abundance forecasts have been made using all complete (or nearly complete) brood years since the 1979 brood. However, recent work suggests that using a more contemporary set of brood years to inform abundance forecasts resulted in better forecast performance. Limiting data to a moving window of the 10 most recent complete (or nearly complete) brood years resulted in the best performance among the alternatives considered. Since 2023, forecasts have been based on the 10 brood year moving window data range.

#### Predictor Performance

The performance of past KRFC forecasts is displayed in Appendix F Table II-4 and in Appendix F Figure II-4. For 2024, the preseason forecast of the KRFC total adult abundance (180,700) was 153 percent of the postseason estimate (118,415).

Management of KRFC harvest since 1986 has attempted to achieve specific harvest rates on fully-vulnerable age-4 and age-5 fish in ocean and river fisheries (Appendix F Table II-5). The Council has used a combination of quotas and time/area restrictions in ocean fisheries in an attempt to meet the harvest rate objective set each year. Since 1992, fisheries have been managed to achieve 50/50 allocation between tribal and non-tribal fisheries. Tribal and recreational river fisheries have been managed on the basis of adult Chinook quotas.

The FMP describes a control rule used annually to specify the maximum allowable exploitation rate on KRFC (Appendix A, Figure A-2). The allowable exploitation rate is determined by the predicted number of potential spawners, which is defined as the natural area adult escapement expected in the absence of fisheries. The FMP allows for any ocean and river harvest allocation that meets the exploitation rate constraints defined by the control rule.

The 2024 salmon fishery regulations were expected to result in 36,511 natural-area spawning adults and an age-4 ocean harvest rate of 2.2 percent. Postseason estimates of these quantities were 24,032 natural-area adult spawners and an age-4 ocean harvest rate of 2.4 percent (Appendix F Table II-5 and Appendix F Table II-6).

## Stock Forecast and Status

The 2025 forecast for the ocean abundance of KRFC as of September 1, 2024 (preseason) is 67,056 age-3 fish, 14,333 age-4 fish, and 1,283 age-5 fish.

Late-season commercial ocean fisheries in 2024 (September through November) were estimated to have harvested seven KRFC. Late-season recreational fisheries were estimated to have harvested zero KRFC. This fall harvest equates to a less than 0.1 percent age-4 ocean harvest rate, which will be deducted from the ocean fishery's allocation in determining the 2025 allowable ocean harvest.

The forecast of potential spawner abundance is derived from the ocean abundance forecasts, ocean natural mortality rates, age-specific maturation rates, stray rates, and the proportion of escapement expected to spawn in natural areas. The 2025 KRFC potential spawner abundance forecast is 20,763 natural-area adults. This potential spawner abundance forecast applied to the KRFC control rule results in an allowable exploitation rate of 10 percent, which produces, in expectation, 18,687 natural-area adult spawners. Therefore, fisheries impacting KRFC must be crafted to achieve, in expectation, a minimum of 18,687 natural-area adult spawners in 2025.

## OFL, ABC, and ACL

The OFL, ABC, and ACL are defined in terms of spawner escapement ( $S_{OFL}$ ,  $S_{ABC}$ , and  $S_{ACL}$ ), and are calculated using potential spawner abundance forecasts and established exploitation rates. For KRFC,  $F_{MSY} = 0.71$ , the value estimated from a stock-specific spawner-recruit analysis (STT 2005). The OFL for KRFC is =  $20,763 \times (1-0.71) = 6,021$ . Because KRFC is a Tier-1 stock,  $F_{ABC} = F_{MSY} \times 0.95 = 0.68$ , and  $F_{ACL} = F_{ABC}$ . The ABC for KRFC is  $S_{ABC} = 20,763 \times (1-0.68) = 6,644$ , with  $S_{ACL} = S_{ABC}$ . These preseason estimates will be recalculated with postseason abundance estimates (when available) to assess ACL and OFL compliance.

## Other California Coastal Chinook Stocks

Other California coastal streams that support fall Chinook stocks which contribute to ocean fisheries off Oregon and California include the Smith, Mad, Eel, Mattole, and Russian Rivers, and Redwood Creek. Except for the Smith River, these populations are included in the California coastal Chinook ESU, which is listed as threatened under the ESA. Current information is insufficient to forecast the ocean abundance of these stocks; however, the NMFS ESA consultation standard restricts the KRFC age-4 ocean harvest rate to no more than 16.0 percent, as estimated postseason, to limit impacts on these stocks. In 2024, the age-4 ocean harvest rate was estimated to be two percent. The Klamath River spring, Smith River, Rogue River, Umpqua River, and other Oregon Chinook stocks south of the Elk River are components of the Southern Oregon/Northern California (SONC) Chinook complex, and as such, specification of ACLs is deferred to KRFC, the indicator stock for the SONC Chinook complex.

# **Oregon Coast Chinook Stocks**

Oregon coast Chinook stocks are categorized into three major subgroups based on ocean migration patterns: the North Oregon Coast (NOC) Chinook aggregate, the Mid Oregon Coast (MOC) Chinook aggregate, and the South Oregon Coast (SOC) Chinook aggregate. Although their ocean harvest distributions overlap somewhat, they have been labeled as far-north, north, or south/local migrating, respectively.

# Far-North and North Migrating Chinook (NOC and MOC groups)

Far-north and north migrating Chinook stocks include spring and fall stocks north of and including the Elk River, with the exception of Umpqua River spring Chinook. Based on CWT analysis, the populations from ten major NOC river systems from the Nehalem through the Siuslaw Rivers are harvested primarily in ocean fisheries off British Columbia and Southeast Alaska, and to a much lesser degree in Council area and terminal area (state waters) fisheries off Washington and Oregon. CWT analysis indicates populations from five major MOC systems, from the Coos through the Elk Rivers, are harvested primarily in ocean fisheries off British Columbia, Washington, Oregon, and in terminal area fisheries. Minor catches occur in California fisheries, and variable catches have been observed in southeast Alaska troll fisheries.

NOC and MOC Chinook stocks are components of the Far-North-Migrating Coastal (FNMC) Chinook complex, which is an exception to the ACL requirements of the MSA because they are managed under an international agreement (the PST); therefore, specification of ACLs is not necessary for stocks in the FNMC complex.

#### Predictor Description

Quantitative abundance predictions are made for all three of the coastal Chinook groups (NOC, MOC, and SOC). Once available, forecast data for the NOC and MOC are incorporated into Chinook Fishery Regulation Assessment Model (FRAM) and used in the annual development of Council area fishery regulations. These forecasts are also used in the PSC management process and to inform terminal area management actions. Quantitative forecasts of abundance are based on sibling regression analyses from individual basin's escapement assessment data and scale sampling, which occur coastwide.

Natural spawner escapement is assessed yearly from the Nehalem through Sixes Rivers. Peak spawning counts of adults are obtained from standard index areas on these rivers and monitored to assess stock trends and reported in the annual *Review of Ocean Salmon Fisheries* (PFMC 2025, Chapter II, Table II-5, and Figure II-3). Natural fall Chinook stocks from both the NOC and MOC dominate production from this subgroup. Also present in lesser numbers are naturally-produced spring Chinook stocks from several rivers, and hatchery fall and/or spring Chinook released in the Trask, Nestucca, Salmon, and Elk rivers.

Basin-specific forecasts contribute an additive total to the overall aggregate forecasts and are derived in conjunction with annual PSC Chinook model input and calibration activities; however, they were not available at publication time.

#### Predictor Performance

Predictors for NOC and MOC stocks are evaluated annually in the PSC's Chinook Technical Committee's Annual PSC Chinook Model Calibration Report.

## Stock Forecast and Status

# **North Oregon Coast**

Since 1977, the Salmon River Hatchery production has been tagged for use primarily as a PSC indicator stock for the NOC stock component. Because these fish are primarily harvested in fisheries north of the Council management area, the STT has not reviewed the procedure by which this indicator stock is used in estimating annual stock status. The 2024 NOC density from standard survey areas (Nehalem R. through the Siuslaw R.) was an increase from 2023 (PFMC 2025, Appendix B, Table B-11).

Based on the density index of total spawners, the generalized expectation for NOC stocks in 2025 is above the recent five years' average density of 105 spawners per mile. Specifically, the 2024 spawner density in standard survey areas for the NOC averaged 126 spawners per mile, the second highest since 2015.

## **Mid Oregon Coast**

Since 1977, the Elk River Hatchery production has been tagged for potential use as a PSC indicator stock for the MOC stock aggregate. Beginning in 2019, Elk River Hatchery production was included as a PSC indicator stock. Age-specific ocean abundance forecasts for 2024 are not currently available but are being developed. The STT has not undertaken a review of the methods used by Oregon Department of Fish and Wildlife (ODFW) staff in developing these abundance forecasts; however, the PSC has, and those findings and recommendations are published in the PSC Technical Report No. 35.

The 2024 MOC density from standard survey areas in the Coos basin averaged 86 adult spawners per mile, a slight increase from 2023 (PFMC 2025, Appendix B, Table B-11). Standard survey areas also include the Coquille basin, however surveys have not been conducted since 2008.

## South/Local Migrating Chinook (SOC group)

South/local migrating Chinook stocks include Rogue River spring and fall Chinook, fall Chinook from smaller rivers south of the Elk River, and Umpqua River spring Chinook. These stocks are important contributors to ocean fisheries off Oregon and northern California. Umpqua River spring Chinook contribute to a lesser degree to fisheries off Washington, British Columbia, and southeast Alaska.

SOC stocks are components of the Southern Oregon/Northern California (SONC) Chinook complex, and as such, specification of ACLs is deferred to KRFC, the indicator stock for the SONC complex.

# **Rogue River Fall Chinook**

Rogue River fall Chinook contribute to ocean fisheries principally as age-3 through age-5 fish. Mature fish enter the river each year from mid-July through October, with the peak of the run occurring during August and September.

## **Predictor Description**

Carcass recoveries in Rogue River index surveys covering a large proportion of the total spawning area were available for 1977-2004. Using Klamath Ocean Harvest Model (KOHM) methodology, these carcass numbers, allocated into age-classes from scale data, were used to estimate the Rogue Ocean Population Index (ROPI) for age-3 to age-5 fish. A linear regression was developed using the escapement estimates (all ages) in year *t* based on seining at Huntley Park (1976-2004) to predict the ROPI in year *t*+1 (1977-2005).

Beginning in 2015, a revised predictor was used which relies on the Huntley Park escapement estimate and dispenses with the use of the carcass counts. Linear regressions are used to relate May 1 ocean abundance estimates of age-3, age-4, age-5, and age-6 Rogue fall Chinook to the previous year's river run size estimates of age-2, age-3, age-4, and age-5 fish, respectively. Historical May 1 ocean abundance estimates were derived from a cohort analysis of 1988-2006 brood years. May 1 (t) ocean abundances were converted to September 1 (t-1) forecasts by dividing the May (t) number by the assumed September 1 (t-1) through May 1 (t) survival rate of 0.5 age-3, 0.8 age-4, 0.8 age-5, and 0.8 age-6. River run size estimates are derived from a flow-based expansion of standardized seine catches of fall Chinook at Huntley Park (RM 8). The y-intercept of the regressions is constrained to zero.

The 2024 Huntley Park escapement estimate and the resulting 2025 ROPI forecast of 224,400 consists of age-3 (157,200), age-4 (36,400) and age-5-6 (30,700) fish.

#### Predictor Performance

The ROPI is based on cohort reconstruction methods with index values predicted from regression equations. Because postseason estimates of the ROPI are not available, it is not possible to assess predictor performance.

#### Stock Forecast and Status

The 2025 ROPI is below the most recent ten-year average (Appendix F Table II-7).

#### Other SOC Stocks

Umpqua and Rogue spring Chinook contribute to ocean fisheries primarily as age-3 fish. Mature Chinook enter the rivers primarily during April and May and generally prior to annual ocean fisheries.

Natural fall Chinook stocks from river systems south of the Elk River and spring Chinook stocks from the Rogue and Umpqua rivers dominate production from this subgroup. Substantial releases of hatchery spring Chinook occur in both the Rogue and Umpqua rivers, although also present in lesser numbers are hatchery fall Chinook, primarily from the Chetco River.

These stocks are minor contributors to general season mixed-stock ocean fisheries. Standard fall Chinook spawning index escapement data were available for the smaller SOC rivers (Winchuck, Chetco, and Pistol rivers). These had been used for assessment of the conservation objective for the SOC stocks prior to 2015. The 2024 average density from standard survey areas was 26 adult spawners per mile, a very slight decrease from the 2023 average of 27 adult spawners per mile (PFMC 2025, Appendix B, Table B-8). Beginning in 2015, for the SOC Chinook stock complex, the conservation objective is assessed using the escapement estimate of naturally produced fall Chinook at Huntley Park on the Rogue River (PFMC 2025, Appendix B, Table B-10, Chapter II, Table II-5, and Figure II-3).

#### CHINOOK STOCKS NORTH OF CAPE FALCON

## **Columbia River Chinook**

Columbia River fall Chinook stocks form the largest contributing stock group to Council Chinook fisheries north of Cape Falcon. Abundance of these stocks is a major factor in determining impacts of fisheries on weak natural stocks critical to Council area management, particularly the natural tule component of the ESA-listed LCR Chinook ESU. Abundance predictions are made for five major fall stock units characterized as being hatchery or natural production and originating above or below Bonneville Dam. The upriver brights (URB) and lower river wild (LRW) are primarily naturally-produced stocks, although the upriver brights do have a substantial hatchery component. The lower river hatchery (LRH) tule, Spring Creek Hatchery (SCH) tule, and Mid-Columbia Bright (MCB) are primarily hatchery-produced stocks. The MCB include the Lower River Bright (LRB) stock as a small naturally-produced component. LRB spawn in the mainstem Columbia River near Beacon Rock and are believed to have originated from MCB hatchery strays. The tule populations generally mature at an earlier age than the bright fall populations and do not migrate as far north. Minor fall populations include the Select Area Bright (SAB), a population originally from the Rogue River.

Upper Columbia River summer Chinook also contribute to Council area fisheries, although like URB and LRW, most ocean impacts occur in British Columbia (B.C.) and Southeast Alaska (SEAK) fisheries. Upper Columbia River summer Chinook have both natural and hatchery components and originate in areas upstream from Rock Island Dam.

URB and upper Columbia summer Chinook are exempt from the ACL requirements of the MSA because they are managed under an international agreement (the PST); therefore, specification of ACLs is not necessary for these two stocks. ESA consultation standards serve the purpose of ACLs for ESA-listed stocks like LRW Chinook. Broodstock goals serve the purpose of ACLs for hatchery-origin stocks like LRH, SCH, and MCB.

# Predictor Description

Preseason forecasts of Columbia River fall and summer Chinook stock abundance, used by the STT to assess the Council's adopted fishery regulations, are based on age-specific and stock-specific forecasts of annual ocean escapement (returns to the Columbia River). These forecasts are developed by WDFW and a subgroup of the *U.S. v Oregon* Technical Advisory Committee (TAC). Columbia River return forecast methodologies used for Council management are identical to those used for planning Columbia River fall season fisheries, although minor updates to Council estimates of inriver run size may occur prior to finalization of the inriver fishery plans, based on the results of planned ocean fisheries.

The 2025 return of summer and each fall Chinook stock group is forecasted using relationships between successive age groups within a cohort. The database for these relationships was constructed by combining age-specific estimates of escapement and in-river fishery catches for years since 1964 (except for MCB, which started in the 1980s). Fall Chinook stock identification in the Columbia River mixed-stock fisheries is determined by sampling catch and escapement for CWTs and visual stock identification (VSI). Age composition estimates are based on CWT data and scale reading of fishery and escapement samples, where available. These stock and age data for Columbia River fall Chinook are the basis for the return data presented in the *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025, Appendix B, Tables B-15 through B-20). The 2024 returns for summer Chinook and the five fall Chinook stocks listed in this report may differ somewhat from those provided in the *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025), since ocean escapement estimates may have been updated after that report was printed.

Summer and fall Chinook ocean escapement forecasts developed for the March Council meeting do not take into account variations in marine harvest. The STT combines the initial inriver run size (ocean escapement; Appendix F Table II-8) with expected Council area fishery harvest levels and stock distribution patterns to produce adjusted ocean escapement forecasts based on the proposed ocean fishing regulations. These revised forecasts are available at the end of the Council preseason planning process in April and are used for preseason fishery modeling in the Columbia River.

#### Predictor Performance

Performance of the preliminary inriver run size estimation methodology can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table II-8; Appendix F Figure II-4). In 2024, the March preliminary preseason forecasts as a percentage of the postseason estimates were 81 percent for URB, 70 percent for LRW, 75 percent for LRH, 101 percent for SCH, 72 percent for MCB, and 125 percent for upper Columbia summer Chinook.

## Stock Forecasts and Status

LRW fall Chinook: The preliminary forecast for 2025 ocean escapement of LRW fall Chinook is 14,200 adults, about 86 percent of the recent 10-year average return of 16,600. The forecast is about 94 percent of last year's actual return of 15,105. The spawning escapement goal of 5,700 in the North Fork Lewis River is expected to be achieved this year.

LRH fall Chinook: The 2025 preliminary forecast for ocean escapement of LRH fall Chinook is 121,500 adults, about 106 percent of last year's return of 114,431 and 149 percent of the recent 10-year average return of 81,600. Based on this abundance forecast, the total allowable LCR natural tule exploitation rate for 2025 fisheries is no greater than 41.0 percent under the matrix developed by the Tule Chinook Workgroup in 2011, which is used by NMFS in developing ESA guidance for this stock (Appendix A Table A-6).

SCH fall Chinook: The 2025 preliminary forecast for ocean escapement of SCH fall Chinook is 184,700 adults, about 143 percent of last year's return of 129,007 and 180 percent of the 10-year average of 102,600.

MCB fall Chinook: The 2025 preliminary forecast for ocean escapement of MCB fall Chinook is 83,300 adults, about 95 percent of last year's return of 87,572 and about 98 percent of the recent 10-year average of 84,700.

Summer Chinook: The 2025 preliminary forecast for ocean escapement of summer Chinook is 38,000 adults, about 89 percent of last year's return of 42,511 and about 57 percent of the recent 10-year average of 66,100. This ocean escapement forecast should provide opportunity for both ocean and in-river fisheries while exceeding the FMP S<sub>MSY</sub> conservation objective of 12,143 escapement above Rock Island Dam.

URB fall Chinook: The 2025 preliminary forecast for ocean escapement of URB fall Chinook is 313,400 adults, about 99 percent of last year's return of 318,086 and about 96 percent of the recent 10-year average of 331,100. This forecasted ocean escapement should allow for moderate ocean and in-river fisheries while achieving the FMP S<sub>MSY</sub> conservation objective of 39,625 natural area spawners in the Hanford Reach, Yakima River, and areas above Priest Rapids Dam.

Snake River wild fall Chinook: The 2025 preliminary forecast for ocean escapement of ESA-listed Snake River wild fall Chinook is 9,000 wild adults. The 2025 preliminary forecast for ocean escapement of Snake River hatchery fall Chinook is 41,300 hatchery adults.

# **Washington Coast Chinook**

Washington Coast Chinook consist of spring, summer, and fall stocks from Willapa Bay through the Hoko River. Based on limited CWT analysis, these populations are harvested primarily in ocean fisheries off British Columbia and Southeast Alaska, and to a lesser degree in Council-area fisheries off Washington and Oregon.

Washington Coast Chinook stocks are components of the FNMC Chinook complex, which is an exception to the ACL requirements of the MSA because it is managed under an international agreement (the PST); therefore, specification of ACLs is not necessary for stocks in the FNMC complex.

# Predictor Description and Past Performance

Council fisheries have negligible impacts on Washington Coast Chinook stocks and information to assess past performance is unavailable. However, abundance estimates are provided for Washington Coastal fall stocks in subsequent preseason fishery impact assessment reports prepared by the STT (e.g., Preseason Report III).

#### Stock Forecasts and Status

The 2025 Willapa Bay natural fall Chinook terminal runsize forecast is 2,338, which is below the FMP  $S_{MSY}$  conservation objective of 3,393. The hatchery fall Chinook terminal runsize forecast is 33,419.

The 2025 Grays Harbor spring Chinook forecast was not available at the time of this report. The Grays Harbor natural fall Chinook terminal runsize forecast is 14,224, which is above the FMP S<sub>MSY</sub> conservation objective of 13,326. The fall hatchery terminal runsize forecast is 3,889.

The 2025 Quinault River natural fall Chinook terminal runsize forecast is 4,072. The fall hatchery terminal runsize forecast is 4,569.

The 2025 Queets River spring Chinook terminal runsize forecast is 562. The FMP  $S_{MSY}$  conservation objective is 700. The natural fall Chinook terminal runsize forecast is 3,306, which is greater than the FMP  $S_{MSY}$  conservation objective of 2,500. The fall hatchery terminal runsize forecast is 563.

The 2025 Hoh River natural spring/summer Chinook terminal runsize forecast is 1,233, which is above the FMP  $S_{MSY}$  conservation objective of 900. The natural fall Chinook terminal runsize forecast is 2,491, which is above the FMP  $S_{MSY}$  conservation objective of 1,200.

The 2025 Quillayute River hatchery summer Chinook terminal runsize forecast is 2,447. The natural summer Chinook terminal runsize forecast is 1,744, which is above the FMP  $S_{MSY}$  conservation objective of 1,200 summer Chinook. The fall Chinook terminal runsize forecast is 6,393, which is above the FMP  $S_{MSY}$  conservation objective of 3,000 fall Chinook.

The 2025 Hoko River forecast is for an escapement without fishing of 1,912, which is above the FMP  $S_{MSY}$  conservation objective of 850.

# **Puget Sound Chinook**

Puget Sound Chinook stocks include all fall, summer, and spring stocks originating from U.S. tributaries in Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek, inclusive). Puget Sound consists of numerous natural Chinook stocks of small to medium-sized populations and substantial hatchery production. The Puget Sound ESU was listed under the ESA as threatened in March 1999.

Council-area fishery impacts to Puget Sound Chinook stocks are generally very low, on the order of five percent or less. NMFS issued a biological opinion in 2004 concluding that Council-area fisheries were not likely to jeopardize listed Puget Sound Chinook and exempting these fisheries from the ESA section 9 take prohibition as long as they are consistent with the terms and conditions in the opinion's incidental take statement. This opinion does not cover the state-managed Puget Sound fisheries. In recent years, the comanagers have developed annual fishery management plans for Puget Sound and NMFS has issued one-year biological opinions for these plans exempting them from ESA section 9 take prohibitions. These opinions take into account the combined impacts of ocean and Puget Sound fisheries. Puget Sound stocks contribute to fisheries off B.C., are present to a lesser degree off SEAK, and are impacted to a minor degree by Council-area ocean fisheries. Because Council-area fishery impacts to Puget Sound Chinook stocks are minor, ocean regulations are not generally used to manage these stocks.

# **Predictor Description**

Methodologies for estimates are described in the annual Puget Sound management reports (starting in 1993, reports are available by Puget Sound management unit, not by individual species). Forecasts for Puget Sound stocks generally assume production is dominated by age-4 adults. The STT has not undertaken a review of the methods employed by state and tribal staffs in preparing these abundance forecasts. Run-size expectations for various Puget Sound stock management units are listed in Table I-1.

#### Predictor Performance

Performance of the preliminary in river run size estimation methodology can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates. Table II-9 compares preseason forecasts and postseason estimates of Puget Sound run size for summer/fall Chinook.

#### Stock Forecasts and Status

ACLs are undefined in the FMP for ESA-listed stocks like Puget Sound Chinook and are deferred to ESA consultation standards.

## Spring Chinook

Puget Sound Spring Chinook abundances remain depressed.

## Summer/Fall Chinook

The 2025 preliminary natural Chinook return forecast for Puget Sound is 32,600 (includes supplemental hatchery forecasts) and the preliminary hatchery Chinook return forecast for Puget Sound is 220,400. The 2024 preseason natural Chinook return forecast was 29,800 (includes supplemental hatchery forecasts) and the hatchery Chinook return forecast was 202,900.

Since ESA listing and development of the Resource Management Plan (RMP), fishery management for Puget Sound Chinook has changed from an escapement goal basis to the use of stock-specific exploitation rates and "critical abundance thresholds." This new approach is evaluated on an annual basis through the RMP.

## STOCK STATUS DETERMINATION UPDATES

Klamath River fall Chinook were found to meet the criteria for being classified as overfished in the PFMC *Review of 2017 Ocean Salmon Fisheries*, released in February 2018. NMFS subsequently published an overfished designation in June 2018, and a rebuilding plan was developed and adopted by the Council in 2019. Queets River spring/summer Chinook were found to meet the criteria for being classified as overfished in the PFMC *Review of 2022 Ocean Salmon Fisheries*, released in February 2023.

Based on the most recent three-year geometric mean escapements published in the PFMC *Review of 2024 Ocean Salmon Fisheries*, Klamath River fall Chinook (2022 – 2024) continues to meet the criteria for overfished status and Queets spring/summer Chinook (2021 – 2023) now meet the criteria for 'not overfished-rebuilding' status.

For Chinook stocks with available estimates of exploitation rates, none were subject to overfishing in the most recent year with estimates available.

# SELECTIVE FISHERY CONSIDERATIONS FOR CHINOOK

As the North of Falcon region has moved forward with mass marking of hatchery Chinook salmon stocks, the first mark-selective fishery for Chinook salmon in Council waters was implemented in June 2010 in the recreational fishery north of Cape Falcon. In 2011 and 2012, the mark-selective fishery in June was 8 and 15 days, respectively. In 2013 and 2014, the North of Falcon mark-selective recreational fishery started in mid-May in Neah Bay and La Push subareas, then opened in all areas in late May or June. In 2015, the mark selective Chinook quota was 10,000 fish in the mid-May to mid-June fishery. Since 2015, no mark-selective fisheries for Chinook in Council waters have occurred. For 2025 preseason planning, selective fishing options for non-Indian fisheries may be under consideration in the ocean area from Cape Falcon, Oregon to the U.S./Canada border. Observed mark rates in previous mark-selective fisheries north of Cape Falcon ranged from 53 to 71 percent. Similar mark rates are expected in this area for 2025.

APPENDIX F - TABLE II-1. Harvest and abundance indices for adult Sacramento River fall Chinook (SRFC) in thousands of fish. (Page 1 of 2)

			ean Harvest							
		South of C	ape Falcon <sup>a/</sup>		- River -	Spa	wning Escape	ment	<ul> <li>Sacramento</li> </ul>	Exploitation
Year	Troll	Sport	Non-Ret <sup>b/</sup>	Total	Harvest	Natural	Hatchery	Total	Index (SI) <sup>c/</sup>	Rate (%) <sup>d/</sup>
1983	246.6	86.3	0.0	332.9	18.0	91.7	18.6	110.2	461.1	76
1984	266.2	87.0	0.0	353.1	25.9	120.2	38.7	159.0	538.1	70
1985	355.5	158.9	0.0	514.4	39.1	210.1	29.3	239.3	792.8	70
1986	619.0	137.5	0.0	756.4	39.2	218.3	21.8	240.1	1,035.7	77
1987	686.1	173.1	0.0	859.2	31.8	175.2	19.8	195.1	1,086.1	82
1988	1,163.2	188.3	0.0	1,351.5	37.1	200.7	26.8	227.5	1,616.1	86
1989	602.8	157.1	0.0	759.9	24.9	127.6	24.9	152.6	937.3	84
1990	507.3	150.4	0.0	657.8	17.2	83.3	21.7	105.1	780.0	87
1991	300.1	89.6	0.0	389.7	26.0 <sup>e/</sup>	92.8	26.0	118.9	534.6	78
1992	233.3	69.4	0.0	302.8	13.3 <sup>e/</sup>	59.9	21.7	81.5	397.6	79
1993	342.8	115.3	0.0	458.1	27.7 <sup>e/</sup>	112.8	24.6	137.4	623.2	78
1994	303.5	168.8	0.0	472.3	28.9 <sup>e/</sup>	135.0	30.6	165.6	666.7	75
1995	730.7	390.4	0.0	1,121.0	48.2	253.8	41.5	295.3	1,464.6	80
1996	426.8	157.0	0.0	583.8	49.2	269.1	32.5	301.6	934.7	68
1997	579.7	210.3	0.0	790.0	56.3	281.6	63.3	344.8	1,191.1	71
1998	292.3	114.0	0.0	406.3	69.8 <sup>e/</sup>	176.0	69.9	245.9	722.1	66
1999	289.1	76.2	0.0	365.3	68.9 <sup>e/</sup>	357.6	42.2	399.8	834.0	52
2000	421.8	152.8	0.0	574.6	59.5 <sup>e/</sup>	370.0	47.6	417.5	1,051.6	60
2001	284.4	93.4	0.0	377.9	97.4	539.4	57.4	596.8	1,072.0	44
2002	447.7	184.0	0.0	631.7	89.2 <sup>e/</sup>	684.2	85.6	769.9	1,490.8	48
2003	501.6	106.4	0.0	608.0	85.4	414.6	108.4	523.0	1,216.3	57
2004	621.8	212.6	0.0	834.5	46.8	206.2	80.7	286.9	1,168.2	75
2005	367.9	127.0	0.0	494.9	64.6	214.9	181.1	396.0	955.5	59
2006	149.9	107.7	0.0	257.7	44.9	196.5	78.5	275.0	577.6	52
2007	119.9	32.0	0.0	152.0	14.3 <sup>e/</sup>	70.1	21.3	91.4	257.7	65
2008	3.2	0.9	0.0	4.1	0.1 <sup>e/</sup>	47.3	18.0	65.4	69.6	6
2009	0.0	0.2	0.1	0.3	0.0 <sup>e/</sup>	24.9	15.9	40.9	41.1	1
2010	11.2	11.4	0.3	22.8	2.7 <sup>e/</sup>	91.1	33.2	124.3	149.8	17

TABLE II-1. Harvest and abundance indices for adult Sacramento River fall Chinook (SRFC) in thousands of fish. (Page 2 of 2)

			ean Harvest ape Falcon <sup>a/</sup>		_ River _	Spa	awning Escapei	ment	_ Sacramento	Exploitation
Year	Troll	Sport	Non-Ret <sup>b/</sup>	Total	Harvest	Natural	Hatchery	Total	Index (SI) <sup>c/</sup>	Rate (%) <sup>d/</sup>
2011	46.7	22.8	0.0	69.5	18.2 <sup>e/</sup>	77.9	41.5	119.3	207.0	42
2012	183.1	93.4	0.3	276.7	65.8 <sup>e/</sup>	166.2	119.2	285.4	627.9	55
2013	290.7	114.3	0.0	404.9	57.5 <sup>e/</sup>	305.6	101.2	406.8	869.3	53
2014	240.6	62.4	0.0	303.0	35.7 <sup>e/</sup>	168.7	43.8	212.5	551.2	61
2015	100.1	24.5	0.0	124.6	16.9 <sup>e/</sup>	74.5	39.0	113.5	254.9	55
2016	62.9	28.9	0.0	91.8	23.9 <sup>e/</sup>	56.3	33.4	89.7	205.3	56
2017	38.7	31.9	0.0	70.7	22.1 <sup>e/</sup>	17.9	26.5	44.3	137.1	68
2018	53.7	45.0	0.0	98.6	16.3 <sup>e/</sup>	71.7	33.8	105.5	220.4	52
2019	248.6	74.4	0.0	323.0	20.3 <sup>e/</sup>	121.6	42.1	163.8	507.1	68
2020	154.8	44.6	0.0	199.5	14.9 <sup>e/</sup>	100.2	37.9	138.1	352.5	61
2021	165.7	41.7	0.0	207.4	10.8 <sup>e/</sup>	72.8	32.8	105.6	323.8	67
2022	135.9	50.2	0.0	186.0	4.9 <sup>e/</sup>	32.7	29.2	61.9	252.7	76
2023	3.8	1.8	0.0	5.6	0.0 <sup>e/</sup>	105.8	28.0	133.8	139.4	4
2024 <sup>f/</sup>	3.4	0.3	0.0	3.7	0.0 e/	72.4	26.8	99.3	103.0	4

a/ Ocean harvest for the period September 1 (t-1) through August 31 (t).

b/ Mortalities estimated from non-retention ocean fisheries (e.g., coho-only fisheries, non-retention GSI sampling). In 2008, there were 37 estimated mortalities as a result of non-retention fisheries that have been rounded to 0 in this table.

c/ The SI is the sum of (1) SRFC ocean fishery harvest south of Cape Falcon between September 1 and August 31, (2) SRFC impacts from non-retention ocean fisheries when they occur, (3) the recreational harvest of SRFC in the Sacramento River Basin, and (4) the SRFC spawner escapement.

d/ Total ocean harvest, non-retention ocean fishery mortalities, and river harvest of SRFC as a percentage of the SI.

e/ Estimates derived from CDFW Sacramento River Basin angler survey. Estimates not marked with a footnote are inferred from escapement data and the mean river harvest rate estimate.

f/ Preliminary.

APPENDIX F - TABLE II-2. Sacramento River winter Chinook abundance forecasts, allowable age-3 impact rates, and management performance.

				Age-3 impact rate south of Point Arena, CA			
	3-Year	Abundance	Postseason	Maximum	Preseason	Postseason	
Year <sup>a/</sup>	Geo. Mean <sup>b/</sup>	Forecast <sup>c/</sup>	Abundance <sup>d/</sup>	Allow able (%) <sup>e/</sup>	Forecast (%)	Estimate (%)	
2000		-		-	-	21.4	
2001		-	8,508	-	-	23.3	
2002		-	9,092	-	-	21.8	
2003		-	5,976	-	-	10.3	
2004		-	18,090	-	-	24.8	
2005		-	18,907	-	-	17.2	
2006		-	2,619	-	-	15.1	
2007		-	2,954	-	-	17.8	
2008		-	4,152	-	-	0.0	
2009		-	1,439	-	-	0.0	
2010		-	696	-	-	e/	
2011		-	3,263	-	-	28.3	
2012	1,797	-	5,960	13.7	13.7	12.6	
2013	1,521	-	3,067	12.9	12.9	18.8	
2014	2,380	-	3,718	15.4	15.4	15.8	
2015	3,659	-	867	19.0	17.5	e/	
2016	3,981	-	508	19.9	12.8	10.7	
2017	2,521	-	2,117	15.8	12.2	17.6	
2018		1,594	8,139	14.4	8.5	13.9	
2019		1,924	6,935	15.7	14.8	10.0	
2020		3,077	10,854	20.0	16.2	12.6	
2021		9,063	6,346	20.0	14.7	18.8	
2022		5,971	3,071	20.0	15.2	26.2g/	
2023		4,540	f/	20.0	0.0	NA <sup>h/</sup>	
2024		1,013	f/	12.1	NA	NA	
2025		4,507	f/	20.0	NA	NA	

a/ Year indicates the management year in which age-3 SRWC are exposed to ocean fisheries.

b/ Allow able impact rates from 2012-2017 were determined by an abundance-based control rule,

where abundance was defined as the most recent three-year geometric mean of escapement.

c/ Since 2018, the abundance forecast has been defined as the predicted age-3 escapement in the absence of fisheries. Forecasts were made using a life cycle model through 2023. Beginning in 2024, forecasts were made using a Gaussian Process model.

 $<sup>\</sup>mbox{\ensuremath{\mbox{d}}\xspace}\xspace$  Postseason estimates of the age-3 escapement in the absence of fisheries.

e/ Beginning in 2018, allow able impact rates were determined by a new control rule utilizing forecasts of the age-3 escapement in the absence of fisheries.

f/ Insufficient data for postseason estimate.

g/ Preliminary. Incomplete cohort data (age-4 escapement unavailable).

h/ Not estimated. Incomplete cohort data (age-3 and age-4 escapement unavailable).

APPENDIX F - TABLE II-3. Klamath River fall Chinook ocean abundance (thousands), harvest rate, and river run size estimates (thousands) by age. (Page 1 of 2).

Annual Ocean Harvest Rate Sept. 1 (t-1) -Ocean Abundance Sept. 1 (t-1) Klamath Basin River Run (t) Aug. 31 (t) Year (t) Age-3 Total Adults Age-4 Total Age-3 Age-4 Age-2 Age-3 Age-4 Age-5 1981 493.2 57.0 550.2 0.21 28.2 64.1 14.4 1.8 80.3 0.53 1982 561.1 133.4 694.5 0.30 0.52 39.4 30.1 33.9 2.6 66.6 1983 313.3 114.2 427.5 0.19 0.60 3.8 35.9 20.7 0.9 57.5 1984 157.3 82.8 240.1 0.08 8.3 21.7 47.2 0.38 24.4 1.1 1985 374.8 56.9 431.7 0.11 69.4 32.9 25.7 64.4 0.24 5.8 195.0 162.9 1986 1,304.4 140.8 1,445.2 0.18 0.46 44.6 29.8 2.3 89.7 1987 781.1 341.9 1.123.0 0.16 0.43 19.1 112.6 6.8 209.1 756.3 234.8 991.0 0.20 0.39 101.2 86.5 1988 24.1 3.9 191.6 1989 369.8 177.2 547.1 0.15 0.36 9.1 50.4 69.6 4.3 124.3 176.1 22.9 35.9 1990 104.0 280.1 0.30 0.55 4.4 11.6 1.3 1991 69.4 37.2 106.6 0.03 0.18 1.8 10.0 21.6 32.7 1.1 1992 39.5 28.2 67.7 0.02 0.07 13.7 6.9 18.8 1.0 26.7 1993 168.5 15.0 183.5 0.05 0.16 7.6 48.3 8.2 0.7 57.2 1994 119.9 41.7 161.7 0.03 0.09 14.4 37.0 26.0 1.0 64.0 1995 787.3 28.7 816.0 0.04 0.14 22.8 201.9 18.3 2.6 222.8 1996 192.3 226.3 418.6 0.05 0.16 9.5 38.8 136.7 0.3 175.8 35.0 140.2 203.0 0.01 0.06 8.0 44.2 4.6 83.7 1997 62.8 1998 154.8 44.7 199.5 0.00 0.09 4.6 59.2 29.7 1.7 90.6 129.1 0.02 29.2 1999 30.5 159.5 0.09 19.2 20.5 1.3 51.0 0.06 187.1 2000 617.1 44.2 661.3 0.10 10.2 30.5 0.5 218.1 356.1 133.8 489.9 0.03 0.09 11.3 99.1 88.2 0.1 187.3 2001 513.6 612.5 0.02 0.15 9.2 94.6 62.5 3.7 160.8 2002 98.9 0.08 94.3 2003 401.1 192.2 593.3 0.21 3.8 96.8 0.9 191.9 2004 159.4 105.2 264.7 0.12 0.35 9.6 33.1 40.5 5.3 78.9 2005 190.0 38.1 228.1 0.02 0.20 2.3 43.8 17.5 3.9 65.2

0.01

0.06

0.00

0.00

0.01

0.10

0.21

0.10

0.00

0.04

154.1

410.6

149.4

261.9

254.8

18.5

113.7

18.6

78.6

46.1

41.6

16.8

50.2

16.4

44.3

1.3

1.6

1.7

5.6

0.4

26.9

1.7

25.2

11.9

16.6

61.4

132.1

70.6

100.6

90.9

2006

2007

2008

2009

2010

90.7

376.9

68.0

240.8

192.8

63.4

33.7

81.4

21.1

62.1

TABLE II-3. Klamath River fall Chinook ocean abundance (thousands), harvest rate, and river run size estimates (thousands) by age. (Page 2 of 2).

	Occan A	hhundanaa Ca	at 1 (t 1)	Harves Sept.	Ocean st Rate 1 (t-1) -		V love et	h Daoin Din	r D. m (4)	
		Abundance Se			31 (t)			h Basin Rive		
Year (t)	Age-3	Age-4	Total	Age-3	Age-4	Age-2	Age-3	Age-4	Age-5	Total Adults
2011	240.2	64.6	304.8	0.03	0.08	84.9	59.0	41.0	2.0	102.0
2012	799.4	74.3	873.7	0.03	0.08	21.4	243.9	49.3	2.1	295.3
2013	438.4	194.4	632.9	0.04	0.20	14.4	55.2	108.8	1.1	165.0
2014	216.5	180.7	397.2	0.03	0.17	22.3	57.8	98.7	3.9	160.4
2015	110.5	61.0	171.5	0.02	0.22	6.1	36.7	34.0	7.1	77.8
2016	32.7	24.8	57.4	0.01	0.09	2.8	8.6	15.5	0.5	24.6
2017	63.2	9.8	73.1	0.02	0.04	20.3	24.4	7.3	1.6	33.2
2018	193.7	10.5	204.2	0.06	0.24	10.9	85.5	5.6	0.0	91.1
2019	81.8	15.7	97.5	0.04	0.36	10.0	30.2	6.8	0.1	37.1
2020	129.1	14.2	143.3	0.01	0.23	9.1	37.8	7.6	0.0	45.4
2021	142.8	35.7	178.6	0.05	0.28	10.4	36.3	17.7	0.2	54.2
2022	126.9	38.3	165.2	0.07	0.39	7.5	32.1	14.3	0.2	46.6
2023	95.1 <sup>a/</sup>	33.1	128.2	0.00 <sup>a/</sup>	0.00	11.7	39.4	25.4	0.9	65.7
2024	101.4 <sup>b/</sup>	16.0 <sup>b/</sup>	117.4	c/	0.02 <sup>a/</sup>	7.1	24.7	11.1	0.7	36.6

a/ Preliminary: incomplete cohort data (age-5 unavailable).

b/ Preliminary: incomplete cohort data (age-4 and age-5 unavailable).

c/ Not estimated: incomplete cohort data (age-4 and age-5 unavailable).

APPENDIX F - TABLE II-4.Comparisons of preseason forecast and postseason estimates for ocean abundance of adult Klamath River fall Chinook. (Page 1 of 4)

	Preseason Forecast <sup>a/</sup>	Postseason Estimate	
Year (t)	Sept. 1 (t-1)	Sept. 1 (t-1)	Pre/Postseason
		Age-3	
1985	113,000	374,822	0.30
1986	426,000 <sup>b/</sup>	1,304,409	0.33
1987	511,800	781,122	0.66
1988	370,800	756,261	0.49
1989	450,600	369,828	1.22
1990	479,000	176,122	2.72
1991	176,200	69,424	2.54
1992	50,000	39,502	1.27
1993	294,400	168,473	1.75
1994	138,000	119,915	1.15
1995	269,000	787,309	0.34
1996	479,800	192,272	2.50
1997	224,600	140,153	1.60
1998	176,000	154,799	1.14
1999	84,800	129,066	0.66
2000	349,600	617,097	0.57
2001	187,200	356,128	0.53
2002	209,000	513,604	0.41
2003	171,300	401,112	0.43
2004	72,100	159,446	0.45
2005	185,700	189,977	0.98
2006	44,100	90,666	0.49
2007	515,400	376,940	1.37
2008	31,600	68,015	0.46
2009	474,900	240,787	1.97
2010	223,400	192,750	1.16
2011	304,600	240,222	1.27
2012	1,567,600	799,446	1.96
2013	390,700	438,443	0.89
2014	219,800	216,493	1.02
2015	342,200	110,506	3.10
2016	93,400	32,670	2.86
2017	42,000	63,235	0.66
2018	330,000	193,685	1.70
2019	167,500	81,818	2.05
2020	149,600	129,077	1.16
2021	135,600	142,822	0.95
2022	155,000	126,919	1.22
2023	75,300	95,079	0.79
2024 <sup>c/</sup>	138,700	101,355	1.37
2025	67,100		<del></del>

TABLE II-4. Comparisons of preseason forecasts and postseason estimates for ocean abundance of adult Klamath River fall Chinook. (Page 2 of 4)

	Preseason Forecast <sup>a/</sup>	Postseason Estimate	
Year (t)	Sept. 1 (t-1)	Sept. 1 (t-1)	Pre/Postseason
		Age-4	
1985	56,900	56,908	1.00
1986	66,300	140,823	0.47
1987	206,100	341,875	0.60
1988	186,400	234,751	0.79
1989	215,500	177,245	1.22
1990	50,100	103,951	0.48
1991	44,600	37,171	1.20
1992	44,800	28,169	1.59
1993	39,100	15,037	2.60
1994	86,100	41,736	2.06
1995	47,000	28,726	1.64
1996	268,500	226,282	1.19
1997	53,900	62,820	0.86
1998	46,000	44,733	1.03
1999	78,800	30,456	2.59
2000	38,900	44,176	0.88
2001	247,000	133,801	1.85
2002	143,800	98,927	1.45
2003	132,400	192,180	0.69
2004	134,500	105,246	1.28
2005	48,900	38,079	1.28
2006	63,700	63,384	1.00
2007	26,100	33,650	0.78
2008	157,200	81,411	1.93
2009	25,200	21,131	1.19
2010	106,300	62,089	1.71
2011	61,600	64,570	0.95
2012	79,600	74,300	1.07
2013	331,200	194,407	1.70
2014	67,400	180,669	0.37
2015	71,100	60,979	1.17
2016	45,100	24,777	1.82
2017	10,600	9,821	1.08
2018	28,400	10,531	2.70
2019	106,100	15,660	6.78
2020	36,200	14,237	2.54
2021	45,100	35,729	1.26
2022	43,200	38,314	1.13
2023	27,200	33,105	0.82
2024 <sup>c/</sup>	39,500	16,030	2.46
2025	14,300		-

TABLE II-4. Comparisons of preseason forecasts and postseason estimates for ocean abundance of adult Klamath River fall Chinook. (Page 3 of 4)

	Preseason Forecast <sup>a/</sup>	Postseason Estimate	
∕ear (t)	Sept. 1 (t-1)	Sept. 1 (t-1)	Pre/Postseason
		Age-5	
1985	NA	11,113	NA
1986	NA	6,376	NA
1987	5,300	19,414	0.27
1988	13,300	14,632	0.91
1989	10,100	9,612	1.05
1990	7,600	7,767	0.98
1991	1,500	2,774	0.54
1992	1,300	1,444	0.90
1993	1,100	1,759	0.63
994	500	1,468	0.34
1995	2,000	3,805	0.53
1996	1,100	788	1.40
1997	7,900	9,004	0.88
1998	3,300	2,382	1.39
1999	2,000	2,106	0.95
2000	1,400	1,051	1.33
2001	1,300	258	5.04
2002	9,700	6,933	1.40
2003	6,500	1,915	3.39
2004	9,700	17,184	0.56
2005	5,200	6,859	0.76
2006	2,200	5,236	0.42
2007	4,700	2,911	1.61
2008	1,900	2,900	0.66
2009	5,600	7,059	0.79
2010	1,800	517	3.48
2011	5,000	2,753	1.82
2012	4,600	5,110	0.90
2013	5,700	3,945	1.44
2014	12,100	7,625	1.59
2015	10,400	13,283	0.78
2016	3,700	1,142	3.24
2017	1,700	2,024	0.84
2018	800	50	16.00
2019	600	220	2.73
2020	700	24	29.17
2021	800	401	2.00
2022	1,900	545	3.49
2023	1,300	1,107	1.17
2024 <sup>c/</sup>	2,400	1,030	2.33
2025	1,300		<b></b>

TABLE II-4. Comparisons of preseason forecasts and postseason estimates for ocean abundance of adult Klamath River fall Chinook. (Page 4 of 4)

	Preseason Forecast <sup>a/</sup>	Postseason Estimate	
Year (t)	Sept. 1 (t-1)	Sept. 1 (t-1)	Pre/Postseason
		al Adults	
1985	169,900 <sup>d/</sup>	442,843	0.38
1986	492,300 <sup>d/</sup>	1,451,608	0.34
1987	723,200	1,142,411	0.63
1988	570,500	1,005,644	0.57
1989	676,200	556,685	1.21
1990	536,700	287,840	1.86
1991	222,300	109,369	2.03
1992	96,100	69,115	1.39
1993	334,600	185,269	1.81
1994	224,600	163,119	1.38
1995	318,000	819,840	0.39
1996	749,400	419,342	1.79
1997	286,400	211,977	1.35
1998	225,300	201,914	1.12
1999	165,600	161,628	1.02
2000	389,900	662,324	0.59
2001	435,500	490,187	0.89
2002	362,500	619,464	0.59
2003	310,200	595,207	0.52
2004	216,300	281,876	0.77
2005	239,800	234,915	1.02
2006	110,000	159,286	0.69
2007	546,200	413,501	1.32
2008	190,700	152,326	1.25
2009	505,700	268,977	1.88
2010	331,500	255,356	1.30
2011	371,100	307,545	1.21
2012	1,651,800	878,856	1.88
2013	727,700	636,795	1.14
2014	299,300	404,787	0.74
2015	423,800	184,768	2.29
2016	142,200	58,589	2.43
2017	54,200	75,080	0.72
2018	359,200	204,266	1.76
2019	274,200	97,698	2.81
2020	186,600	143,338	1.30
2021	181,500	178,952	1.01
2022	200,100	165,778	1.21
2023	103,800	129,291	0.80
2024 <sup>c/</sup>	180,700	118,415	1.53
2025	82,700		

a/ Original preseason forecasts for years 1985-2001 were for May 1 (t); converted to Sept. 1 (t-1) forecasts by dividing the May 1 (t) number by the assumed Sept. 1 (t-1) through May 1 (t) survival rate in those years: 0.5 age-3, 0.8 age-4, 0.8 age-5.

b/ A scalar of 0.75 was applied to the jack count to produce the forecast because, (1) most jacks returned to the Trinity River, and (2) the jack count was outside the database range.

c/ Postseason estimates are preliminary.

d/ Does not include age-5 adults.

APPENDIX F - TABLE II-5.Summary of management objectives and predictor performance for Klamath River fall Chinook.

ALL LIVE	Prese		or management Postsea		Prese			eason		eason	Postse	eason	
	Ocean Al	oundance	Ocean Abu	ındance	Age	e-4	Age	e-4	Ad	lult	Adı	ult	
Average	Sept.	1 (t-1)	Sept. 1	(t-1)	Harves	st Rate	Harves	st Rate	Har	vest	Harv	est	
or	Fore	cast <sup>a/</sup>	Estim	ate	Fore	cast <sup>b/</sup>	Estim	Estimate <sup>c/</sup>		Forecast		Estimate	
Year (t)	Age-3	Age-4	Age-3	Age-4	Ocean	River	Ocean	River	Ocean	River	Ocean	River	
1986-90	447,640	144,880	677,548	199,729	0.30	0.51	0.44	0.54	104,100	56,020	214,598	51,814	
1991-95	185,520	52,320	236,925	30,168	0.09	0.28	0.13	0.34	12,980	14,460	13,095	13,667	
1996-00	262,960	97,220	246,677	81,693	0.11	0.44	0.10	0.33	30,500	44,180	21,336	31,382	
2001	187,200	247,000	356,128	133,801	0.14	0.61	0.09	0.29	45,600	105,300	21,747	50,780	
2002	209,000	143,800	513,604	98,927	0.13	0.57	0.15	0.26	30,000	70,900	28,896	35,069	
2003	171,300	132,400	401,112	192,180	0.16	0.50	0.21	0.28	30,600	52,200	70,995	39,715	
2004	72,100	134,500	159,446	105,246	0.15	0.38	0.35	0.48	26,500	35,800	64,226	29,807	
2005	185,700	48,900	189,977	38,079	0.08	0.16	0.20	0.19	7,100	9,600	12,807	10,001	
2006	44,100	63,700	90,666	63,384	0.11	0.23	0.10	0.18	10,000	10,000	10,401	10,345	
2007	515,400	26,100	376,940	33,650	0.16	0.63	0.21	0.56	30,200	51,400	30,275	33,884	
2008	31,600	157,200	68,015	81,411	0.02	0.43	0.10	0.38	4,500	49,500	8,716	24,180	
2009	474,900	25,200	240,787	21,131	0.00	0.57	0.00	0.40	100	61,700	53	34,040	
2010	223,400	106,300	192,750	62,089	0.12	0.49	0.04	0.40	22,600	46,600	4,489	32,920	
2011	304,600	61,600	240,222	64,570	0.16	0.54	0.08	0.34	26,900	42,700	12,011	30,502	
2012	1,567,600	79,600	799,446	74,300	0.16	0.77	0.08	0.51	92,400	227,600	34,719	109,263	
2013	390,700	331,200	438,443	194,407	0.16	0.62	0.20	0.51	74,800	154,800	59,511	82,835	
2014	219,800	67,400	216,493	180,669	0.16	0.40	0.17	0.25	23,200	31,400	40,158	31,353	
2015	342,200	71,100	110,506	60,979	0.16	0.59	0.22	0.47	29,400	57,700	20,019	35,890	
2016	93,400	45,100	32,670	24,777	0.08	0.19	0.09	0.31	6,300	8,500	3,025	6,470	
2017	42,000	10,600	63,235	9,821	0.03	0.06	0.04	0.08	700	900	1,783	1,951	
2018	330,000	28,400	193,685	10,531	0.12	0.34	0.24	0.36	14,600	21,600	13,227	18,879	
2019	167,500	106,100	81,818	15,660	0.16	0.47	0.36	0.38	24,800	40,000	8,677	11,365	
2020	149,600	36,200	129,077	14,237	0.09	0.22	0.23	0.37	7,300	9,900	4,708	10,335	
2021	135,600	45,100	142,822	35,729	0.11	0.19	0.28	0.22	6,900	9,400	17,595	10,487	
2022	155,000	43,200	126,919	38,314	0.10	0.22	0.39	0.31	7,300	11,600	23,637	10,496	
2023 <sup>d/</sup>	75,300	27,200	95,079	33,105	0.00	0.10	0.00	0.04	100	3,700	47	2,144	
2024 <sup>e/</sup>	138,700	39,500	101,355	16,030	0.02	0.19	0.02	0.29	1,400	11,400	758	7,385	
2025	67,100	14,300	=	-	-	-	=	-	=	-	=	-	

a/ Original preseason forecasts for years 1990-2001 were for May 1 (t); converted to Sept. 1 (t-1) forecasts by dividing the May 1 (t) number by the assumed Sept. 1 (t-1) through May 1 (t) survival rate in those years: 0.5 age-3, 0.8 age-4, 0.8 age-5.

b/ Ocean harvest rate forecast is the fraction of the predicted ocean abundance expected to be harvested Sept. 1 (t-1) through August 31(t). River harvest rate forecast is the fraction of the predicted river run expected to be harvested in river fisheries. Original ocean harvest rate forecasts for year (t), 1990-2001, were based on a May 1 (t) ocean abundance denominator; converted to Sept. 1 (t-1) abundance denominator by multiplying former values by 0.8 (assumed age-4 survival rate between Sept. 1 (t-1) and May 1 (t) in those years).

c/ Ocean harvest rate is the fraction of the postseason ocean abundance harvested Sept. 1 (t-1) through August 31 (t). River harvest rate is the fraction of the river run harvested by river fisheries.

d/ Postseason estimates are preliminary for age-3.

e/ Postseason estimates are preliminary for age-3 and age-4.

APPENDIX F - TABLE II-6.Harvest levels and rates of age-3 and age-4 Klamath River fall Chinook. (Page 1 of 4)

_		Oc	ean Fisheries	s (Sept. 1 (t-	1) - Aug. 31 (	t))				
Year (t) or _		KMZ		North of	South of			Riv	er Fisheries	(t)
Average	Troll	Sport	Subtotal	KMZ	KMZ	Subtotal	Ocean Total	Net	Sport	Total
				ı	HARVEST (n	umbers of f	ish)			
Age-3										
1986-90	15,081	6,253	21,334	38,683	64,397	103,080	124,414	7,200	9,480	16,680
1991-95	8	689	698	3,055	5,086	8,141	8,839	4,980	2,189	7,170
1996-00	93	740	833	2,157	7,326	9,483	10,316	8,840	3,764	12,604
2001	113	105	218	2,749	6,082	8,831	9,049	17,885	7,294	25,179
2002	220	784	1,004	1,501	9,916	11,417	12,421	11,734	6,258	17,992
2003	176	669	845	1,921	27,586	29,507	30,352	6,996	5,061	12,057
2004	402	970	1,372	9,710	7,324	17,034	18,406	4,679	2,051	6,730
2005	0	568	568	619	2,381	3,000	3,568	4,394	1,641	6,035
2006	0	478	478	32	341	373	851	2,388	13	2,401
2007	770	8,101	8,871	4,194	9,366	13,560	22,431	17,543	5,734	23,277
2008	0	0	0	0	0	0	0	3,225	608	3,833
2009	0	53	53	0	0	0	53	19,820	4,715	24,535
2010	106	28	134	0	1,664	1,664	1,798	13,132	1,884	15,016
2011	334	1,119	1,453	48	4,829	4,877	6,330	13,286	2,630	15,916
2012	1,116	11,350	12,466	928	13,089	14,017	26,483	70,409	12,104	82,513
2013	390	5,574	5,964	868	12,053	12,921	18,885	18,996	7,675	26,671
2014	0	566	566	4,144	1,550	5,694	6,260	3,386	1,778	5,164
2015	48	293	341	652	1,597	2,249	2,590	10,604	4,509	15,113
2016	0	0	0	14	308	322	322	918	430	1,348
2017	0	0	0	115	1,263	1,378	1,378	1,261	23	1,284
2018	1,511	1,628	3,139	3,960	3,577	7,537	10,676	12,954	3,931	16,885
2019	157	371	528	181	2,391	2,572	3,100	4,089	4,656	8,745
2020	0	44	44	46	1,260	1,306	1,350	2,997	4,554	7,551
2021	0	281	281	784	6,694	7,478	7,759	4,648	1,803	6,451
2022 <sup>a/</sup>	0	446	446	13	7,875	7,888	8,334	3,947	1,976	5,923
2023 <sup>a/</sup>	0	0	0	0	0	0	0	1,151	53	1,204
2024 <sup>a/</sup>	0	0	0	48	0	48	48	3,601	113	3,714

TABLE II-6. Harvest levels and rates of age-3 and age-4 Klamath River fall Chinook. (Page 2 of 4)

_		Oc	ean Fisherie	s (Sept. 1 (t-	1) - Aug. 31 (	t))				
Year (t) or		KMZ		North of	South of			Riv	er Fisheries	(t)
Average	Troll	Sport	Subtotal	KMZ	KMZ	Subtotal	Ocean Total	Net	Sport	Total
				ı	HARVEST (n	umbers of f	ish)			
Age-4										
1986-90	10,282	4,358	14,640	38,450	31,653	70,103	84,743	28,720	5,500	34,220
1991-95	34	484	519	1,438	1,807	3,245	3,764	5,072	856	5,928
1996-00	200	1,002	1,202	3,833	5,093	8,926	10,128	15,076	2,948	18,023
2001	1,312	1,604	2,916	5,819	3,926	9,745	12,661	20,759	4,819	25,578
2002	1,938	827	2,765	2,811	9,416	12,227	14,992	11,929	4,063	15,992
2003	834	919	1,753	7,856	30,011	37,867	39,620	22,754	4,592	27,346
2004	1,429	1,234	2,663	11,645	22,132	33,777	36,440	17,623	1,751	19,374
2005	247	317	564	5,243	1,909	7,152	7,716	3,048	304	3,352
2006	196	725	921	4,192	985	5,177	6,098	7,569	42	7,611
2007	270	2,336	2,606	2,019	2,472	4,491	7,097	8,987	502	9,489
2008	6,378	1,105	7,483	581	113	694	8,177	17,891	1,260	19,151
2009	0	0	0	0	0	0	0	5,831	706	6,537
2010	36	113	149	889	1,482	2,371	2,520	16,630	1,134	17,764
2011	417	175	592	1,045	3,780	4,825	5,417	12,587	1,466	14,053
2012	334	2,085	2,419	759	2,960	3,719	6,138	23,285	1,718	25,003
2013	4,277	6,236	10,513	4,054	23,994	28,048	38,561	43,671	12,043	55,714
2014	1,292	1,434	2,726	19,822	8,977	28,799	31,525	21,303	3,404	24,707
2015	273	197	470	5,763	7,127	12,890	13,360	13,160	2,692	15,852
2016	0	56	56	633	1,571	2,204	2,260	3,966	870	4,836
2017	0	124	124	98	183	281	405	503	43	546
2018	637	91	728	927	852	1,779	2,507	1,815	179	1,994
2019	670	47	717	1,075	3,779	4,854	5,571	1,860	716	2,576
2020	53	0	53	228	3,064	3,292	3,345	2,209	568	2,777
2021	0	238	238	754	8,843	9,597	9,835	3,353	605	3,958
2022	0	331	331	651	13,970	14,621	14,952	4,003	485	4,488
2023 <sup>a/</sup>	0	14	14	0	32	32	46	938	0	938
2024 <sup>a/</sup>	0	0	0	382	0	382	382	3,226	23	3,249

TABLE II-6. Harvest levels and rates of age-3 and age-4 Klamath River fall Chinook. (Page 3 of 4)

_		Od	cean Fisheries	s (Sept. 1 (t-	-1) - Aug. 31 (	t))				
Year (t) or		KMZ		North of	South of		_	Riv	ver Fisheries	(t)
Average	Troll	Sport	Subtotal	KMZ	KMZ	Subtotal	Ocean Total	Net	Sport	Total
					HARVE	ST RATE <sup>b/</sup>				
Age-3										
1986-90	0.02	0.01	0.03	0.08	0.09	0.17	0.20	0.09	0.11	0.20
1991-95	0.00	0.01	0.01	0.01	0.02	0.03	0.03	0.13	0.06	0.18
1996-00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.14	0.07	0.21
2001	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.18	0.07	0.25
2002	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.12	0.07	0.19
2003	0.00	0.00	0.00	0.00	0.07	0.07	0.08	0.07	0.05	0.13
2004	0.00	0.01	0.01	0.06	0.05	0.11	0.12	0.14	0.06	0.20
2005	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.10	0.04	0.14
2006	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.13	0.00	0.13
2007	0.00	0.02	0.02	0.01	0.02	0.04	0.06	0.15	0.05	0.20
2008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.03	0.21
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.06	0.31
2010	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.28	0.04	0.33
2011	0.00	0.00	0.01	0.00	0.02	0.02	0.03	0.23	0.04	0.27
2012	0.00	0.01	0.02	0.00	0.02	0.02	0.03	0.29	0.05	0.34
2013	0.00	0.01	0.01	0.00	0.03	0.03	0.04	0.34	0.14	0.48
2014	0.00	0.00	0.00	0.02	0.01	0.03	0.03	0.06	0.03	0.09
2015	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.29	0.12	0.41
2016	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.11	0.05	0.16
2017	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.05	0.00	0.05
2018	0.01	0.01	0.02	0.02	0.02	0.04	0.06	0.15	0.05	0.20
2019	0.00	0.00	0.01	0.00	0.03	0.03	0.04	0.14	0.15	0.29
2020	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.08	0.12	0.20
2021	0.00	0.00	0.00	0.01	0.05	0.05	0.05	0.13	0.05	0.18
2022 <sup>a/</sup>	0.00	0.00	0.00	0.00	0.06	0.06	0.07	0.12	0.06	0.18
2023 <sup>a/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03
2024 <sup>a/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.15

TABLE II-6. Harvest levels and rates of age-3 and age-4 Klamath River fall Chinook. (Page 4 of 4)

		Od	cean Fisheries	S (Sept. 1 (t-	·1) - Aug. 31 (	t))	•			
Year (t) or		KMZ		North of	South of			Riv	er Fisheries	(t)
Average	Troll	Sport	Subtotal	KMZ	KMZ	Subtotal	Ocean Total	Net	Sport	Total
					HARVE	ST RATE <sup>b/</sup>				
Age-4										
1986-90	0.05	0.02	0.07	0.21	0.16	0.37	0.44	0.45	0.09	0.54
1991-95	0.00	0.01	0.01	0.05	0.06	0.11	0.13	0.29	0.04	0.34
1996-00	0.00	0.01	0.01	0.05	0.04	0.09	0.10	0.28	0.05	0.33
2001	0.01	0.01	0.02	0.04	0.03	0.07	0.09	0.24	0.05	0.29
2002	0.02	0.01	0.03	0.03	0.10	0.12	0.15	0.19	0.06	0.26
2003	0.00	0.00	0.01	0.04	0.16	0.20	0.21	0.24	0.05	0.28
2004	0.01	0.01	0.03	0.11	0.21	0.32	0.35	0.43	0.04	0.48
2005	0.01	0.01	0.01	0.14	0.05	0.19	0.20	0.17	0.02	0.19
2006	0.00	0.01	0.01	0.07	0.02	0.08	0.10	0.18	0.00	0.18
2007	0.01	0.07	0.08	0.06	0.07	0.13	0.21	0.53	0.03	0.56
2008	0.08	0.01	0.09	0.01	0.00	0.01	0.10	0.36	0.03	0.38
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.04	0.40
2010	0.00	0.00	0.00	0.01	0.02	0.04	0.04	0.37	0.03	0.40
2011	0.01	0.00	0.01	0.02	0.06	0.07	0.08	0.31	0.04	0.34
2012	0.00	0.03	0.03	0.01	0.04	0.05	0.08	0.47	0.03	0.51
2013	0.02	0.03	0.05	0.02	0.12	0.14	0.20	0.40	0.11	0.51
2014	0.01	0.01	0.02	0.11	0.05	0.16	0.17	0.22	0.03	0.25
2015	0.00	0.00	0.01	0.09	0.12	0.21	0.22	0.39	0.08	0.47
2016	0.00	0.00	0.00	0.03	0.06	0.09	0.09	0.26	0.06	0.31
2017	0.00	0.01	0.01	0.01	0.02	0.03	0.04	0.07	0.01	0.08
2018	0.06	0.01	0.07	0.09	0.08	0.17	0.24	0.33	0.03	0.36
2019	0.04	0.00	0.05	0.07	0.24	0.31	0.36	0.27	0.10	0.38
2020	0.00	0.00	0.00	0.02	0.22	0.23	0.23	0.29	0.07	0.37
2021	0.00	0.01	0.01	0.02	0.25	0.27	0.28	0.19	0.03	0.22
2022	0.00	0.01	0.01	0.02	0.36	0.38	0.39	0.28	0.03	0.31
2023 <sup>a/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.04
2024 <sup>a/</sup>	0.00	0.00	0.00	0.02	0.00	0.02	0.02	0.29	0.00	0.29

a/ Preliminary (incomplete cohort).

b/ Ocean harvest rates are the fraction of Sept. 1 (t-1) ocean abundance harvested in these fisheries. River harvest rates are the fraction of the river run (t) harvested in these fisheries.

APPENDIX F - TABLE II-7. Rogue River fall Chinook inriver run and ocean population indices.

						Ocean Har		Rogue	Ocean Population	on Index (ROPI)	
Return		Inriver Run In	dex in Thousa	nds of Fish <sup>a/</sup>		by A	ge <sup>b/</sup>		in Thousands of	Fish <sup>c/d/</sup>	
Year	Age-2	Age-3	Age-4	Age-5-6	Total <sup>d/</sup>	Age-3	Age-4-6	Age-3	Age-4	Age-5-6	Total
1977-80	1.0	2.3	2.2	0.2	5.7	0.23	0.55	14.1	6.5	0.5	21.1
1981-85	21.4	17.6	22.9	2.3	64.1	0.18	0.45	197.5	60.0	16.6	274.1
1986-90	30.8	47.2	37.5	4.5	120.0	0.20	0.44	485.0	112.0	30.3	627.2
1991-95	16.7	28.9	17.2	3.5	66.4	0.03	0.13	165.1	51.2	11.8	228.1
1996-00	15.1	31.2	18.2	4.6	69.1	0.03	0.10	199.1	66.6	13.6	279.3
2001	27.9	29.5	33.9	16.6	107.9	0.03	0.09	164.8	146.2	18.6	329.6
2002	43.8	64.1	63.1	30.6	201.6	0.02	0.15	337.9	70.0	28.4	436.3
2003	20.1	66.9	99.0	47.0	233.0	0.08	0.21	530.4	151.9	52.2	734.5
2004	20.3	30.6	69.5	35.4	155.8	0.12	0.34	243.3	158.4	82.5	484.2
2005 <sup>f/</sup>	5.0	17.7	28.7	11.6	63.0	0.02	0.20	245.2	72.6	58.2	376.0
2006	7.4	11.6	19.6	7.1	45.7	0.01	0.10	60.4	42.1	23.5	126.0
2007	3.4	15.8	16.6	12.7	48.5	0.06	0.21	89.5	27.5	15.8	132.8
2008	16.2	7.6	14.1	4.2	42.1	0.00	0.10	41.3	37.6	15.4	94.3
2009	15.2	34.3	28.0	4.5	82.0	0.00	0.00	195.9	18.0	11.4	225.3
2010	15.1	23.6	26.5	2.7	67.9	0.01	0.04	183.4	81.3	21.5	286.2
2011	31.9	25.1	41.1	5.5	103.6	0.03	0.08	183.2	56.0	19.9	259.1
2012	11.0	39.9	28.0	5.3	84.2	0.03	0.08	385.6	59.4	31.2	476.2
2013	24.3	17.0	66.1	3.1	110.5	0.04	0.20	133.4	94.5	21.7	249.6
2014	12.5	20.5	29.2	6.7	68.9	0.03	0.17	295.5	40.5	49.0	385.0
2015	8.5	6.8	23.1	3.0	41.4	0.02	0.22	151.5	48.5	22.8	222.8
2016	17.7	8.1	17.7	2.9	46.4	0.01	0.09	102.6	16.2	17.6	136.4
2017	25.0	58.6	24.4	12.7	120.7	0.02	0.04	214.0	19.2	13.6	246.8
2018	23.9	27.7	11.4	0.4	63.4	0.06	0.24	303.0	138.8	21.0	462.8
2019	17.1	14.1	6.0	0.1	37.3	0.04	0.36	305.5	69.2	8.7	383.6
2020	16.6	22.9	7.6	0.1	47.2	0.01	0.23	207.1	33.5	4.3	244.9
2021	14.3	21.8	27.0	1.9	65.0	0.05	0.28	200.7	54.2	5.5	260.5
2022	15.4	11.4	7.4	0.9	35.0	0.06	0.38	173.4	51.7	20.0	245.1
2023	12.8	15.1	13.9	3.6	45.4	-	0.00	185.8	26.9	5.6	218.4
2024	13.0	15.4	41.2	3.1	72.6	-	-	155.2 e/	35.7 <sup>e/</sup>	11.1 <sup>e/</sup>	202.0 e/
2025	NA	NA	NA	NA	NA	-	-	157.2 <sup>f/</sup>	36.4 f/	30.7 <sup>f/</sup>	224.4 f/

a/ Huntley Park passage estimate and estuary harvest. Age composition from Huntley Park scale analysis.

b/ Exploitation rates since 1981 are based on Klamath River fall Chinook cohort analysis.

c/ Based on cohort reconstruction methods. Index values predicted from regression equations; postseason estimates are not available.

d/ Rogue ocean abundances initially reconstructed to May 1 (t); converted to Sept. 1 (t-1) forecasts by dividing the May 1 (t) number by the assumed Sept. 1 (t-1) through May 1 (t) survival rate: 0.5 age-3, 0.8 age-4, 0.8 age-5, 0.8 age-6.

e/ Preliminary, complete cohort not available.

f/ Preseason forecast.

APPENDIX F - TABLE II-8. Predicted and postseason returns of Columbia River adult summer and fall Chinook in thousands of fish. (Page 1 of 3)

(Page 1 of					
Year or	March Preseason	April STT Modeled		March	April
Average	Forecast <sup>a/</sup>	Forecast <sup>b/</sup>	Postseason Return	Pre/Postseason	Pre/Postseason
			URB		
1984-85	124.6	126.1	163.9	0.75	0.76
1986-90	306.8	305.5	291.4	1.02	1.02
1991-95	86.2	91.5	105.3	0.83	0.87
1996-00	144.9	140.9	153.8	0.94	0.92
2001-05	266.6	260.3	303.9	0.88	0.87
2006	253.9	249.1	230.4	1.10	1.08
2007	182.4	185.2	112.6	1.62	1.64
2008	162.5	165.9	196.9	0.83	0.84
2009	259.9	269.8	212.0	1.23	1.27
2010	310.8	319.1	324.9	0.96	0.98
2011	398.2	399.5	324.1	1.23	1.23
2012	353.5	353.0	298.1	1.19	1.18
2013	432.5	434.7	784.1	0.55	0.55
2014	973.3	919.4	684.2	1.42	1.34
2015	500.3	516.2	795.9	0.63	0.65
2016	589.0	579.4	406.6	1.45	1.42
2017	260.0	275.1	297.1	0.88	0.93
2018	200.1	205.8	149.0	1.34	1.38
2019	158.4	162.6	212.2	0.75	0.77
2020	233.4	227.0	299.3	0.78	0.76
2021	354.2	349.2	239.9	1.48	1.46
2022	230.4	229.6	254.9	0.91	0.90
2023 <sup>c/</sup>	272.4	278.5	339.0	0.80	0.82
2024	258.3	261.9	318.1	0.81	0.82
2025	313.4	-	0.0	-	-
			LRW		
1984-85	14.8	NA	13.3	1.12	NA
1986-90	27.8	30.8	32.6	0.86	0.95
1991-95	13.9	13.2	14.8	0.99	0.93
1996-00	6.1	5.5	9.5	0.69	0.62
2001-05	20.9	21.2	21.1	1.01	1.03
2006	16.6	16.6	18.1	0.92	0.92
2007	10.1	10.0	4.3	2.35	2.33
2008	3.8	3.8	7.1	0.54	0.54
2009	8.5	8.6	7.5	1.13	1.15
2010	9.7	10.0	10.9	0.89	0.92
2011	12.5	13.1	15.2	0.82	0.86
2012	16.2	16.2	13.9	1.17	1.17
2013	14.2	14.3	25.8	0.55	0.55
2014	34.2	33.4	25.8	1.33	1.29
2015	18.9	19.4	32.4	0.58	0.60
2016	22.2	22.4	13.0	1.71	1.72
2017	12.5	13.6	7.8	1.60	1.74
2018	7.6	7.9	8.3	0.92	0.95
2019	13.7	14.1	16.6	0.83	0.85
2020	19.7	19.2	35.4	0.56	0.54
2021	20.0	20.4	16.9	1.18	1.21
2022	10.8	10.9	9.4	1.16	1.17
2023 <sup>c/</sup>	8.6	8.7	11.4	0.75	0.76
2024	10.5	10.5	15.1	0.70	0.70
2025	14.2	-	-	-	-

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TABLE II-8. Predicted and postseason returns of Columbia River adult summer and fall Chinook in thousands of fish. (Page 2 of 3)

	March Preseason	April STT Modeled		March	April
Year	Forecast <sup>a/</sup>	Forecast <sup>b/</sup>	Postseason Return	Pre/Postseason	Pre/Postseasor
			LRH		
984-85	76.0	87.9	106.7	0.71	0.83
986-90	209.8	204.2	234.9	0.91	0.88
991-95	67.2	72.2	55.5	1.18	1.28
1996-00	33.9	40.8	49.0	0.72	0.86
2001-05	87.4	87.6	118.6	0.73	0.73
2006	55.8	57.5	58.3	0.96	0.99
2007	54.9	54.4	32.7	1.68	1.66
2008	59.0	55.9	60.3	0.98	0.93
2009	88.8	88.2	76.7	1.16	1.15
2010	90.6	85.6	103.0	0.88	0.83
2011	133.5	128.9	109.0	1.22	1.18
2012	127.0	128.4	84.8	1.50	1.51
2013	88.0	87.4	103.2	0.85	0.85
2014	110.0	100.7	101.8	1.08	0.99
2014	94.9	96.8	128.7	0.74	0.99
		96.6 142.5			
2016	133.7		81.9	1.63	1.74
2017	92.4	98.8	64.6	1.43	1.53
2018	62.4	63.9	50.4	1.24	1.27
2019	54.5	55.1	48.9	1.11	1.13
2020	51.0	50.0	77.9	0.65	0.64
2021	73.1	73.8	74.7	0.98	0.99
2022	73.0	73.6	87.5	0.83	0.84
2023 <sup>c/</sup>	77.1	77.0	87.1	0.89	0.88
2024	85.5	85.4	114.4	0.75	0.75
2025	121.5	-	-	-	-
			SCH		
1984-85	28.1	32.1	40.4	0.75	0.85
1986-90	17.7	15.6	16.7	1.01	0.92
1991-95	31.0	34.5	30.2	1.05	1.18
1996-00	30.3	32.6	30.3	0.94	1.05
2001-05	110.0	113.1	148.5	0.76	0.78
2006	50.0	51.8	27.9	1.79	1.86
2007	21.8	21.3	14.5	1.50	1.47
2008	87.2 50.3	86.2	93.8	0.93	0.92
2009	59.3	56.5	49.0	1.21	1.15
2010	169.0	162.9	128.6	1.31	1.27
2011	116.4	116.7	70.5	1.65	1.66
2012	63.8	60.0	56.9	1.12	1.05
2013	38.0	36.7	86.7	0.44	0.42
2014	115.1	103.3	127.0	0.91	0.81
2015	160.5	163.9	166.4	0.96	0.98
2016	89.5	100.7	41.4	2.16	2.43
2017	158.4	164.4	48.1	3.29	3.42
2018	50.1	51.4	28.9	1.73	1.78
2019	46.0	48.4	29.0	1.59	1.67
2020	46.2	45.5	52.3	0.88	0.87
2021	46.8	47.3	73.7	0.64	0.64
2022	91.2	92.2	258.3	0.35	0.36
2023 <sup>c/</sup>	136.1	135.8	198.9	0.68	0.68
2023	129.8	129.4	129.0	1.01	1.00
	123.0	123.4	123.0	1.01	1.00

TABLE II-8. Predicted and postseason returns of Columbia River adult summer and fall Chinook in thousands of fish.

(Page 3 of 3)

	March Preseason	April STT Modeled		March	April
Year	Forecast <sup>a/</sup>	Forecast <sup>b/</sup>	Postseason Return	Pre/Postseason	Pre/Postseasor
			MCB		
1991-95	34.6	35.6	32.4	1.08	1.10
1996-00	49.9	47.9	48.6	1.07	1.04
2001-05	84.9	82.0	110.1	0.77	0.75
2006	88.3	86.6	80.4	1.10	1.08
2007	68.0	69.1	46.9	1.45	1.47
2008	54.0	55.1	75.5	0.72	0.73
2009	94.4	97.9	73.1	1.29	1.34
2010	79.0	74.6	79.0	1.00	0.94
2011	100.0	100.4	85.4	1.17	1.18
2012	90.8	90.7	58.7	1.55	1.55
2013	105.2	96.3	243.4	0.43	0.40
2014	360.1	340.2	203.8	1.77	1.67
2015	113.3	116.9	170.6	0.66	0.69
2016	99.0	99.4	87.8	1.13	1.13
2017	48.2	48.3	50.5	0.95	0.96
2018	42.0	41.2	50.2	0.84	0.82
2019	64.7	66.4	68.1	0.95	0.98
2020	79.7	77.5	109.0	0.73	0.71
2021	86.2	85.0	73.8	1.17	1.15
2022	78.9	78.6	67.7	1.17	1.16
2023 <sup>c/</sup>	52.6	53.8	82.1	0.64	0.66
2024	63.4	64.3	87.6	0.72	0.73
2025	83.3	-	-	-	-
			SUMMER		
2008	52.0		55.5	0.94	
2009	70.7		53.9	1.31	
2010	88.8		72.3	1.23	
2011	91.1		80.6	1.13	
2012	91.2	92.6	58.3	1.56	1.59
2013	73.5	78.5	67.6	1.09	1.16
2014	67.5	64.7	78.3	0.86	0.83
2015	73.0	100.1	126.9	0.58	0.79
2016	93.3	95.6	91.0	1.03	1.05
2017	63.1	64.8	68.2	0.93	0.95
2018	67.3	70.5	42.1	1.60	1.67
2019	35.9	36.3	34.6	1.04	1.05
2020	38.3	38.0	65.5	0.58	0.58
2021	77.6	78.8	56.8	1.37	1.39
2022	57.5	56.3	78.5	0.73	0.72
2023 <sup>c/</sup>	84.8	85.4	54.7	1.55	1.56
2024	53.0	52.6	42.5	1.25	1.24
2025	38.0	-	-	-	-

a/ March preseason forecasts are ocean escapements based on terminal run size and stock-specific cohort relationships affected by the historical "normal" ocean fisheries, generally between 1979 and the most recent complete broods.

b/ STT-modeled forecasts adjust March preseason forecasts for Council-adopted ocean regulations each year, and should provide a more accurate estimate of expected ocean escapement.

c/ Postseason estimates are preliminary.

APPENDIX F - TABLE II-9. Preseason forecasts and postseason estimates of Puget Sound run size for summer/fall Chinook in thousands of fish. al (Page 1 of 3)

Year or	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-
Average	Forecast	Return	season	Forecast	Return	season	Forecast	Return	season	Forecast	Return	season
	No	oksack-Sami	sh	E	ast Sound Bay	/		Skagit <sup>b/</sup>			Skagit	
	Hate	chery and Nat	ural		Hatchery			Hatchery			Natural	
1993-95	45.2	29.6	1.54	3.3	1.6	15.40	1.3	3.4	0.47	9.1	7.2	1.35
1996-00	27.0	39.1	0.70	2.1	0.5	9.58	0.2	0.3	0.38	7.0	10.8	0.81
2001	34.9	71.4	0.49	1.6	0.9	1.85	0.0	0.2	0.00	9.1	14.0	0.65
2002	52.8	62.5	0.84	1.6	0.9	1.87	0.0	0.1	0.00	13.8	19.8	0.70
2003	45.8	33.3	1.37	1.6	0.2	7.51	0.0	0.3	0.00	13.7	10.0	1.37
2004	34.2	18.1	1.89	0.8	0.0	400.00	0.5	0.2	2.16	20.3	24.0	0.85
2005	19.5	20.7	0.94	0.4	0.1	7.69	0.7	0.4	1.88	23.4	23.4	1.00
2006	16.9	38.5	0.44	0.4	0.0	26.67	0.6	0.4	1.51	24.1	22.4	1.08
2007	18.8	32.9	0.57	0.4	0.0	-	1.1	0.4	2.59	15.0	12.9	1.16
2008	35.3	33.7	1.05	0.8	0.0	-	0.7	0.2	3.32	23.8	14.8	1.61
2009	23.0	25.9	0.89	0.1	0.0	4.76	0.6	0.1	4.48	23.4	12.2	1.91
2010	30.3	41.4	0.73	2.3	0.7	3.19	0.9	0.1	10.59	13.0	9.6	1.36
2011	37.5	40.9	0.92	0.4	0.7	0.57	1.5	0.1	13.51	14.3	9.2	1.56
2012	44.0	43.2	1.02	0.4	1.6	0.25	1.3	0.1	13.83	8.3	15.7	0.53
2013	47.2	39.1	1.21	2.0	1.1	1.79	0.3	0.1	3.45	12.9	13.0	1.00
2014	43.9	32.3	1.36	1.2	0.4	3.23	0.3	0.1	2.78	18.0	11.9	1.51
2015	38.6	23.8	1.62	1.2	0.9	1.39	0.6	0.1	5.94	11.8	14.6	0.81
2016	27.9	21.3	1.31	0.7	0.7	1.05	0.4	0.1	4.55	15.1	21.0	0.72
2017	21.2	33.0	0.64	0.8	0.5	1.70	0.4	0.1	4.04	15.8	13.8	1.14
2018	24.6	25.8	0.95	0.7	0.0	63.64	0.3	0.1	3.13	13.3	12.1	1.10
2019	21.3	18.6	1.14	0.3	0.4	0.71	0.3	0.1	3.12	13.6	13.0	1.05
2020	18.2	22.3	0.82	0.3	0.2	1.15	0.5	0.1	5.65	12.9	12.5	1.03
2021 <sup>c/</sup>	18.9	37.8	0.50	0.6	0.3	2.34	0.5	0.1	3.60	10.5	9.0	1.16
2022	28.1	51.8	0.54	0.4	0.1	4.45	0.5	0.1	5.71	12.5	19.2	0.65
2023	41.2	67.2	0.61	0.2	0.5	0.34	0.5	0.1	4.74	12.2	13.1	0.94
2024	40.9	-	-	0.2	-	-	0.6	-	-	10.4	-	-
2025	53.7	-	-	1.0	-	-	0.5	-	-	9.7	-	-

TABLE II-9. Preseason forecasts and postseason estimates of Puget Sound run size for summer/fall Chinook in thousands of fish. a/ (Page 2 of 3)

TABLE IF9.	rieseasonii		osiseason es	unales of rug	et Sound Fun Siz	ze for summe	I/I all Gilliook	in thousands o	ilisii. (Fage	2013)		
Year or	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-
Average	Forecast	Return	season	Forecast	Return	season	Forecast	Return	season	Forecast	Return	season
	5	Stillaguam is h	d/		Snohom is h d/			Snohomish d			Tulalip <sup>d∕</sup>	
		Natural			Hatchery			Natural			Hatchery	
1993-95	1.8	1.3	1.31	2.0	3.7	0.44	4.6	3.9	1.16	2.6	5.7	0.56
1996-00	1.6	2.0	0.82	7.0	8.0	0.94	5.3	3.5	1.65	3.7	10.8	0.37
2001	1.7	2.0	0.87	4.1	2.9	1.43	5.8	6.7	0.86	5.5	6.3	0.87
2002	2.0	2.2	0.91	6.8	2.7	2.55	6.7	7.6	0.88	5.8	6.1	0.96
2003	2.0	1.5	1.32	9.4	6.1	1.55	5.5	5.8	0.94	6.0	10.3	0.58
2004	3.3	2.1	1.55	10.1	6.4	1.58	15.7	11.0	1.42	6.8	6.4	1.06
2005	2.0	1.7	1.21	9.9	4.0	2.47	14.2	5.0	2.83	6.4	7.1	0.90
2006	1.6	1.8	0.87	9.6	6.0	1.61	8.7	7.3	1.20	9.3	5.7	1.64
2007	1.9	1.1	1.74	8.7	8.4	1.03	12.3	3.0	4.13	8.4	5.8	1.44
2008	1.1	2.0	0.54	8.8	7.5	1.18	6.5	7.2	0.91	2.7	3.5	0.76
2009	1.7	1.2	1.38	4.9	2.6	1.88	8.4	1.9	4.43	4.0	1.8	2.23
2010	1.4	1.5	0.92	5.6	3.5	1.62	9.9	3.6	2.76	3.4	3.8	0.91
2011	1.8	1.6	1.14	5.2	3.5	1.51	7.4	1.5	4.97	3.5	5.2	0.68
2012	0.9	1.9	0.47	3.9	8.4	0.46	2.8	3.4	0.82	5.9	0.5	11.26
2013	1.3	1.6	0.79	5.9	6.0	0.98	3.6	2.9	1.25	10.9	2.0	5.38
2014	1.6	0.9	1.82	5.4	6.2	0.88	5.3	2.4	2.18	4.7	1.9	2.42
2015	0.5	0.9	0.58	3.3	4.8	0.69	4.2	2.3	1.80	1.3	2.7	0.48
2016	0.5	1.2	0.41	5.0	10.3	0.49	3.3	3.6	0.92	1.4	6.8	0.21
2017	1.5	1.3	1.19	4.8	9.3	0.51	3.4	4.5	0.75	5.3	12.0	0.44
2018	1.6	1.2	1.35	6.5	6.1	1.06	3.5	3.4	1.03	7.5	10.2	0.73
2019	0.9	1.1	0.78	7.0	6.4	1.11	3.2	1.1	2.93	12.5	9.3	1.34
2020	0.9	1.6	0.56	6.8	5.7	1.18	3.0	3.0	0.99	6.0	3.8	1.57
2021 <sup>c/</sup>	0.9	8.0	1.08	6.1	7.3	0.83	2.9	2.3	1.29	5.8	3.0	1.93
2022	0.9	1.9	0.48	6.0	8.7	0.69	2.4	3.9	0.62	7.7	3.9	1.95
2023	1.2	1.0	1.21	7.5	6.5	1.15	3.4	1.6	2.07	5.5	7.6	0.72
2024	0.9	-	-	8.4	-	-	2.7	-	-	5.9	-	-
2025	1.1	-	-	11.4	-	-	2.9	-	-	4.9	-	-

TABLE II-9. Preseason forecasts and postseason estimates of Puget Sound run size for summer/fall Chinook in thousands of fish. a/ (Page 3 of 3)

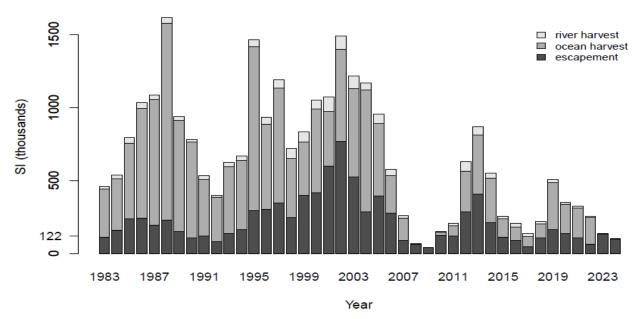
Year or	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-
Average	Forecast	Return	season	Forecast	Return	season	Forecast	Return	season	Forecast	Return	season
	Soi	uth Puget Sou	ınd	Sou	ıth Puget Sou	nd	Stra	it of Juan de F	uca		Hood Canal	
		Hatchery			Natural		Hato	chery and Nati	ıral	Hate	chery and Natu	ıral
1993-95	54.7	71.4	0.82	22.1	13.6	1.76	4.2	2.3	1.92	11.6	6.2	2.13
1996-00	64.3	74.3	0.91	19.2	15.2	1.27	3.0	3.5	0.89	7.3	16.6	0.54
2001	73.7	108.0	0.68	16.2	20.3	0.80	3.5	3.6	0.96	19.2	30.4	0.63
2002	90.8	106.9	0.85	16.9	20.4	0.83	3.6	3.7	0.97	25.3	34.4	0.73
2003	86.6	92.3	0.94	19.6	6.5	3.00	3.4	4.0	0.84	24.0	38.8	0.62
2004	86.5	97.0	0.89	17.5	10.9	1.60	3.6	5.5	0.65	29.6	36.9	0.80
2005	83.1	88.8	0.94	17.7	6.3	2.82	4.2	3.7	1.13	30.6	59.3	0.52
2006	85.8	133.4	0.64	21.3	9.4	2.26	4.2	4.4	0.96	30.2	47.0	0.64
2007	83.0	167.4	0.50	17.0	11.6	1.46	4.4	2.1	2.07	47.5	39.3	1.21
2008	101.6	111.5	0.91	21.1	15.3	1.38	3.2	1.9	1.71	36.8	40.9	0.90
2009	93.0	89.1	1.04	17.2	3.0	5.68	2.4	4.4	0.55	42.6	44.0	0.97
2010	97.4	95.1	1.02	12.7	4.1	3.10	1.9	2.9	0.66	45.0	43.7	1.03
2011	118.6	86.6	1.37	8.9	3.5	2.51	2.5	4.1	0.61	40.6	68.5	0.59
2012	95.8	84.6	1.13	8.9	5.7	1.55	2.9	4.2	0.68	46.8	97.5	0.48
2013	102.0	93.6	1.09	5.0	4.8	1.05	4.3	6.4	0.68	66.2	76.9	0.86
2014	96.7	44.0	2.20	4.8	3.3	1.46	5.3	6.9	0.77	84.1	27.1	3.11
2015	62.4	52.8	1.18	3.8	5.5	0.69	8.4	7.3	1.16	62.1	35.9	1.73
2016	43.1	88.6	0.49	4.5	6.7	0.68	6.6	4.5	1.48	45.0	66.2	0.68
2017	80.4	157.0	0.51	4.7	8.7	0.54	4.6	5.0	0.92	50.8	100.9	0.50
2018	123.6	117.0	1.06	4.8	7.4	0.66	7.4	10.2	0.73	61.4	72.1	0.85
2019	99.9	100.0	1.00	8.4	5.7	1.48	8.3	10.4	0.80	67.2	62.4	1.08
2020	100.7	63.5	1.59	5.8	5.8	0.99	5.0	6.2	0.80	72.2	23.6	3.06
2021 <sup>c/</sup>	78.8	100.4	0.79	7.0	7.1	0.99	5.5	5.5	0.99	69.8	54.5	1.28
2022	90.3	93.0	0.97	6.9	8.5	0.82	5.0	6.7	0.75	57.3	75.8	0.76
2023	90.4	81.1	1.12	7.0	5.0	1.40	3.7	9.4	0.40	56.8	61.9	0.92
2024	90.5	-	-	7.3	-	-	4.3	-	-	60.6	-	-
2025	94.4	-	-	8.5	-	-	5.2	-	-	59.7	-	-

a/ Puget Sound run size is defined as the run available to Puget Sound net fisheries. Does not include fish caught by troll and recreational fisheries inside Puget Sound.

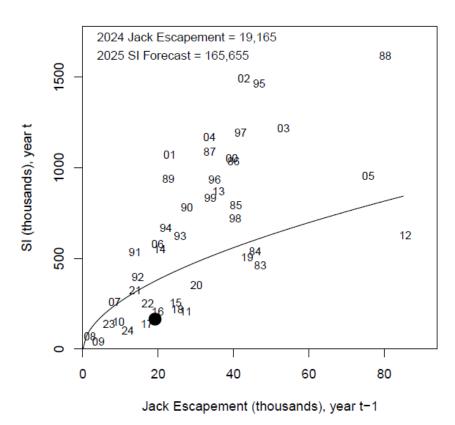
b/ Postseason returns do not include hatchery strays to the spawning grounds.

c/ Postseason returns are preliminary.

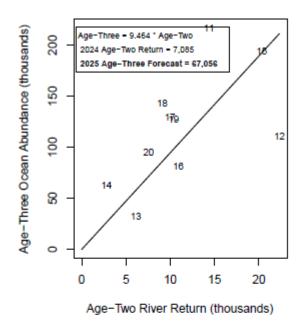
d/ Preseason forecasts include a variety of runsize types including escapement without fishing and terminal run. Postseason returns are in terms of terminal run of Chinook returning to area 8A. This includes all adult Chinook harvested in the net fisheries in Area 8A, 8D, and the Stillaguamish and Snohomish Rivers, harvest in sport fisheries in Area 8D, and the Stillaguamish and Snohomish River escapements.

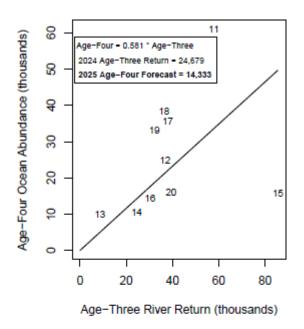


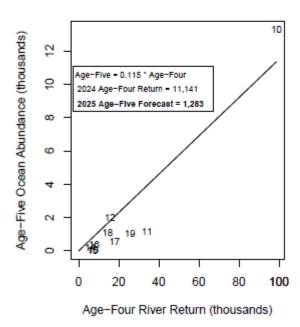
APPENDIX F - FIGURE II-1. The Sacramento Index (SI) and relative levels of its components. The Sacramento River fall Chinook  $S_{MSY}$  of 122,000 adult spawners is noted on the vertical axis.



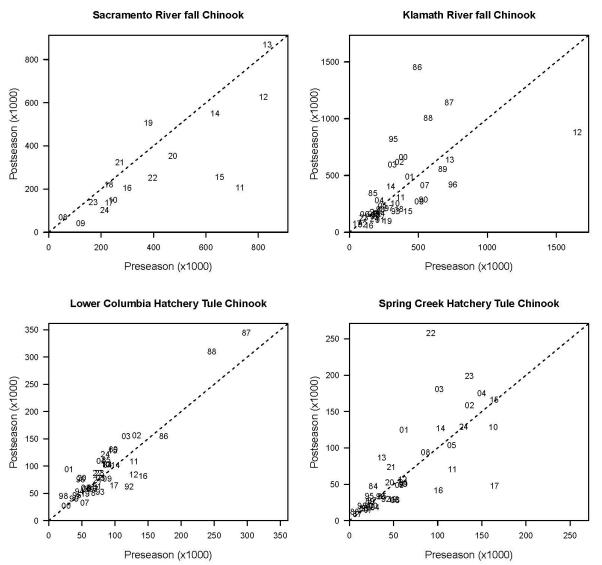
APPENDIX F - FIGURE II-2. Sacramento Index (SI) forecast based on log-log regression of the SI on jack escapement from the previous year, accounting for autocorrelated errors. The solid line represents the fitted model and the black dot denotes the SI forecast. Years shown are SI years.







APPENDIX F FIGURE II-3.Regression estimators for Klamath River fall Chinook ocean abundance (September 1) based on that year's river return of same cohort. Numbers in plots denote brood years.



APPENDIX F FIGURE II-4. Selected preseason vs. postseason forecasts for Chinook stocks with substantial contribution to Council area fisheries.

# AFFECTED ENVIRONMENT - COHO SALMON ASSESSMENT

# COLUMBIA RIVER AND OREGON/CALIFORNIA COAST COHO

#### OREGON PRODUCTION INDEX AREA

The majority of coho harvested in the Oregon Production Index (OPI) area originate from stocks produced in rivers located within the OPI area (Leadbetter Point, Washington to the U.S./Mexico border). These stocks include hatchery and natural production from the Columbia River, Oregon Coast, and northern California, and are divided into the following components: (1) Columbia River, coastal Oregon, and northern California public hatchery (OPIH), (2) Oregon coastal natural (OCN), including river and lake components, and (3) Lower Columbia natural (LCN). Direct comparisons of 2024 abundance forecasts with recent year preseason abundance forecasts and postseason estimates are reported in Appendix F Table III-1.

Beginning in 2008, a method was developed to estimate postseason coho abundances for both the natural and hatchery components of the Columbia River and the Oregon coast. The run size estimates are based on Backwards FRAM (BKFRAM, also referred to as postseason FRAM) run reconstructions. BKFRAM is used to estimate the pre-fishing abundances and post-season exploitation rates of OPI stocks. FRAM is populated with post-season estimates of escapements and catches/non-retention mortalities for OPI fisheries. When run in BKFRAM mode, stock specific mortalities are added to escapements to reconstruct pre-fishing abundances and to estimate exploitation rates. Prior to 2008, the method of stock abundance estimation used only catch data from Leadbetter Point, Washington, to the U.S./Mexico border. The assumption was that OPI stocks that were caught north of the OPI area were balanced by northern stocks that were caught inside the OPI area. This assumption was valid as long as fisheries north and south were balanced. However, in some recent years, fisheries to the south have been more restricted than those to the north, leading to underestimation of harvest of OPI area stocks. In addition, the estimation technique was not consistent with the methods used in Coho FRAM. The Mixed Stock Model (MSM) for constructing the FRAM base period data was used to estimate the contribution of various coho stocks, including the OPI area stocks, to ocean fisheries. MSM is based on CWT recoveries (release years 1986-1992) and associated tag rates. FRAM includes all fisheries that impact a particular stock, and therefore should provide a better overall accounting of total harvest and mortality of both Columbia River and Oregon coast coho stocks.

## **Hatchery Coho**

OPI area public hatchery coho smolt production occurs primarily in Columbia River facilities. Several facilities located in Oregon coastal rivers and in the Klamath River Basin, California, collectively produce fewer coho. Salmon Trout Enhancement Hatchery Coho Smolt Program (STEP) releases were discontinued after the 2004 brood. There have been no Oregon coastal private hatchery coho (PRIH) smolt releases since 1990. OPI area smolt releases since 1960 are reported by geographic area in Appendix C, Table C-1.

The OPIH abundance forecast includes all hatchery production in the OPI area, and all naturally produced coho from the Columbia River basin. After the total OPIH forecast is produced, stock components including Columbia River early and late hatchery stocks, LCN, and coastal Oregon and northern California hatchery coho, are partitioned from the total forecast value.

## **Predictor Description**

Beginning in 2024, OPIH abundance was forecasted using an autoregressive integrated moving average (ARIMA) model with an ensemble approach. A detailed description of this modeling approach can be found in the PFMC November 2023 Briefing Book, Agenda Item D.3 Attachment 1. From 1996 to 2023, the OPIH forecast was a regression model that included adult recruits, jack returns, and smolt production. Further documentation for this past forecast approach can be found in the 2023 Preseason Report I.

The ARIMA model forecasts ocean adult abundance for the OPIH component with 11 covariates: jack returns and the delayed smolt adjustment metric used in the past forecast approach, as well as nine environmental variables (Table C-2). The jack return metric includes hatchery jack returns to all OPI coastal areas and to the Columbia River. The jack return values are also log-transformed because the ARIMA models are fit using a log-link (as opposed to the past methodology that used an identity link). The adjusted smolt metric was also modified by log-transforming Columbia River jack abundance in its calculation:

$$lag1_log SmAdj = log(lag1.JackCR) * (lag1.SmD/lag1.SmCR)$$

Where, JackCR is the total jack return to the Columbia River hatcheries and dams, SmD is the delayed smolt release from Columbia River hatcheries, and SmCR is the total smolts releases from Columbia River hatcheries.

The OPIH ARIMA model approach is a multistep process that results in an ensemble forecast. First, ARIMA models were fit to 1,485 unique combinations of the 11 covariates to subsets of the data beginning with the first year of post-season run size estimates ( $t_0 = 1970$ ) and running through subsequent year  $t \in \{2007, 2008, 2009 \dots 2024\}$ . Each ARIMA model forecasts the abundance for 2025, such that 1,485 one-year-ahead forecasts with distinct combinations of covariates for 2025 were generated. The models' performance were assessed based on the models mean average percent error (MAPE) over the 15 most recent years. The ensemble forecast was generated by taking weighted means of the 10 models with the lowest MAPE. The final method of generating weights to each model used a Markov-Chain Monte-Carlo optimization algorithm that minimized the MAPE of the ensemble forecasts across 2010–2024, termed stacking weights (Smyth and Wolpert 1999). The ten models used to generate the 2025 OPIH forecast, their weight in the ensemble, and their ARIMA orders can be found in Table C-5.

The OPIH forecast was divided into Columbia River early and late and coastal components. In 2025, for the early and late components, linear regressions were conducted, where the jack return in 2024 predicted the adult abundance for 2025. The time series from 2015 to 2024 was fit to these regressions. The coastal component applied a linear regression using the time series from 1986 to 2024, where the smolt release in 2024 predicted the adult abundance for 2025. The coastal hatchery stock is further partitioned into northern and southern coastal stock components using the proportion of smolt releases north and south of Cape Blanco in 2024. The proportion of the regression results for each component was applied to the ARIMA-based forecast to derive the component forecast seen in Appendix F Table III-1. LCN abundance is included as a subset of the early and late hatchery abundance. After the LCN forecast is developed (see 3.1.4), the LCN subset for the early and late components is derived. The LCN component within the early OPIH forecast is 35 percent of the Washington LCN forecasts. The LCN component of the OPIH late forecast is 65 percent of the Washington LCN forecast and 25 percent of the Clackamas forecast.

#### Predictor Performance

Recent year OPIH stock preseason abundance forecasts partitioned by production area, stock, and as a total, are compared with postseason estimates in Appendix F Table III-1 and Appendix F Figure III-1a. The 2024 preseason abundance prediction of 403,100 OPIH coho was 54 percent of the preliminary postseason estimate of 742,300 coho.

#### Stock Forecast and Status

The OPIH abundance forecast for 2025 is 312,600 coho, 78 percent of the 2024 preseason abundance prediction and 42 percent of the preliminary 2024 postseason estimate (Table Appendix F III-1).

# **Oregon Coastal Natural Coho**

The OCN stock is composed of natural production north of Cape Blanco, Oregon from river (OCNR) and lake (OCNL) systems, which are forecasted independently.

Under the FMP, ESA consultation standards are used in place of ACLs for ESA-listed stocks like OCN (and Southern Oregon/Northern California Coast (SONCC) and Central California Coast (CCC)) coho.

## **Predictor Description**

## **Oregon Coastal Natural Rivers**

Prior to 2010, a variety of methods were used to forecast OCNR coho abundance. Beginning in 2011, generalized additive models (GAMs) were used to relate OCNR recruitment to ocean environment indices. Nine variables were evaluated, ranging from indices of large-scale ocean patterns (e.g., Pacific Decadal Oscillation [PDO]) to local ecosystem variables (e.g., sea surface temperature at Charleston, OR). It was found that high explanatory power and promising forecast skill could be achieved when the mean May-July PDO averaged over the four years prior to the return year was used in combination with two other variables in a GAM. The multi-year average of the PDO, in essence, explains the lower frequency (multi-year) variability in recruitment, and can be viewed as a replacement of the Regime Index used previously. A final set of six models using six different environmental indices plus parent spawner abundance was chosen from the possible model combinations. When averaging the predictions from the set of models (the ensemble mean), a higher skill (in terms of variance explained or cross-validation) was achieved than by selecting any single model. Making multiple forecasts from a set of models also provides a range of possible outcomes that reflects, to some degree, the uncertainty in understanding how salmon productivity is driven by ocean conditions.

Specifically, the final estimate is the mean of six GAM estimates, each with three predictor variables. The individual GAMs can be expressed in the following general form:

$$\hat{Y} = f(X_1) + f(X_2) + f(X_3) + \varepsilon$$

Where  $\hat{Y}$  is the prediction,  $X_1$  through  $X_3$  are the predictor variables, and  $\varepsilon$  is the deviation of  $\hat{Y}$  from the observation Y. For the prediction, Y was the log-transformation of annual recruit abundance. The term f represents a smooth function, which in this case is a cubic spline.

The ensemble mean predictor was the geometric mean of the six GAM predictors which is provided in Appendix C, Table C-6. For 2025, the OCNR forecast is 277,700.

The OCNR stock data set and a definition of the above terms are presented in Appendix C, Table C-4.

# **Oregon Coastal Natural Lakes**

Since 1988, except for 2008, the abundance of OCNL index coho has been predicted using the most recent three-year average adult stock abundance. OCNL coho production occurs from three lake systems (Tenmile, Siltcoos, and Tahkenitch). Following the same reasoning used for the OCN Rivers predictor in 2008, OPITT chose to use the 2007 postseason abundance estimate of 10,000 coho for the 2008 preseason prediction instead of using the most recent three-year average. For 2025, the OCNL forecast is 11,300, based on most recent three-year average adult stock abundance.

#### Predictor Performance

Recent year OCN preseason abundance predictions are compared to postseason estimates in Table III-1. The 2024 preseason abundance prediction of 233,200 OCN coho was 116 percent of the preliminary postseason estimate of 200,400 coho.

## Stock Forecasts and Status

The 2025 preseason prediction for OCN (river and lake systems combined) is 289,000 coho, 124 percent of the 2024 preseason prediction and 144 percent of the 2024 postseason estimate (Appendix F Table III-1).

Based on parent escapement levels and observed OPI smolt-to-jack survival for 2022 brood OPI smolts, the total allowable OCN coho exploitation rate for 2025 fisheries is no greater than 30.0 percent under the Salmon FMP (Amendment 13) and no greater than 30.0 percent under the matrix developed by the OCN Coho Workgroup during their review of Amendment 13 (Table V-8; Appendix A, Tables A-2, and A-3, respectively). The workgroup recommendation was accepted by the Council as expert biological advice in November 2000.

In November 2013, the Council approved a methodology change for a new marine survival index for the OCN coho harvest matrix that uses biological and oceanographic indicators for preseason planning beginning in 2014<sup>11</sup>. Based on this methodology, the marine survival index of 7.48 percent and the parent escapement levels, allows for a total allowable exploitation rate for 2025 fisheries that is no greater than 30.0 percent (Table V-8: Appendix Table A-4).

# Southern Oregon / Northern California Coast Coho

The SONCC coho ESU consists of all naturally produced populations of coho from coastal streams between Cape Blanco, OR and Punta Gorda, CA. Under the FMP, ESA consultation standards are used to manage ESA-listed stocks, including SONCC coho and CCC coho.

Under FMP Amendment 22, the harvest control rule was revised to include (1) a total fishery (marine and freshwater) exploitation rate limit of 15.0 percent for all populations within the SONCC ESU, except the Trinity River coho populations, and (2) a total fishery exploitation rate limit of 16.0 percent for the Trinity River coho populations.

## **Lower Columbia River Natural**

LCN coho consist of naturally produced coho mostly from Columbia River tributaries below Bonneville Dam; however, coho produced in the upper Willamette are not part of the ESA-listed ESU and are not included in the LCN coho forecast. LCN coho were listed as endangered under the Oregon State ESA in 2002, and as threatened under the Federal ESA on June 28, 2005. Under the FMP, ESA consultation standards are used in place of ACLs for ESA-listed stocks like LCN coho.

# **Predictor Description**

The LCN stock predictor methodology was developed in 2007.

The 2025 predictions for the Oregon LCN coho populations are derived by the recent 3-year average abundances based on spawning ground counts. The 2025 adult abundance forecast for Oregon LCN coho is 28,500.

Preseason I Appendix F

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<sup>&</sup>lt;sup>11</sup> For additional information see the November 2013 PFMC Briefing Book, Agenda Item C.2.a, Attachment 1: Technical Revision to the OCN Coho Work Group Harvest Matrix.

The 2025 predictions for the Washington LCN coho populations are derived by combining estimates of the 2022 brood year natural smolt production based on watershed area and the marine survival rate of 5.8 percent. The 2025 adult abundance forecast for Washington LCN coho is 43,500.

#### Predictor Performance

The preseason abundance compared to the postseason estimate is presented in Appendix F Table III-1. The 2024 preseason abundance prediction of 87,800 LCN coho was 118 percent of the preliminary postseason estimate of 74,700 coho.

#### Stock Forecast and Status

The 2025 prediction for LCN coho is 72,000 coho (Appendix F Table III-1). This abundance estimate includes both Oregon and Washington LCN components.

NMFS ESA guidance for harvest of LCN coho in marine and mainstem Columbia River fisheries is based on a matrix describing parent escapement levels for multiple populations and the observed Columbia River OPI smolt-to-jack survival rate. Based on this matrix, the total allowable marine and mainstem Columbia River exploitation rate for LCN coho in 2025 fisheries would be no more than 23.0 percent.

# **Oregon Production Index Area Summary of Forecasts**

The 2025 combined OPI area stock abundance is predicted to be 601,500 coho, which is 95 percent of the 2024 preseason prediction of 636,300 coho, and 63 percent of the 2024 preliminary postseason estimate of 942,700 coho. The historical OPI abundances are reported in Appendix F Table III-1 and III-2.

#### WASHINGTON COAST COHO

Washington coastal coho stocks include all natural and hatchery stocks originating in Washington coastal streams north of the Columbia River to the western Strait of Juan de Fuca (west of the Sekiu River). The stocks in this group most pertinent to ocean salmon fishery management are Willapa Bay (hatchery), Grays Harbor, Quinault (hatchery), Queets, Hoh, and Quillayute coho. These stocks contribute primarily to ocean fisheries off Washington and B.C.

A variety of preseason abundance estimators currently are employed for Washington coast and Puget Sound coho stocks, primarily based on smolt production and survival (Table I-2). These estimators are used to forecast preseason abundance of adult (OA3) recruits.

A comparison was made of preseason OA3 forecasts with postseason estimates derived from run reconstructions using FRAM ("Backwards" mode, BKFRAM) to expand observed escapements to ocean abundance from CWT recovery data. It should be noted that forecast methodology has changed over time, and the overall trends and biases may not reflect the current methods.

Except for Willapa Bay, Washington coast coho fall within an exception to the ACL requirements of the MSA because they are managed under an international agreement (the PST); therefore, specification of ACLs is not necessary for these stocks.

# Willapa Bay

#### Predictor Description

Willapa Bay natural coho ocean abundance predictions were generated with the auto-regressive (AR1) and spatio-temporal integrated population model (STIPM) state-space models presented for SSC review in

October 2021 and built from the work of DeFilippo et al 2021. These approaches base estimates on the series of past total returns (AR1) and a simplified life cycle model (returning spawners give rise to smolts, which are subject to marine survival and harvest). Lower recent year forecast error for the simpler AR1 model, in conjunction with uncertainties regarding some of the STIPM input data, supported use of the AR1 forecast in 2025.

The hatchery terminal run size was calculated using a marine survival rate of 2.93 percent (7-year average; 2015-2021 brood years) applied to the 2022 estimated brood year smolts (2,171,633) released in the spring of 2024 from all Willapa Bay hatchery facilities. The terminal runsize was then expanded to an OA3 runsize using a 0.32 exploitation rate expansion factor, which is a 10-year average (2013-2022) of Willapa Bay hatchery coho marine survival based on coded wire tag (CWT) recoveries.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-3; Appendix F Figure III-1a). In 2023, the preseason forecast was 188 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

## Stock Forecasts and Status

The 2025 Willapa Bay natural coho OA3 abundance forecast is 28,037, compared to the 2024 preseason forecast of 29,512.

The 2025 Willapa Bay hatchery coho OA3 abundance forecast is 93,718, compared to the 2024 preseason forecast of 91,536.

## OFL, ABC, and ACL

The OFL, ABC, and ACL are defined in terms of spawner escapement (S<sub>OFL</sub>, S<sub>ABC</sub>, and S<sub>ACL</sub>), and are calculated using potential spawner abundance forecasts and established exploitation rates. Potential Willapa Bay coho natural area spawner abundance was derived by adding the current forecast of natural origin coho OA3 abundance, 28,037, to the predicted abundance of OA3 hatchery origin coho spawning in natural areas. The forecast of OA3 naturally spawning, hatchery origin coho is 11,902 and was calculated by multiplying the OA3 hatchery coho abundance forecast, 93,718, by the most recent 3-year average stray rate (0.127). Annual stray rates were estimated by dividing the number of hatchery origin spawners in natural areas by the number of hatchery origin river mouth returns. Stray rates in 2021, 2022, and 2023 were, 0.175, 0.124, and 0.083 respectively.

For Willapa Bay natural coho,  $F_{MSY} = 0.74$ , the value estimated from a stock-specific spawner-recruit analysis. The OFL for Willapa Bay natural coho is  $S_{OFL} = 39,939 \times (1-0.74) = 10,384$ . Because Willapa Bay natural coho are a Tier-1 stock,  $F_{ABC} = F_{MSY} \times 0.95 = 0.70$ , and  $F_{ACL} = F_{ABC}$ . The ABC for Willapa Bay natural coho is  $S_{ABC} = 39,939 \times (1-0.70) = 11,982$ , with  $S_{ACL} = S_{ABC}$ . These preseason estimates will be recalculated with postseason abundance estimates (when available) to assess ACL and OFL compliance.

## **Grays Harbor**

Preseason abundance forecasts are made for natural fish throughout the system and for hatchery fish returning to three freshwater rearing complexes and three saltwater net-pen sites. The forecasts include fish originating from numerous volunteer production projects.

## Predictor Description

The natural forecast is the sum of the Chehalis River natural, Humptulips River natural, and South Bay tributary natural forecasts. An OA3 coho marine survival prediction was developed by converting the

Quinault Department of Fisheries prediction of Queets coho JA3 marine survival. The Chehalis wild Coho smolt estimates was developed scaling the 2024 Queets River natural Coho smolt production by a geometric mean relationship between the Backward FRAM (BKFRAM) JA3 ocean abundances of Queets and Chehalis natural Coho adults from run years 1998-2022. The Humptulips and South Bay tributary forecasts are based on recruit densities scaled from Clearwater and Chehalis basins, respectively.

The hatchery forecast is the sum of the Chehalis River, Humptulips River, and Grays Harbor net pen and off-site hatchery program hatchery-origin forecasts. The Chehalis River, Humptulips River, and Grays Harbor net-pen and off-site hatchery program hatchery-origin forecasts were based on recent 3-year average terminal return/smolt release rates scaled by current hatchery rack returns per release compared to the past 3-year average, expanded to OA3 recruits based on Bingham Creek hatchery tag recoveries for brood year released 2013-2016, the most recent full complement of tag code recoveries.

## Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-3; Appendix F Figure III-1a). In 2023, the preseason forecast was 174 percent of the preliminary postseason estimate. Postseason estimates are not yet available for 2024.

#### Stock Forecasts and Status

The 2025 Grays Harbor natural OA3 abundance forecast is 62,184 compared to a 2024 preseason forecast of 74,851.

The 2025 Grays Harbor hatchery coho OA3 abundance forecast is 87,805, compared to the 2024 preseason forecast of 68,200.

The ocean abundance forecast for Grays Harbor natural coho results in classification of the stock abundance as "Abundant" under the 2019 PST Southern Coho Management Plan (Appendix F Table III-5).

#### OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). Potential Grays Harbor coho natural area spawner abundance was derived by adding the current forecast of natural origin coho OA3 abundance, 62,184, to the predicted abundance of OA3 hatchery origin coho spawning in natural areas. The forecast of OA3 naturally spawning hatchery origin coho is 8,254 and was calculated by multiplying the OA3 hatchery coho abundance forecast, 87,805, by the most recent 5-year average stray rate (2019-2023 average = 0.094). Annual stray rates were estimated by dividing the number of hatchery origin spawners in natural areas by the total hatchery origin escapement. For Grays Harbor natural coho MFMT = 0.65 and the OFL is  $S_{OFL} = 70,438 \times (1-0.65) = 24,653$ . The preseason  $S_{OFL}$  will also be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

#### **Quinault River**

#### Predictor Description

The 2025 Quinault natural coho forecast is the recent 5-year average JA3 abundance calculated from PSC post season FRAM modeling.

The hatchery forecast is calculated by multiplying the smolt releases from the Quinault (Cook Creek) Hatchery (683,994 adipose clipped smolts) by a forecasted marine survival rate of 5.667 percent. The marine survival rate (OA3 recruits/release) forecast is a recent 5-year mean (2019-2023 smolt years).

## Predictor Performance

There was no information available to evaluate performance of predictors for these stocks.

#### Stock Forecasts and Status

The 2025 forecast for Quinault natural coho is 21,110 OA3 recruits, compared to the 2024 forecast of 25,261.

The 2025 Quinault hatchery coho forecast is 37,304 OA3 recruits, compared to the 2024 forecast of 34,745.

## **Queets River**

# **Predictor Description**

The natural forecast was developed by multiplying the 2024 smolt outmigration of 224,681 by the predicted marine survival rate of 4.95 percent, which results in an abundance prediction of 11,122 JA3. The model uses run reconstructions developed by the Quinault Department of Fisheries (QDFi) as a response, which includes FRAM natural and incidental mortality, but does not include estimates of mark-selective fishery mortality. Expansion for mark-selective fishery mortality for the 2025 run abundance prediction was not available at the time of this report but was estimated as mean (post season FRAM / QDFi run reconstruction for run years 2010 to 2020) \* abundance prediction for 2024 = 1.095037 \* 11,122 = 12,179.

Marine survival is typically predicted using a general additive logistic regression model (logit (recruits/smolts) ~ spline (explanatory variable(s)). The explanatory variables are the Pacific Decadal Oscillation index (PDO) maximum May-August and Biologically Effective Upwelling Transport Index (BEUTI) median April-August.

The hatchery forecast is based on the 2024 coho smolt release from the Salmon River Hatchery of 413,864 (330,373 adipose clipped). The OA3 marine survival rate of 2.3524 percent is estimated using the 3-year mean of marine survival over the years 2021-2023.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-3; Appendix F Figure III-1a). In 2023, the preseason forecast was 166 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

#### Stock Forecasts and Status

The 2025 Queets natural coho forecast is 9,030 OA3 recruits, compared to the 2024 forecast of 12,824. This ocean abundance results in classification of this stock's status as "Moderate" under the 2019 PST Southern Coho Management Plan (Appendix F Table III-5).

The 2025 Queets hatchery (Salmon River) coho forecast is 9,736 OA3 recruits, compared to the 2024 forecast of 18,895. Approximately 80 percent of the fish released from the Salmon River facility were marked with an adipose fin clip.

#### OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Queets River coho, MFMT = 0.65, and the OFL is  $S_{OFL}$  = 9,030 × (1-0.65) = 3,161. The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

#### **Hoh River**

# Predictor Description

The natural coho forecast is based on estimated average smolt production per square mile of watershed from the Clearwater tributary which lies between the Queets River mainstem and the Hoh River. The Quinault Fisheries Department has a long-standing trapping program on the Clearwater River to estimate smolt production; it is assumed the two rivers produce smolts at a comparable rate per square mile of watershed. In 2024, the Clearwater produced 57,702 smolts at the rate of 412 smolts/mi<sup>2</sup>. Applying that rate to the Hoh watershed of 299 mi<sup>2</sup> yields 123,188 natural coho smolts emigrating from the Hoh River in 2024.

A marine survival estimate to JA3 of 5.37 percent was applied to the total natural smolt production estimate to predict the 2025 return of Hoh River wild coho. This rate is the mean of two marine survival estimates of wild stocks that are to the north and south of the Hoh River: the Queets wild coho to the south with a marine survival estimate of 4.95 percent JA3 (Jurasin, QDFi) and Washington Coast wild coho stocks with a marine survival estimate of 5.79 percent JA3 (WDFW, 2025). The average marine survival rate of 5.37 percent JA3 (4.35 percent OA3) is within 2 percent of the OA3 survival of 4.7 percent predicted in 2025 for other Washington Coast coho stocks (WDFW, 2025).

No coho hatchery production is projected for the Hoh system for 2025.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Table III-3; Appendix F Figure III-1a). In 2023, the preseason forecast was 101 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

## Stock Forecasts and Status

The 2025 Hoh River natural coho forecast is 5,371 OA3 recruits, compared to the 2024 forecast of 4,870. This ocean abundance results in classification of this stock's status as "Abundant" under the 2019 PST Southern Coho Management Plan (Appendix F Table III-5).

## OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Hoh River coho, MFMT = 0.65, and the OFL is  $S_{OFL} = 5,371 \times (1-0.65) = 1,880$ . The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

# **Quillayute River**

Quillayute River coho consist of a summer run that is managed primarily for hatchery production, and a fall run that is managed primarily for natural production. Quillayute River coho have both natural and hatchery components to both runs.

# Predictor Description

The natural coho forecast is based on coho smolt data measured in the Quillayute watershed in 2024 by West Fork Environmental and the Quileute Nation. A total of 257,061 coho smolts are estimated to have emigrated from the Quillayute River system in 2024.

Smolt abundance from the Dickey River was estimated to be 27,431 wild coho smolts (245 smolts/mi<sup>2</sup>). Smolt abundance from the Bogachiel, Calawah, and Sol Duc rivers was estimated to be 164,701 wild coho smolts (316 smolts/mi<sup>2</sup>).

Total smolts were separated into summer and fall natural coho smolts by the relative number of natural brood year 2022 spawners, 3.09 percent and 96.91 percent, respectively. Results from this separation yield estimates of 7,934 natural summer coho smolts and 249,127 natural fall coho smolts.

#### **Summer Coho**

The summer natural coho forecast is based on the estimated total summer coho smolt production (7,934) and a JA3 projected marine survival rate of 5.38 percent.

The summer hatchery production forecast was based on a marine survival estimate of 3.33 percent multiplied by a release of 110,053 smolts from the Sol Duc Hatchery. This yielded 3,632 summer hatchery JA3 coho recruits.

#### **Fall Coho**

The forecast for the natural component was based on the estimated total fall coho smolt production (249,127) multiplied by an expected marine survival rate of 5.38 percent, the same survival rate used to forecast summer natural returns.

The fall hatchery production forecast was based on a marine survival estimate of 3.33 percent multiplied by a release of 501,166 smolts.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-3; Appendix F Figure III-1a). In 2023, the preseason forecast was 127% of the postseason estimate. Postseason estimates are not yet available for 2024.

## Stock Forecasts and Status

The 2025 Quillayute River summer natural and hatchery coho forecasts are 347 and 2,949 OA3 recruits, respectively; 98.1 percent of the hatchery smolts were marked with an adipose fin clip and coded wire tag. The 2025 forecast abundance of natural summer coho is lower than the 2024 forecast of 393.

The 2025 Quillayute River fall natural and hatchery coho forecasts are 10,882 and 13,427 OA3 recruits, respectively. The 2025 forecast abundance of Quillayute fall natural coho is higher than the 2024 forecast of 10,246. Approximately 83 percent of the hatchery fish were marked with an adipose fin clip.

The ocean abundance forecast for Quillayute fall natural coho results in classification of the stock abundance as "Abundant" under the 2019 PST Southern Coho Management Plan (Appendix F Table III-5).

# North Washington Coast Independent Tributaries

## **Predictor Description**

The 2025 forecast of natural coho production for these independent streams is based on a prediction of 475smolts per square mile of watershed drainage, 424 square miles of watershed, and resulting in 201,400 smolts. This is multiplied by an expected marine survival rate of 4.7 percent.

The 2025 hatchery forecast is based on the predicted JA3 marine survival of 5.38 percent for the brood year 2022 multiplied by the estimated smolt release from a smolt trap operated in the Tsoo-Yess River (21,396 marked) and hatchery smolt releases (54,609) directly from Makah National Fish Hatchery. As a result of

changing climate conditions and increasing difficulty with rearing coho in the hatchery over the summer, Makah National Fish Hatchery and the Makah Tribe implemented a coho fry release program beginning with brood year 2017. Both hatchery origin smolts resulting from the fry plant and natural origin smolts are estimated using the rotary screw trap.

A single, best fit model was selected to predict marine survival of Tsoo-Yess coho entering the ocean in 2024. The best-fit model uses the natural log of hatchery-origin jack return rate as a predictor variable and produced a JA3 marine survival rate of 5.38 percent.

#### Predictor Performance

There was no information available to evaluate performance of predictors for these stocks.

#### Stock Forecasts and Status

The 2025 North Coast Independent Tributaries natural coho forecast is 9,447 OA3 recruits, compared to the 2024 forecast of 4,882.

The 2025 North Coast Independent Tributaries hatchery coho forecast is 3,319 OA3 recruits (3,319 marked), compared to the 2024 forecast of 8,977. 100 percent of smolts released were marked with an adipose fin clip.

#### PUGET SOUND COHO STOCKS

Puget Sound coho salmon stocks include natural and hatchery stocks originating from U.S. tributaries in Puget Sound and the Strait of Juan de Fuca. The primary stocks in this group that are most pertinent to ocean salmon fishery management are Strait of Juan de Fuca, Hood Canal, Skagit, Stillaguamish, Snohomish, and South Puget Sound (hatchery) coho. These stocks contribute primarily to ocean fisheries off Washington and B.C.

A variety of preseason abundance estimators are currently employed for Puget Sound coho stocks. Previously, forecast methodologies heavily relied on smolt production and survival, and in some watersheds in Puget Sound forecast methodologies continue to be based upon estimated smolt production and predicted survival. However, recent inter-annual variation in the jack to adult return ratios for natural coho salmon have led to the need for alternate predictors of adult coho marine survival (WDFW, 2025). For this forecast, environmental indicators were applied using generalized additive models. Updates to previous sibling or multiple regression methodologies were also used. Marine survival was estimated based on nine coho management units--seven in Puget Sound (including the Strait of Georgia/Nooksack and Strait of Juan de Fuca), one in coastal Washington, and one in the Lower Columbia. Four of the monitored populations (Big Beef Creek in Hood Canal, Baker River in Skagit, Deschutes River in Deschutes, Bingham Creek in Grays Harbor. Marine survival time series in the remaining four management units (Strait of Georgia/Nooksack, Green/Duwamish, Snohomish, Strait of Juan de Fuca, Lower Columbia have been derived more recently in order to better represent the geographic extent of Washington stocks. Puget Sound hatchery forecasts were generally the product of 2023 brood year (BY) smolt releases from each facility, and a predicted marine survival rate for each program. Hatchery marine survival rates were typically based on recent year average survival rates derived from CWT recovery information and/or run reconstructions.

The 2025 total Puget Sound region natural and hatchery coho ocean recruit forecast is 726,425, compared to a 2024 preseason forecast of 722,134. The 2025 natural forecast is 256,929, compared to the 2024 preseason forecast of 295,282. The 2025 hatchery forecast is 469,496, compared to the 2024 preseason forecast of 426,852 (Table I-2).

A comparison was made of preseason OA3 forecasts with postseason estimates derived from run reconstructions using BKFRAM. This method expands observed escapements and actual catch to produce a FRAM estimate of post-season ocean abundance. This post-season FRAM estimate is dependent upon Base Period (1986-1992 fishing years) CWT recovery data. It should be noted that forecast methodology has changed over time, and the overall trends and biases may not reflect the current methods.

Puget Sound coho fall within an exception to the ACL requirements of the MSA because they are managed under an international agreement (the PST); therefore, specification of ACLs is not necessary for these stocks.

## Strait of Juan de Fuca

# **Predictor Description**

The natural forecast includes both Eastern and Western Strait of Juan de Fuca drainages. JA3 ocean recruits were predicted as the product of the estimated 2024 coho smolt outmigration from all independent tributaries of the Strait of Juan de Fuca, and a predicted marine survival rate (6.78 percent). The marine survival rate was predicted by an  $r^2$ -weighted average of two linear regression models using the southern copepod biomass anomaly and the Pacific decadal oscillation index (PDO) from May through September, both during the year of smolt outmigration. The linear relationships that these models solved for have  $r^2$  values of 0.33 and 0.30, respectively.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates. In 2023, the preseason forecast was 105 percent of the postseason estimate (Table III-4). Postseason estimates are not yet available for 2024.

#### Stock Forecasts and Status

The 2025 Strait of Juan de Fuca natural OA3 abundance forecast is 14,038, compared to the 2024 preseason forecast of 19,690.

The 2025 Strait of Juan de Fuca hatchery OA3 abundance forecast is 18,330, compared to the 2024 preseason forecast of 22,557.

The ocean abundance forecast for Strait of Juan de Fuca natural coho results in classification of the stock abundance as "Moderate" under the 2019 PST Southern Coho Management Plan and "Low" under the FMP. This results in an allowable total exploitation rate of no more than 40 percent under both the Council-adopted exploitation rate matrix (Appendix A, Table A-5) and the 2019 PST Southern Coho Management Plan (Table III-5).

## OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Strait of Juan de Fuca coho MFMT = 0.60, and the OFL is  $S_{OFL}$  = 14,038 × (1-0.60) = 5,615. The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

## Nooksack-Samish

## **Predictor Description**

The natural coho forecast is the product of projected natural smolt production from each stream basin in the region, multiplied by stock-specific marine survival rate expectations, ranging from 3.7 to 7.2 percent.

The hatchery forecast is the product of projected smolt releases from hatcheries in the region, multiplied by stock-specific marine survival rate expectations, ranging from 0.7 to 6.9 percent.

## Predictor Performance

There was no information available to evaluate performance of predictors for Nooksack-Samish coho

#### Stock Forecasts and Status

The 2025 Nooksack-Samish natural OA3 abundance forecast is 29,545, compared to the 2024 preseason forecast of 35,103.

The 2025 Nooksack-Samish hatchery OA3 abundance forecast is 58,935, compared to the 2024 preseason forecast of 72,320.

# Skagit

## Predictor Description

The 2025 Skagit wild coho forecast was based on a prediction of total (Baker wild + Skagit wild) smolt to OA3 survival. Note that this forecast is not based on Baker wild indicator CWT survival. The total survival was calculated assuming that the ratio of total wild terminal run size to Baker wild indicator run size is equal to the ratio of total pre-terminal wild catch to Baker pre-terminal wild catch. Using that ratio, total wild OA3 run size can be calculated utilizing pieces of the Skagit co-manager run reconstruction, RMIS, and RRTERM. Due to the large uncertainty surrounding how ocean conditions would influence the survival of 2024 outmigrants, WDFW's alternative coho forecast for Baker wild indicator survival relying on GAM methodology was also incorporated into the final agreed forecast (WDFW 2025).

The hatchery forecast is based on the weighted average of beta regression models of PDO\_ May – September and SAR Chloro in May, ONI May, and Race Rocks Salinity April through June. The 2024 hatchery outmigration/release estimates were 54,789 Baker marked hatchery smolts, 49,738 Marblemount unmarked hatchery smolts, and 475,716 Marblemount marked hatchery smolts. Multiplying each of these by the 6.10 percent survival estimate gives 2025 forecasts of 3,342 OA3 Baker marked hatchery coho, 3,034 OA3 Marblemount unmarked hatchery coho, and 29,019 OA3 Marblemount marked hatchery coho. The total 2025 hatchery forecast is 35,395 OA3 coho.

In addition to the Marblemount/Baker hatchery coho releases, 29,800 hatchery marked but untagged coho were released from the newly reinstated Oak Harbor net pen program. Applying the same 6.10 percent predicted hatchery survival rate to that release results in a 2025 forecast of 1,818 for Oak Harbor net pen coho.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Table III-4; Figure III-1b). In 2023, the preseason forecast was 58 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

#### Stock Forecasts and Status

The 2025 Skagit natural OA3 abundance forecast is 66,267, compared to the 2024 preseason forecast of 63,430.

The 2025 Skagit hatchery OA3 abundance forecast is 37,213, compared to the 2024 preseason forecast of 27,254.

The ocean abundance forecast for Skagit natural coho results in classification of the stock abundance as "Abundant" under the 2019 PST Southern Coho Management Plan and "Normal" under the FMP. This results in an allowable total exploitation rate of no more than 60 percent under both the Council-adopted exploitation rate matrix (Appendix A, Table A-5) and the 2019 PST Southern Coho Management Plan (Table III-5).

## OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Skagit River coho, MFMT = 0.60 and the OFL is  $S_{OFL}$  = 66,267 × (1-0.60) = 26,507. The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

# Stillaguamish

## **Predictor Description**

Regressing annual coho smolt trap CPUE (total fish/total hours fished) against terminal run size one year later generates a relationship that could be used to predict Stillaguamish adult returns. However, due to the high variability in marine survival (MS), coho smolt numbers at the trap are not a very precise predictor of adult returns one year later. Therefore, the Stillaguamish smolt trap CPUE was corrected with the SF Skykomish marine survival estimate for each brood and log transformed the data, which tightened the regression relationship with the terminal run.

The natural coho marine survival rate is estimated at 6.8 percent, based on recent 5-year (brood year 2016-2021, brood year 2020 excluded) SF Skykomish estimated marine survival.

The Stillaguamish Hatchery released an estimated 38,622 marked and 152 unmarked yearlings from brood year 2022, with an estimated 1,242 marked and 5 unmarked adults returning based on current Wallace hatchery marine survival estimate of 3.2 percent.

# Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-4; Appendix F Figure III-1b). In 2023, the preseason forecast was 65 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

#### Stock Forecasts and Status

The 2025 Stillaguamish natural OA3 abundance forecast is 27,473, compared to the 2024 preseason forecast of 30,809.

The 2025 Stillaguamish hatchery OA3 abundance is 1,247, compared to the 2024 preseason forecast of 903.

The ocean abundance forecast for Stillaguamish natural coho results in classification of the stock abundance as "Abundant" under the 2019 PST Southern Coho Management Plan and "Normal" under the FMP. This results in an allowable total exploitation rate of no more than 50 percent under both the Council-adopted exploitation rate matrix (Appendix A, Table A-5) and the 2019 PST Southern Coho Management Plan (Table III-5).

## OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Stillaguamish coho, MFMT = 0.50 and the OFL is  $S_{OFL}$ = 27,473× (1-0.50) = 13,737. The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

#### Snohomish

# Predictor Description

The natural forecast is based on production of 2024 out-migrant smolts estimated from a mark-recapture estimate of smolt abundance from two smolt traps, one operated on the Skykomish River (river mile 26.5) and the second on the Snoqualmie River (river mile 12.2). Smolt trap estimates for the Skykomish and Snoqualmie rivers are summed and further expanded for rearing downstream of the trap locations in the Snohomish River. A marine survival rate of 6.0 percent (using the last two years of observed marine survival (OEY 2022 and 2023, WDFW 2025)) was applied to the total smolt production estimate for the Snohomish watershed of 984,000 smolts. The resulting forecast was rounded to the nearest hundred to account for co-manager agreed-to precision.

The hatchery forecast is based on 2024 hatchery releases of smolts from the WDFW Wallace River Hatchery, the Everett Net Pens, Eagle Creek, and Tulalip Bernie Kai Kai Gobin Hatchery and estimated marine survival rates for each release group. 2025 marine survival rates for Tulalip releases, 5.4 percent, were modeled using a GAM model with light transmission at Admiral Inlet Station (ADM001) as an environmental variable. For Wallace, Eagle Creek, and Everett net pen releases, marine survival rates were based on the recent three-year average survival rates of Wallace hatchery coho, 4.0%.

## Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-4). In 2023, the preseason forecast was 96 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

## Stock Forecasts and Status

The 2025 Snohomish natural OA3 abundance forecast is 59,000, compared to the 2024 preseason forecast of 71,600.

The 2025 Snohomish hatchery OA3 abundance forecast is 76,187, compared to the 2024 preseason forecast of 34,728.

The ocean abundance forecast for Snohomish natural coho results in classification of the stock abundance as "Moderate" under the 2019 PST Southern Coho Management Plan and "Low" under the FMP. This results in an allowable total exploitation rate of no more than 40 percent under both the Council-adopted exploitation rate matrix (Appendix A, Table A-5) and the 2019 PST Southern Coho Management Plan (Table III-5)

## OFL

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Snohomish coho, MFMT = 0.60 and the OFL is  $S_{OFL}$ = 59,000 × (1-0.60) = 23,600. The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

## **Hood Canal**

# **Predictor Description**

The natural forecast is based on a linear regression model that related the return of tagged natural jack coho at Big Beef Creek to Hood Canal December age-2 recruits in the subsequent run year, using brood years 1983-1998 and 2002-2020. This forecast was then converted to OA3. The 1999-2001 broods were excluded because of the unusually high recruit-per-tagged jack ratio, which is not expected to occur this year. For 2025, as was done since 2016, the co-managers agreed to apply a conservative bias correction for forecasting natural coho in Hood Canal.

The hatchery forecast utilized an average marine survival from CWT-based cohort reconstruction of December age-2 recruits/smolt for the six most recent available broods from each facility, applied to the 2022 brood smolt releases for each facility and converted to OA3.

#### Predictor Performance

Forecast performance can be assessed, in part, by examining the differences between preseason forecasts and postseason estimates (Appendix F Table III-4; Appendix F Figure III-1b). In 2023, the preseason forecast was 76 percent of the postseason estimate. Postseason estimates are not yet available for 2024.

## Stock Forecasts and Status

The 2025 Hood Canal natural OA3 abundance forecast is 18,996, compared to the 2024 preseason forecast of 36,541.

The 2025 Hood Canal hatchery OA3 abundance forecast is 63,825, compared to the 2024 preseason forecast of 67,201.

The ocean abundance forecast for Hood Canal natural coho results in classification of the stock abundance as "Low" under the 2019 PST Southern Coho Management Plan and "Critical" under the FMP. This results in an allowable total exploitation rate of no more than 20 percent under both the Council-adopted exploitation rate matrix (Appendix A, Table A-5) and the 2019 PST Southern Coho Management Plan (Table III-5).

## **OFL**

The OFL is defined in terms of spawner escapement ( $S_{OFL}$ ). For Hood Canal coho MFMT = 0.65, and the OFL is  $S_{OFL} = 18,996 \times (1-0.65) = 6,649$ . The preseason  $S_{OFL}$  value will be recalculated with postseason abundance estimates (when available) to assess OFL compliance.

## **South Sound**

## **Predictor Description**

Natural forecasts for the runs of coho that comprise the South Puget Sound natural coho aggregate are based on several forecasting approaches. The Lake Washington natural coho forecast is based on a basin-wide naturally emigrating coho smolt production estimate of 77,797 smolts, which is multiplied by an estimated marine survival rate of 3.84% to get the expected return of 2,988 ocean age-3 recruits. The marine survival of 3.84 percent was calculated based on adult returns observed across the last five years (2020-2024). The Green River natural coho forecast is based on a basin-wide naturally spawning coho smolt production estimate of 53,385 smolts, which is multiplied by an estimated marine survival rate of 5.89 percent. The marine survival of 5.89 percent was equivalent to the recent five year adult returns to the Green River spawning grounds The East Kitsap natural coho forecast is based on a basin-wide naturally spawning coho

smolt production estimate of 15,000 smolts, which is multiplied by an estimated marine survival rate of 5.89 percent. The marine survival of 5.89 percent is equivalent to the recent five year adult return rate to the Green River spawning grounds and is used as a surrogate for natural Coho survival to East Kitsap. Nisqually River natural forecasts were based on a recent 5-year average of marine survival (1.7 percent). Deschutes River natural and South Sound natural forecasts were based modeling of North Pacific Gyre Oscillation (NPGO) index May to September of ocean entry which predicted a marine survival rate of 4.9 percent (WDFW 2025).

#### Stock Forecasts and Status

The 2025 South Sound natural OA3 abundance forecast is 41,577, compared to the 2024 preseason forecast of 38,109.

The 2025 South Sound hatchery OA3 abundance forecast is 213,759, compared to the 2024 preseason forecast of 201,889.

#### STOCK STATUS DETERMINATION UPDATES

No coho stocks were subject to overfishing in 2023 and none met the criteria for overfished status based on 2021 - 2023 spawning escapements. For coho stocks for which projections could be made under the No-Action Alternative, none meet the criteria for approaching an overfished condition under 2024 fishery management measures (Table V-4).

## SELECTIVE FISHERY CONSIDERATIONS FOR COHO

As the region has moved forward with mass marking of hatchery coho salmon stocks, selective fishing options have become an important consideration for fishery managers. Projected coho mark rates in Council area fisheries are generally expected to be lower than 2024 projections. Appendix F Table III-6 summarizes projected 2025 mark rates for coho fisheries by month from Southern British Columbia, Canada to the Oregon Coast, based on preseason abundance forecasts

APPENDIX F - TABLE III-1.Preliminary preseason and postseason coho stock abundance estimates for Oregon production index area stocks in thousands of fish. (Page 1 of 2)

Year or			Pre/Post			Pre/Post			Pre/Post			Pre/Post
Average	Preseason F	Postseason <sup>a/</sup>	season <sup>a/</sup>	Preseason	Postseason <sup>a/</sup>	season <sup>a/</sup>	Preseason	Postseason <sup>a/</sup>	season <sup>a/</sup>	Preseason	Postseason <sup>a/</sup>	season <sup>a/</sup>
		ımbia River H	atchery		umbia River Ha		Lo	wer Columbia Riv	er	Oreg	on Coast Natura	I (OCN)
		Early			Late			Natural (LCN)			(Rivers and La	kes)
1996-00	212.9	181.4	1.3	128.9	102.5	1.6				62.7	52.8	1.5
2001	1036.5	873.0	1.2	491.8	488.3	1.0				50.1	163.2	0.3
2002	161.6	324.7	0.5	143.5	271.8	0.5				71.8	304.5	0.2
2003	440.0	645.7	0.7	377.9	248.0	1.5				117.9	278.8	0.4
2004	313.6	389.0	0.8	274.7	203.0	1.4				150.9	197.0	0.8
2005	284.6	282.7	1.0	78.0	111.6	0.7				152.0	150.1	1.0
2006	245.8	251.4	1.0	113.8	156.3	0.7				60.8	116.4	0.5
2007	424.9	291.0	1.5	139.5	171.0	0.8	21.5	20.5	1.0	255.4	60.0	4.3
2008	110.3	342.3	0.3	86.4	219.9	0.4	13.4	28.7	0.5	60.0	183.1	0.3
2009	672.7	637.6	1.1	369.7	403.9	0.9	32.7	37.6	0.9	211.6	281.5	8.0
2010	245.3	272.6	0.9	144.2	260.3	0.6	15.1	53.2	0.3	148.0	296.7	0.5
2011	216.0	294.4	0.7	146.5	147.1	1.0	22.7	29.5	0.8	249.4	378.9	0.7
2012	229.8	115.7	2.0	87.4	55.7	1.6	30.1	12.9	2.3	291.0	121.3	2.4
2013	331.6	193.3	1.7	169.5	128.6	1.3	46.5	36.8	1.3	191.0	146.2	1.3
2014	526.6	777.4	0.7	437.5	516.5	0.8	33.4	108.7	0.3	230.6	402.0	0.6
2015	515.2	165.5	3.1	261.9	94.0	2.8	35.9	20.9	1.7	206.6	70.4	2.9
2016	153.7	134.0	1.1	226.9	102.4	2.2	40.0	25.1	1.6	152.7	83.2	1.8
2017	231.7	177.9	1.3	154.6	108.4	1.4	30.1	31.2	1.0	101.9	68.9	1.5
2018	164.7	98.7	1.7	121.5	82.0	1.5	21.9	29.7	0.7	54.9	81.3	0.7
2019	545.0	213.7	2.6	360.6	124.0	2.9	36.9	34.1	1.1	76.1	107.6	0.7
2020	130.7	247.0	0.5	50.3	134.8	0.4	24.8	55.4	0.4	83.0	110.0	0.8
2021	1014.0	580.3	1.7	576.0	249.6	2.3	39.2	70.5	0.6	125.0	273.3	0.5
2022	592.5	431.1	1.4	404.7	253.8	1.6	65.7	74.7	0.9	222.4	200.1	1.1
2023	481.8	365.3	1.3	404.3	143.6	2.8	45.5	77.9	0.6	238.8	185.7	1.3
2024	227.5	496.8	0.5	173.6	240.2	0.7	87.8	74.7	1.2	233.2	200.4	1.2
2025	214.1	-	-	89.7	-	-	72.0	-	-	289.0	-	-

TABLE III-1. Preliminary preseason and postseason coho stock abundance estimates for Oregon production index area stocks in thousands of fish. (Page 2 of 2)

Year or		•	Pre/Post			Pre/Post			Pre/Post		, ,	Pre/Post
Average	Preseason P	ostseason <sup>a/</sup>	season <sup>a/</sup>	Preseason P	ostseason <sup>a/</sup>	season <sup>a/</sup>	Preseason	Postseason <sup>a/</sup>	season <sup>a/</sup>	Preseason	Postseason <sup>a/</sup>	season <sup>a/</sup>
	Salmon	Trout Enhand	cement		Oregon Coas	st	Califo	rnia and Oregon	Coast	Oregon F	Production Index	(OPI) Area
	Pro	ogram (STEP	) <sup>c/</sup>	North	n of Cape Bla	nco	So	outh of Cape Blan	со		Hatchery Total	b/
1996-00	0.6									-	-	
2001	1.0	1.4	0.7	127.3	46.9	2.7	52.0	46.0	1.1	1,707.6	1,454.2	1.2
2002	0.6	3.0	0.2	36.6	41.6	0.9	20.0	22.0	0.9	361.7	660.1	0.5
2003	3.6	3.6	1.0	29.3	34.5	8.0	15.9	24.3	0.7	863.1	952.5	0.9
2004	3.1	1.0	3.1	16.6	21.7	8.0	19.0	29.9	0.6	623.9	634.6	1.0
2005	1.0	0.4	2.5	11.5	10.7	1.1	15.8	38.1	0.4	389.9	443.1	0.9
2006	0.6	0.1	6.0	8.6	7.9	1.1	30.6	25.0	1.2	398.8	440.6	0.9
2007	0.2	0.0	-	7.0	1.3	5.4	22.2	13.2	1.7	593.6	476.5	1.2
2008				1.7	6.9	0.2	17.7	2.2	8.2	216.1	571.3	0.4
2009				7.3	6.5	1.1	23.4	3.1	7.6	1,073.1	1,051.0	1.0
2010				4.4	8.6	0.5	14.1	5.0	2.8	408.0	546.5	0.7
2011				3.6	3.6	1.0	9.0	9.0	1.0	375.1	454.2	8.0
2012				6.4	3.1	2.1	18.1	8.6	2.1	341.7	183.1	1.9
2013				5.6	5.7	1.0	18.7	7.6	2.5	525.4	335.1	1.6
2014				4.8	19.3	0.2	14.2	3.4	4.2	983.1	1,316.5	0.7
2015				6.9	5.6	1.2	24.4	3.8	6.5	808.4	268.9	3.0
2016				5.5	9.0	0.6	10.4	2.3	4.5	396.5	247.7	1.6
2017				3.5	1.9	1.9	4.5	3.6	1.2	394.3	291.8	1.4
2018				3.3	1.1	3.0	4.6	1.0	4.7	294.1	182.8	1.6
2019				12.0	2.2	5.5	15.9	0.8	18.8	933.5	340.7	2.7
2020				2.4	4.7	0.5	2.3	1.3	1.7	185.7	387.7	0.5
2021				6.4	5.8	1.1	11.5	5.6	2.0	1,607.9	841.3	1.9
2022				1.9	5.5	0.3	4.4	5.2	8.0	1,003.5	696.0	1.4
2023				3.0	1.4	2.2	7.8	4.0	2.0	896.9	514.2	1.7
2024				0.6	2.2	0.3	1.4	3.1	0.4	403.1	742.3	0.5
2025				3.3	-	-	5.5	-	-	312.6	-	

a/ Postseason estimates are based on preliminary data and not all stocks have been updated.

b/ LCN abundance is included as a subset of early/late hatchery abundance beginning in 2007. STEP estimates not included.

c/ Program was discontinued in 2005.

APPENDIX F - TABLE III-2.Oregon production index (OPI) area coho harvest impacts, spawning, abundance, and exploitation rate estimates in thousands of fish.<sup>al</sup>

		Oregon a	and California Coast	al Returns			Ocean
	h/	Hatcheries and					Exploitation Rate
Ocean Fi	sheries	Freshwater			Columbia River		Based on OPI
Troll	Sport	Harvest <sup>c/</sup>	OCN Spawners <sup>d/</sup>	Private Hatcheries	Returns	Abundance <sup>e/</sup>	Abundance <sup>f/</sup>
1,629.6	558.4	45.8	55.2	-	460.4	2,749.3	0.80
1,253.6	555.0	31.2	31.1	26.1	263.3	2,154.2	0.84
451.2	274.0	37.2	56.0	176.8	305.3	1,328.6	0.55
574.6	339.3	55.1	45.5	154.3	705.0	1,602.2	0.57
107.4	182.7	46.6	53.2	35.1	315.1	668.4	0.43
7.0	31.8	45.8	87.5	-	117.1	260.3	0.15
5.5	22.4	27.9	31.6	-	156.4	230.5	0.12
3.5	12.8	31.2	34.9	-	175.9	270.8	0.06
3.6	36.5	23.4	48.6	-	289.1	432.0	0.09
25.2	74.6	37.0	84.8	-	558.3	762.4	0.13
38.1	216.8	75.7	174.7	-	1128.3	1,673.2	0.15
15.0	118.7	53.9	266.9	-	535.8	972.2	0.14
28.8	252.4	44.9	236.2	-	713.2	1,266.9	0.22
26.2	159.3	38.1	198.5	-	463.5	904.5	0.21
10.5	58.2	42.7	165.1	-	354.7	629.9	0.11
4.5	47.5	29.5	133.1	-	409.7	674.1	0.08
26.2	128.5	10.9	71.6	-	349.0	631.3	0.25
0.6	26.4	16.0	180.2	-	520.8	769.8	0.04
27.7	201.2	16.5	265.5	-	760.2	1,341.3	0.17
5.8	48.8	18.5	287.7	-	474.0	848.4	0.06
4.2	54.7	20.0	361.3	-	382.4	836.4	0.07
4.7	45.5	18.5	104.9	-	159.1	311.3	0.16
8.4	48.3	26.5	136.8	-	260.4	494.1	0.11
35.6	197.4	42.0	362.4	-	1045.3	1,724.8	0.14
11.7	84.4	11.8	61.6	-	173.7	350.5	0.27
2.8	31.7	11.4	83.5	-	210.8	340.3	0.10
2.1	50.0	3.9	66.2	-	245.5	362.4	0.14
1.5	53.8	3.1	83.8	-	132.6	265.8	0.21
5.0	135.4	4.2	97.8	-	223.0	454.3	0.31
2.3	40.2	7.4	111.8	-	344.7	499.7	0.08
5.0	158.6	20.4	251.1	-	668.4	1,126.9	0.15
8.5	127.4	16.9	177.9	_	539.7	905.2	0.15
5.3	97.3		156.6	_	419.5		0.14
5.3				_	602.6		0.13
	Troll 1,629.6 1,253.6 451.2 574.6 107.4 7.0 5.5 3.5 3.6 25.2 38.1 15.0 28.8 26.2 10.5 4.5 26.2 0.6 27.7 5.8 4.2 4.7 8.4 35.6 11.7 2.8 2.1 1.5 5.0 2.3 5.0 8.5 5.3	1,629.6       558.4         1,253.6       555.0         451.2       274.0         574.6       339.3         107.4       182.7         7.0       31.8         5.5       22.4         3.5       12.8         3.6       36.5         25.2       74.6         38.1       216.8         15.0       118.7         28.8       252.4         26.2       159.3         10.5       58.2         4.5       47.5         26.2       128.5         0.6       26.4         27.7       201.2         5.8       48.8         4.2       54.7         4.7       45.5         8.4       48.3         35.6       197.4         11.7       84.4         2.8       31.7         2.1       50.0         1.5       53.8         5.0       135.4         2.3       40.2         5.0       158.6         8.5       127.4         5.3       97.3	Ocean Fisheries b/         Hatcheries and Freshwater Harvest e/           1,629.6         558.4         45.8           1,253.6         555.0         31.2           451.2         274.0         37.2           574.6         339.3         55.1           107.4         182.7         46.6           7.0         31.8         45.8           5.5         22.4         27.9           3.5         12.8         31.2           3.6         36.5         23.4           25.2         74.6         37.0           38.1         216.8         75.7           15.0         118.7         53.9           28.8         252.4         44.9           26.2         159.3         38.1           10.5         58.2         42.7           4.5         47.5         29.5           26.2         128.5         10.9           0.6         26.4         16.0           27.7         201.2         16.5           5.8         48.8         18.5           4.2         54.7         20.0           4.7         45.5         18.5           8.4         48.3	Ocean Fisheries b/         Hatcheries and Freshwater Harvest c/         OCN Spawners d/           1,629.6         558.4         45.8         55.2           1,253.6         555.0         31.2         31.1           451.2         274.0         37.2         56.0           574.6         339.3         55.1         45.5           107.4         182.7         46.6         53.2           7.0         31.8         45.8         87.5           5.5         22.4         27.9         31.6           3.5         12.8         31.2         34.9           3.6         36.5         23.4         48.6           25.2         74.6         37.0         84.8           38.1         216.8         75.7         174.7           15.0         118.7         53.9         266.9           28.8         252.4         44.9         236.2           26.2         159.3         38.1         198.5           10.5         58.2         42.7         165.1           4.5         47.5         29.5         133.1           26.2         128.5         10.9         71.6           0.6         26.4 <t< td=""><td>Troll         Sport         Harvest<sup>cl</sup>         OCN Spawners<sup>dl</sup>         Private Hatcheries           1,629.6         558.4         45.8         55.2         -           1,253.6         555.0         31.2         31.1         26.1           451.2         274.0         37.2         56.0         176.8           574.6         339.3         55.1         45.5         154.3           107.4         182.7         46.6         53.2         35.1           7.0         31.8         45.8         87.5         -           5.5         22.4         27.9         31.6         -           3.5         12.8         31.2         34.9         -           3.6         36.5         23.4         48.6         -           25.2         74.6         37.0         84.8         -           38.1         216.8         75.7         174.7         -           15.0         118.7         53.9         266.9         -           28.8         252.4         44.9         236.2         -           26.2         159.3         38.1         198.5         -           10.5         58.2         42.7</td><td>Ocean Fisheries by         Hatcheries and Freshwater Harvest<sup>cl</sup>         OCN Spawners<sup>dl</sup>         Private Hatcheries Returns           1,629.6         558.4         45.8         55.2         -         460.4           1,253.6         555.0         31.2         31.1         26.1         263.3           451.2         274.0         37.2         56.0         176.8         305.3           574.6         339.3         55.1         45.5         154.3         705.0           107.4         182.7         46.6         53.2         35.1         315.1           7.0         31.8         45.8         87.5         -         117.1           5.5         22.4         27.9         31.6         -         175.9           3.6         36.5         23.4         48.6         -         289.1           25.2         74.6         37.0         84.8         -         558.3           38.1         216.8         75.7         174.7         -         1128.3           25.2         74.6         37.0         84.8         -         535.8           28.8         252.4         44.9         236.2         -         713.2           26.2</td><td>Ocean Fisheries         Hatcheries and Freshwater Harvester         Active Private Hatcheries         Private Hatcheries         Columbia River Returns         Abundance®           1,629.6         558.4         48.8         55.2         -         460.4         2,749.3           1,253.6         555.0         31.2         31.1         26.1         263.3         2,154.2           451.2         274.0         37.2         56.0         176.8         305.3         1,328.6           574.6         339.3         55.1         45.5         154.3         705.0         1,602.2           107.4         182.7         46.6         53.2         35.1         315.1         668.4           7.0         31.8         45.8         87.5         -         117.1         260.3           3.5         12.8         31.2         34.9         -         175.9         270.8           3.6         36.5         23.4         48.6         -         289.1         1432.0           25.2         74.6         37.0         84.8         -         558.3         762.4           38.1         216.8         75.7         174.7         -         1128.3         1,673.2           28.8</td></t<>	Troll         Sport         Harvest <sup>cl</sup> OCN Spawners <sup>dl</sup> Private Hatcheries           1,629.6         558.4         45.8         55.2         -           1,253.6         555.0         31.2         31.1         26.1           451.2         274.0         37.2         56.0         176.8           574.6         339.3         55.1         45.5         154.3           107.4         182.7         46.6         53.2         35.1           7.0         31.8         45.8         87.5         -           5.5         22.4         27.9         31.6         -           3.5         12.8         31.2         34.9         -           3.6         36.5         23.4         48.6         -           25.2         74.6         37.0         84.8         -           38.1         216.8         75.7         174.7         -           15.0         118.7         53.9         266.9         -           28.8         252.4         44.9         236.2         -           26.2         159.3         38.1         198.5         -           10.5         58.2         42.7	Ocean Fisheries by         Hatcheries and Freshwater Harvest <sup>cl</sup> OCN Spawners <sup>dl</sup> Private Hatcheries Returns           1,629.6         558.4         45.8         55.2         -         460.4           1,253.6         555.0         31.2         31.1         26.1         263.3           451.2         274.0         37.2         56.0         176.8         305.3           574.6         339.3         55.1         45.5         154.3         705.0           107.4         182.7         46.6         53.2         35.1         315.1           7.0         31.8         45.8         87.5         -         117.1           5.5         22.4         27.9         31.6         -         175.9           3.6         36.5         23.4         48.6         -         289.1           25.2         74.6         37.0         84.8         -         558.3           38.1         216.8         75.7         174.7         -         1128.3           25.2         74.6         37.0         84.8         -         535.8           28.8         252.4         44.9         236.2         -         713.2           26.2	Ocean Fisheries         Hatcheries and Freshwater Harvester         Active Private Hatcheries         Private Hatcheries         Columbia River Returns         Abundance®           1,629.6         558.4         48.8         55.2         -         460.4         2,749.3           1,253.6         555.0         31.2         31.1         26.1         263.3         2,154.2           451.2         274.0         37.2         56.0         176.8         305.3         1,328.6           574.6         339.3         55.1         45.5         154.3         705.0         1,602.2           107.4         182.7         46.6         53.2         35.1         315.1         668.4           7.0         31.8         45.8         87.5         -         117.1         260.3           3.5         12.8         31.2         34.9         -         175.9         270.8           3.6         36.5         23.4         48.6         -         289.1         1432.0           25.2         74.6         37.0         84.8         -         558.3         762.4           38.1         216.8         75.7         174.7         -         1128.3         1,673.2           28.8

a/ The OPI area includes ocean and inside harvest impacts and escapement to streams and lakes south of Leadbetter Pt., Washington.

b/ Includes estimated non-retention mortalities; troll: release mort.(1982-present) and drop-off mort.(all yrs.); sport: release mort.(1994-present) and drop-off mort.(all yrs.).

c/ Includes STEP smolt releases through the 2007 return year, after which the program was terminated.

d/ Includes Rogue River.

e/ FRAM post-season runs used after 1985 and includes OPI origin stock catches in all fisheries.

f/ Private hatchery stocks are excluded in calculating the OPI area stock aggregate ocean exploitation rate index.

g/ Preliminary.

APPENDIX F - TABLE III-3. Preseason forecasts and postseason estimates of ocean abundance for selected Washington coastal adult natural coho stocks in thousands of fish. (Page 1 of 2)

Quillayute River Fall	on Pre/Post-	Postseason	Preseason	Pre/Post-	Postseason	Preseason	Pre/Post-	Postseason	Preseason	Year
1991-1995         15.4         16.2         1.07         7.1         8.5         1.32         11.9         14.9           1996         13.0         20.3         0.64         4.2         7.7         0.54         8.3         22           1997         8.9         5.8         1.53         2.8         4.1         0.68         4.3         22           1998         8.0         17.4         0.46         3.4         5.6         0.61         4.2         6           1999         14.5         16.1         0.90         3.2         6.8         0.47         4.3         8           2000         8.7         16.5         0.53         3.5         9.3         0.38         2.7         12           2001         23.0         28.4         0.81         8.5         16.2         0.52         12.0         38           2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         18           2004         21.2         20.7         1.02         8.1 <t< th=""><th>season</th><th>Return</th><th>Forecast</th><th>season</th><th>Return</th><th>Forecast</th><th>season</th><th>Return</th><th>Forecast</th><th>or Ave.</th></t<>	season	Return	Forecast	season	Return	Forecast	season	Return	Forecast	or Ave.
1996         13.0         20.3         0.64         4.2         7.7         0.54         8.3         22           1997         8.9         5.8         1.53         2.8         4.1         0.68         4.3         2           1998         8.0         17.4         0.46         3.4         5.6         0.61         4.2         6           1999         14.5         16.1         0.90         3.2         6.8         0.47         4.3         8           2000         8.7         16.5         0.53         3.5         9.3         0.38         2.7         12           2001         23.0         28.4         0.81         8.5         16.2         0.52         12.0         35           2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         18.5         13           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6 </th <th>ver</th> <th>Queets River</th> <th></th> <th></th> <th></th> <th></th> <th>II</th> <th>Quillayute River Fa</th> <th></th> <th><u></u></th>	ver	Queets River					II	Quillayute River Fa		<u></u>
1997         8.9         5.8         1.53         2.8         4.1         0.68         4.3         2           1998         8.0         17.4         0.46         3.4         5.6         0.61         4.2         6           1999         14.5         16.1         0.90         3.2         6.8         0.47         4.3         8           2000         8.7         16.5         0.53         3.5         9.3         0.38         2.7         12           2001         23.0         28.4         0.81         8.5         16.2         0.52         12.0         35           2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         15           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7 <td>1.2</td> <td>14.0</td> <td>11.9</td> <td>1.32</td> <td>8.5</td> <td>7.1</td> <td>1.07</td> <td>16.2</td> <td>15.4</td> <td>1991-1995</td>	1.2	14.0	11.9	1.32	8.5	7.1	1.07	16.2	15.4	1991-1995
1998       8.0       17.4       0.46       3.4       5.6       0.61       4.2       6.6         1999       14.5       16.1       0.90       3.2       6.8       0.47       4.3       8         2000       8.7       16.5       0.53       3.5       9.3       0.38       2.7       12         2001       23.0       28.4       0.81       8.5       16.2       0.52       12.0       35         2002       22.3       33.2       0.67       8.5       13.2       0.64       12.5       26         2003       24.9       22.5       1.11       12.5       8.7       1.44       24.0       15         2004       21.2       20.7       1.02       8.1       6.9       1.17       18.5       13         2005       18.6       20.9       0.89       7.6       8.2       0.93       17.1       11         2006       14.6       9.9       1.48       6.4       2.7       2.36       8.3       9         2007       10.8       10.7       1.01       5.4       5.8       0.93       13.6       7         2008       10.5       11.1       0.95	0.37	22.6	8.3	0.54	7.7		0.64		13.0	1996
1999         14.5         16.1         0.90         3.2         6.8         0.47         4.3         8           2000         8.7         16.5         0.53         3.5         9.3         0.38         2.7         12           2001         23.0         28.4         0.81         8.5         16.2         0.52         12.0         35           2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         18           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.	1.92	2.2	4.3	0.68	4.1	2.8	1.53	5.8	8.9	1997
2000         8.7         16.5         0.53         3.5         9.3         0.38         2.7         12           2001         23.0         28.4         0.81         8.5         16.2         0.52         12.0         35           2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         15           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2010         12.0         17.1         1.29         7.6         1	0.66	6.3	4.2	0.61	5.6	3.4	0.46	17.4	8.0	1998
2001         23.0         28.4         0.81         8.5         16.2         0.52         12.0         35           2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         15           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6 <td< td=""><td>0.50</td><td>8.6</td><td>4.3</td><td>0.47</td><td>6.8</td><td>3.2</td><td>0.90</td><td>16.1</td><td>14.5</td><td>1999</td></td<>	0.50	8.6	4.3	0.47	6.8	3.2	0.90	16.1	14.5	1999
2002         22.3         33.2         0.67         8.5         13.2         0.64         12.5         26           2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         15           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         1	0.22	12.1	2.7	0.38	9.3	3.5	0.53	16.5	8.7	2000
2003         24.9         22.5         1.11         12.5         8.7         1.44         24.0         15           2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         <	0.33	35.8	12.0	0.52	16.2	8.5	0.81	28.4	23.0	2001
2004         21.2         20.7         1.02         8.1         6.9         1.17         18.5         13           2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6 <td< td=""><td>0.47</td><td>26.3</td><td>12.5</td><td>0.64</td><td>13.2</td><td>8.5</td><td>0.67</td><td>33.2</td><td>22.3</td><td>2002</td></td<>	0.47	26.3	12.5	0.64	13.2	8.5	0.67	33.2	22.3	2002
2005         18.6         20.9         0.89         7.6         8.2         0.93         17.1         11           2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6         9.2         0.94         24.5         9           2014         18.4         17.3         1.07         8.9	1.52	15.7	24.0	1.44	8.7	12.5	1.11	22.5	24.9	2003
2006         14.6         9.9         1.48         6.4         2.7         2.36         8.3         9.9           2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6         9.2         0.94         24.5         9           2014         18.4         17.3         1.07         8.9         9.1         0.97         10.3         12           2015         10.5         4.8         2.19         5.1 <td< td=""><td>1.39</td><td>13.3</td><td>18.5</td><td>1.17</td><td>6.9</td><td>8.1</td><td>1.02</td><td>20.7</td><td>21.2</td><td>2004</td></td<>	1.39	13.3	18.5	1.17	6.9	8.1	1.02	20.7	21.2	2004
2007         10.8         10.7         1.01         5.4         5.8         0.93         13.6         7           2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6         9.2         0.94         24.5         9           2014         18.4         17.3         1.07         8.9         9.1         0.97         10.3         12           2015         10.5         4.8         2.19         5.1         2.9         1.74         7.5         2           2016         4.5         11.7         0.38         2.1         5	1.43	11.9	17.1	0.93	8.2	7.6	0.89	20.9	18.6	2005
2008         10.5         11.1         0.95         4.3         4.3         1.00         10.2         7           2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6         9.2         0.94         24.5         9           2014         18.4         17.3         1.07         8.9         9.1         0.97         10.3         12           2015         10.5         4.8         2.19         5.1         2.9         1.74         7.5         2           2016         4.5         11.7         0.38         2.1         5.4         0.39         3.5         6           2017         15.8         12.9         1.22         6.2         6.	0.90	9.2	8.3	2.36	2.7	6.4	1.48	9.9	14.6	2006
2009         19.3         15.5         1.24         9.5         9.5         1.00         31.4         16           2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6         9.2         0.94         24.5         9           2014         18.4         17.3         1.07         8.9         9.1         0.97         10.3         12           2015         10.5         4.8         2.19         5.1         2.9         1.74         7.5         2           2016         4.5         11.7         0.38         2.1         5.4         0.39         3.5         6           2017         15.8         12.9         1.22         6.2         6.0         1.03         6.5         6           2018         10.6         8.7         1.22         5.8         3.7<	1.92	7.1	13.6	0.93	5.8	5.4	1.01	10.7	10.8	2007
2010         22.0         17.1         1.29         7.6         11.4         0.67         21.8         19           2011         28.2         13.3         2.11         11.6         13.0         0.89         13.3         15           2012         33.5         12.8         2.61         14.3         8.1         1.77         37.2         9           2013         17.2         15.8         1.09         8.6         9.2         0.94         24.5         9           2014         18.4         17.3         1.07         8.9         9.1         0.97         10.3         12           2015         10.5         4.8         2.19         5.1         2.9         1.74         7.5         2           2016         4.5         11.7         0.38         2.1         5.4         0.39         3.5         6           2017         15.8         12.9         1.22         6.2         6.0         1.03         6.5         6           2018         10.6         8.7         1.22         5.8         3.7         1.56         7.0         3	1.39	7.4	10.2	1.00	4.3	4.3	0.95	11.1	10.5	2008
2011       28.2       13.3       2.11       11.6       13.0       0.89       13.3       15.2         2012       33.5       12.8       2.61       14.3       8.1       1.77       37.2       9.2         2013       17.2       15.8       1.09       8.6       9.2       0.94       24.5       9.2         2014       18.4       17.3       1.07       8.9       9.1       0.97       10.3       12.2         2015       10.5       4.8       2.19       5.1       2.9       1.74       7.5       2.2         2016       4.5       11.7       0.38       2.1       5.4       0.39       3.5       6.5         2017       15.8       12.9       1.22       6.2       6.0       1.03       6.5       6.5         2018       10.6       8.7       1.22       5.8       3.7       1.56       7.0       3	1.97	16.0	31.4	1.00	9.5	9.5	1.24	15.5	19.3	2009
2012     33.5     12.8     2.61     14.3     8.1     1.77     37.2     9       2013     17.2     15.8     1.09     8.6     9.2     0.94     24.5     9       2014     18.4     17.3     1.07     8.9     9.1     0.97     10.3     12       2015     10.5     4.8     2.19     5.1     2.9     1.74     7.5     2       2016     4.5     11.7     0.38     2.1     5.4     0.39     3.5     6       2017     15.8     12.9     1.22     6.2     6.0     1.03     6.5     6       2018     10.6     8.7     1.22     5.8     3.7     1.56     7.0     3	1.09	19.9	21.8	0.67	11.4	7.6	1.29	17.1	22.0	2010
2013     17.2     15.8     1.09     8.6     9.2     0.94     24.5     9.2       2014     18.4     17.3     1.07     8.9     9.1     0.97     10.3     12       2015     10.5     4.8     2.19     5.1     2.9     1.74     7.5     2       2016     4.5     11.7     0.38     2.1     5.4     0.39     3.5     6       2017     15.8     12.9     1.22     6.2     6.0     1.03     6.5     6       2018     10.6     8.7     1.22     5.8     3.7     1.56     7.0     3	0.88	15.1	13.3	0.89	13.0	11.6	2.11	13.3	28.2	2011
2014     18.4     17.3     1.07     8.9     9.1     0.97     10.3     12       2015     10.5     4.8     2.19     5.1     2.9     1.74     7.5     2       2016     4.5     11.7     0.38     2.1     5.4     0.39     3.5     6       2017     15.8     12.9     1.22     6.2     6.0     1.03     6.5     6       2018     10.6     8.7     1.22     5.8     3.7     1.56     7.0     3	4.08	9.1	37.2	1.77	8.1	14.3	2.61	12.8	33.5	2012
2015     10.5     4.8     2.19     5.1     2.9     1.74     7.5     2       2016     4.5     11.7     0.38     2.1     5.4     0.39     3.5     6       2017     15.8     12.9     1.22     6.2     6.0     1.03     6.5     6       2018     10.6     8.7     1.22     5.8     3.7     1.56     7.0     3	2.48	9.9	24.5	0.94	9.2	8.6	1.09	15.8	17.2	2013
2016     4.5     11.7     0.38     2.1     5.4     0.39     3.5     6       2017     15.8     12.9     1.22     6.2     6.0     1.03     6.5     6       2018     10.6     8.7     1.22     5.8     3.7     1.56     7.0     3	0.80	12.8	10.3	0.97	9.1	8.9	1.07		18.4	2014
2017     15.8     12.9     1.22     6.2     6.0     1.03     6.5     6       2018     10.6     8.7     1.22     5.8     3.7     1.56     7.0     3	2.75	2.7	7.5	1.74	2.9	5.1	2.19	4.8	10.5	2015
2018 10.6 8.7 1.22 5.8 3.7 1.56 7.0 3	0.54	6.5	3.5	0.39	5.4	2.1	0.38	11.7	4.5	2016
· · · · · · · · · · · · · · · · · · ·	0.96	6.8	6.5	1.03	6.0	6.2	1.22	12.9	15.8	2017
2019 14.8 10.9 1.36 7.0 5.2 1.36 11.2 3	2.04	3.4	7.0	1.56	3.7	5.8	1.22	8.7	10.6	2018
	2.84	3.9	11.2	1.36	5.2	7.0	1.36	10.9	14.8	2019
2020 9.2 9.1 1.01 4.2 5.4 0.77 7.8 5	1.53	5.1	7.8	0.77	5.4	4.2	1.01	9.1	9.2	2020
2021 7.5 10.4 0.73 3.0 7.8 0.39 3.9 5	0.78	5.0	3.9	0.39	7.8	3.0	0.73	10.4	7.5	2021
2022 12.5 16.3 0.77 4.7 11.7 0.40 18.2 17	1.02	17.8	18.2	0.40	11.7	4.7	0.77	16.3	12.5	2022
2023 13.5 10.6 1.27 6.5 6.5 1.01 12.4 7	1.66	7.5	12.4	1.01	6.5	6.5	1.27	10.6	13.5	2023
2024 10.2 4.9 12.8	-	-	12.8	-	-	4.9	-	-	10.2	2024
2025 10.9 5.4 9.0	-	-		-	-		-	-	10.9	2025

TABLE III-3. Preseason forecasts and postseason estimates of age-3 ocean abundance for selected Washington coastal adult natural coho stocks in thousands of fish. (Page 3 of 3)

(Page 2 of 2)						
Year	Preseason	Postseason	Pre/Post-	Preseason	Postseason	Pre/Post-
or Ave.	Forecast	Return	season	Forecast	Return	season
		<b>Grays Harbor</b>		,	Willapa Bay	
1991-1995	122.8	68.0	2.2			
1996	121.4	89.7	1.4			
1997	26.1	20.2	1.3			
1998	30.1	46.4	0.6			
1999	57.7	42.7	1.4			
2000	47.8	51.9	0.9			
2001	51.3	103.2	0.5			
2002	55.4	142.0	0.4		Data not available	
2003	58.0	108.4	0.5		until 2010	
2004	117.9	90.8	1.3			
2005	91.1	65.9	1.4			
2006	67.3	30.6	2.2			
2007	59.4	34.6	1.7			
2008	42.7	49.0	0.9			
2009	59.2	104.6	0.6			
2010	67.9	117.4	0.6	20.4	101.1	0.20
2011	89.1	86.2	1.0	47.8	61.6	0.78
2012	150.2	103.9	1.4	81.3	40.6	2.00
2013	196.8	80.3	2.4	58.6	36.7	1.60
2014	108.8	152.9	0.7	58.9	95.6	0.62
2015	142.6	31.7	4.5	42.9	18.6	2.30
2016	35.7	35.3	1.0	39.5	40.5	0.98
2017	50.0	37.3	1.3	36.7	14.3	2.56
2018	42.5	60.8	0.7	20.7	17.0	1.21
2019	71.8	51.0	1.4	63.4	19.4	3.27
2020	50.0	31.6	1.6	17.9	18.5	0.96
2021	44.8	77.4	0.6	19.0	29.8	0.64
2022	120.4	79.4	1.5	35.8	22.7	1.58
2023	102.8	59.1	1.7	42.7	22.7	1.88
2024	74.9	-	-	29.5	-	-
2025	62.2	-	-	28.0		-

a/ Coho FRAM was used to estimate post-season ocean abundance.

b/ In 1993 and 1994 preseason forecasts were a range of 144-153 and 53.8-60.2 respectively. The midpoint of each range was used in calculating the 1991-1995 average.

APPENDIX F - TABLE III-4. Preseason forecasts and postseason estimates of ocean abundance for selected Puget Sound adult natural coho stocks in thousands of fish<sup>a/</sup>. (Page 1 of 2)

Year	Preseason	Postseason		Preseason	Postseason		Preseason	Postseason	
or Ave.	Forecast <sup>b/</sup>	Return	Pre/Postseason	Forecast	Return	Pre/Postseason	Forecast	Return	Pre/Postseason
		Skagit River	r	5	Stillaguamish Ri	ver		<b>Hood Canal</b>	
1991-1995	NA	82.0	-	53.6	18.1	3.74	94.2	14.2	6.63
1996	NA	48.3	-	51.6	12.5	4.13	25.1	37.2	0.67
1997	70.9	63.1	1.12	36.0	14.1	2.56	78.4	101.8	0.77
1998	55.0	95.1	0.58	47.8	31.1	1.54	108.0	118.5	0.91
1999	75.7	40.9	1.85	35.7	7.5	4.77	65.1	17.6	3.70
2000	30.2	95.2	0.32	17.7	31.2	0.57	61.0	39.7	1.54
2001	87.2	132.5	0.66	24.4	81.8	0.30	62.0	110.0	0.56
2002	98.5	71.8	1.37	19.7	30.4	0.65	34.9	81.0	0.43
2003	116.6	114.1	1.02	37.8	49.8	0.76	33.4	199.9	0.17
2004	155.8	145.3	1.07	38.0	73.9	0.51	98.7	219.7	0.45
2005	61.8	52.4	1.18	56.7	29.1	1.95	98.4	68.3	1.44
2006	106.6	11.5	9.25	45.0	11.8	3.81	59.4	49.7	1.20
2007	26.8	83.0	0.32	69.2	45.2	1.53	42.4	78.6	0.54
2008	61.4	35.5	1.73	31.0	15.3	2.03	30.4	25.8	1.18
2009	33.4	87.5	0.38	13.4	27.4	0.49	48.6	45.7	1.06
2010	95.9	64.6	1.48	25.9	16.8	1.55	33.2	14.5	2.29
2011	138.1	78.1	1.77	66.6	61.3	1.09	74.7	56.8	1.31
2012	48.3	139.1	0.35	47.5	60.6	0.78	73.4	125.5	0.58
2013	137.2	150.7	0.91	33.1	78.1	0.42	36.8	37.9	0.97
2014	112.4	51.7	2.17	32.5	49.1	0.66	82.8	69.6	1.19
2015	121.4	15.5	7.82	31.3	5.6	5.59	61.5	63.7	0.96
2016	8.9	44.7	0.20	2.8	15.6	0.18	35.3	31.8	1.11
2017	11.2	22.3	0.50	7.6	6.9	1.10	115.6	35.0	3.31
2018	59.4	36.9	1.61	19.0	30.9	0.62	59.9	18.7	3.20
2019	58.2	27.5	2.12	23.9	16.2	1.48	40.4	14.7	2.76
2020	31.0	41.5	0.75	19.5	24.7	0.79	35.0	23.6	1.48
2021	58.4	112.0	0.52	26.8	42.7	0.63	28.8	45.7	0.63
2022	80.4	124.0	0.65	24.9	59.7	0.42	20.2	20.0	1.01
2023	43.1	74.9	0.58	30.2	46.3	0.65	37.9	49.9	0.76
2024	63.4	-	-	30.8	-	-	36.5	-	-
2025	66.3	-	-	27.5	-	-	19.0	-	-

TABLE III-4. Preseason and postseason estimates of ocean abundance for selected Puget Sound adult natural coho stocks in thousands of fish<sup>a/</sup>. (Page 2 of 2)

Year	Preseason and Preseason	Postseason estim Postseason	ates of ocean abunda	Preseason	Puget Sound adu Postseason	it natural coho stock	s in thousands of fish <sup>a</sup> '. (Page 2 of 2)
or Ave.	Forecast	Return	Pre/Postseason	Forecast	Return	Pre/Postseason	
or Ave.	rolecast	Snohomish	PTE/POSISEASOIT	rolecast	Strait of Juan d		
1991-1995	244.6	200.6	1.05	20.6			
	341.6		1.85	20.6	19.3	1.22 0.55	
1996 1997	338.1 186.6	132.3 106.4	2.55 1.75	10.7	19.4	0.32	
			i	6.5	20.3	:	
1998	165.3	193.9	0.85	16.8	21.0	0.80	
1999	141.6	82.2	1.72	14.7	9.9	1.48	
2000	53.0	154.6	0.34	13.5	28.6	0.47	
2001	129.6	360.1	0.36	21.4	43.9	0.49	
2002	123.1	185.5	0.66	21.3	26.3	0.81	
2003	203.0	198.0	1.03	25.6	22.9	1.12	
2004	192.1	287.9	0.67	35.7	23.8	1.50	
2005	241.6	133.4	1.81	20.7	12.5	1.66	
2006	139.5	94.2	1.48	26.1	4.6	5.65	
2007	98.9	156.4	0.63	29.9	10.2	2.92	
2008	92.0	49.5	1.86	24.1	3.9	6.25	
2009	67.0	133.4	0.50	20.5	24.7	0.83	
2010	99.4	54.4	1.83	8.5	20.1	0.42	
2011	180.0	137.4	1.31	12.3	11.7	1.05	
2012	109.0	175.8	0.62	12.6	12.5	1.01	
2013	163.8	176.0	0.93	12.6	9.8	1.29	
2014	150.0	66.6	2.25	12.5	13.8	0.91	
2015	151.5	28.3	5.35	11.1	4.7	2.36	
2016	20.6	54.1	0.38	4.4	8.7	0.51	
2017	107.3	23.2	4.63	13.1	5.9	2.24	
2018	66.3	77.6	0.85	7.2	5.9	1.21	
2019	62.9	48.7	1.29	8.8	5.3	1.68	
2020	39.0	47.7	0.82	7.5	9.2	0.82	
2021	60.0	109.9	0.55	6.7	22.5	0.30	
2022	64.2	93.2	0.69	7.3	18.4	0.40	
2023	76.5	79.7	0.96	15.6	14.9	1.05	
2024	71.6	-	-	19.7	-	-	
2025	59.0	-	-	14.0	-	-	

a/ Coho FRAM was used to estimate post season ocean abundance.

b/ Preseason forecasts in 1986-1996 were based on accounting system that signficantly underestimated escapement and are not comparable to post season.

APPENDIX F - TABLE III-5. Status categories and constraints for Puget Sound and Washington Coast coho under the FMP and PST Southern Coho Management Plan.

FMP Stock	Total Exploitation Rate Constraint <sup>a/</sup>	Categorical Status <sup>a/</sup>	
Skagit	60%	Normal	
Stillaguamish	50%	Normal	
Snohomish	40%	Low	
Hood Canal	20%	Critical	
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 <sup>b/</sup>	Categorical Status <sup>c/</sup>
Skagit	60%	Abundant
Stillaguamish	50%	Abundant
Snohomish	40%	Moderate
Hood Canal	20%	Low
Strait of Juan de Fuca	40%	Moderate
Quillayute Fall <sup>c/</sup>	42%	Abundant
Hoh <sup>c/</sup>	63%	Abundant
Queets <sup>c/</sup>	36%	Moderate
Grays Harbor <sup>c/d/</sup>	50%	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.

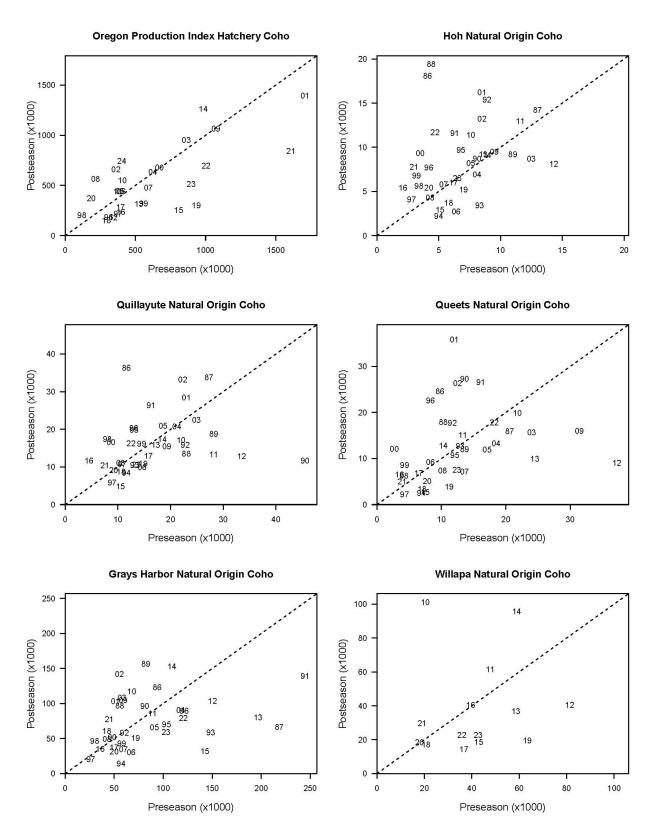
c/ Categories (Abundant, Moderate, Low) correspond to the general exploitation rate ranges depicted in paragraph 8(b)(iii) of the 2019 PST Southern Coho Management Plan. For Washington Coast stocks, categorical status is determined by the exploitation rate associated with meeting the escapement goal (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.

APPENDIX F - TABLE III-6. Projected coho mark rates for 2025 U.S. forecasts under base period fishing patterns (percent marked).

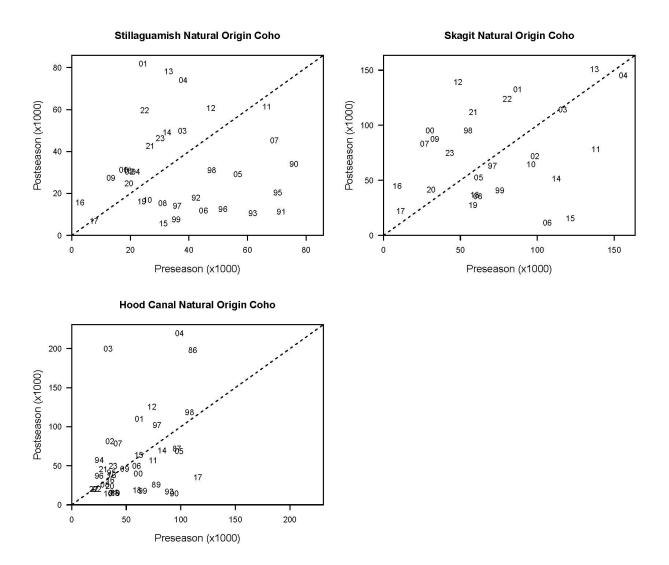
APPENDIX F - TABLE III-6. Projected c	Fishery	June	July	se period fishing p August	Sept
Canada					•
Johnstone Strait	Recreational		17%	14%	
West Coast Vancouver Island	Recreational	38%	37%	36%	37%
North Georgia Strait	Recreational	35%	35%	34%	27%
South Georgia Strait	Recreational	40%	44%	37%	38%
Juan de Fuca Strait	Recreational	41%	44%	44%	41%
Johnstone Strait	Troll	42%	30%	23%	27%
NW Vancouver Island	Troll	45%	38%	39%	38%
SW Vancouver Island	Troll	53%	49%	49%	50%
Georgia Strait	Troll	46%	45%	45%	39%
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational	48%	49%	49%	50%
Strait of Juan de Fuca (Area 6)	Recreational	47%	50%	52%	49%
San Juan Island (Area 7)	Recreational	56%	51%	45%	33%
North Puget Sound (Areas 6 & 7A)	Net		42%	44%	35%
Council Area					
Neah Bay (Area 4/4B)	Recreational	50%	50%	51%	54%
LaPush (Area 3)	Recreational	44%	51%	54%	55%
Westport (Area 2)	Recreational	52%	52%	52%	53%
Columbia River (Area 1)	Recreational	49%	51%	49%	49%
Tillamook	Recreational	45%	42%	36%	22%
Newport	Recreational	40%	36%	33%	21%
Coos Bay	Recreational	26%	24%	16%	7%
Brookings	Recreational	21%	14%	13%	5%
Neah Bay (Area 4/4B)	Troll	52%	52%	51%	49%
LaPush (Area 3)	Troll	53%	53%	50%	51%
Westport (Area 2)	Troll	49%	52%	52%	57%
Columbia River (Area 1)	Troll	51%	52%	49%	46%
Tillamook	Troll	47%	44%	41%	41%
Newport	Troll	41%	39%	32%	31%
Coos Bay	Troll	26%	24%	20%	12%
Brookings	Troll	19%	21%	23%	42%
Columbia River					
Buoy 10	Recreational				53%

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APPENDIX F FIGURE III-1a. Selected preseason vs. postseason forecasts for coho stocks with substantial contribution to Council area fisheries.

Preseason I Appendix F



APPENDIX F FIGURE III-1b. Selected preseason vs. postseason forecasts for coho stocks with substantial contribution to Council area fisheries.

Preseason I Appendix F

#### AFFECTED ENVIRONMENT - PINK SALMON ASSESSMENT

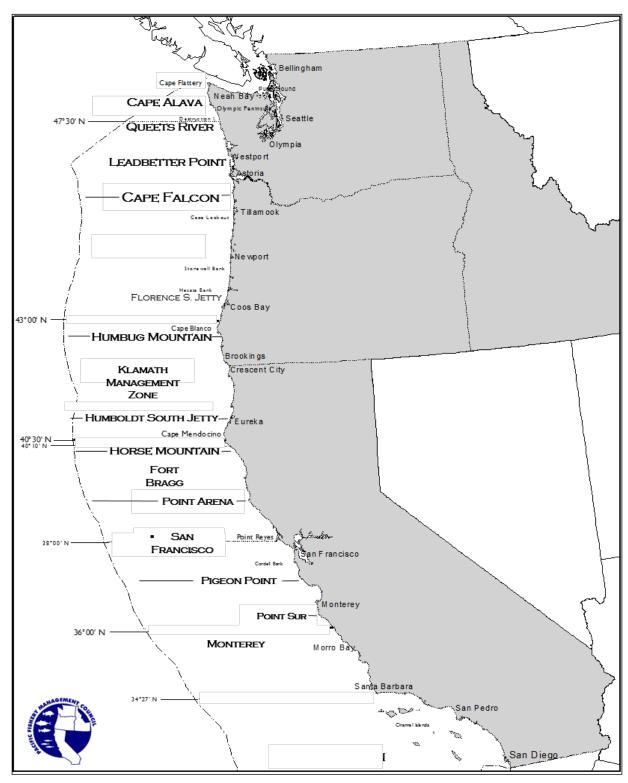
Two major runs comprise the pink salmon population available to Council fisheries during odd-numbered years: the Puget Sound run, and the Fraser River (British Columbia) run, the latter is the more abundant of the two. The 2023 pink salmon run size forecasts were 3,950,917 for the Puget Sound and 6,135,000 for the Fraser River. The actual 2023 run size was 7,222,610 in Puget Sound and 10,513,300 in the Fraser River. The 2025 pink salmon run size forecasts are 7,756,232 for the Puget Sound and 26,965,000 for the Fraser River. See Appendix F Table IV-1 for details.

APPENDIX F - TABLE IV-1. Estimated annual (odd-numbered years) run sizes and forecasts for Fraser River and Puget Sound pink salmon in millions of fish.

	Puget 9	Sound	Fraser	River <sup>a/</sup>
Year	Forecast	Actual	Forecast	Actual
1977	NA	0.88	NA	8.21
1979	NA	1.32	NA	14.40
1981	NA	0.50	NA	18.69
1983	NA	1.01	NA	15.35
1985	NA	1.76	NA	19.04
1987	NA	1.57	NA	7.17
1989	NA	1.93	NA	16.48
1991	NA	1.09	NA	22.18
1993	NA	1.06	NA	16.98
1995	3.4	2.08	NA	12.90
1997	NA	0.44	11.40	8.18
1999	NA	0.96	NA	3.61
2001	2.92	3.56	5.47	21.26
2003	2.32	2.90	17.30	24.25
2005	1.98	1.23	16.32	9.87
2007	3.34	2.45	19.60	8.49
2009	5.16	9.84	17.54	19.94
2011	5.98	5.27	17.50	20.65
2013	6.27	8.75	8.93	15.90
2015	6.76	3.70	14.50	5.87
2017	1.15	0.51	8.69	3.56
2019	0.61	2.94	5.02	8.86
2021	2.93	3.77	3.01	8.11
2023	3.95	7.22	6.14	10.51
2025 <sup>b/</sup>	7.76	NA	26.97	NA

a/ Total run size.

b/ Preliminary forecasts



This map is for reference only and is not intended for use in navigation or fishery regulation.

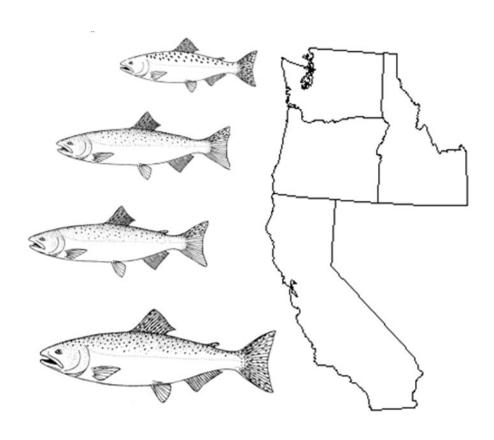
Preseason I Appendix F

# PRESEASON REPORT II

# PROPOSED ALTERNATIVES AND

# ENVIRONMENTAL ASSESSMENT PART 2 FOR 2025 OCEAN SALMON FISHERY REGULATIONS

**REGULATION IDENTIFIER NUMBER 0648-BN19** 



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

**MARCH 2025** 

# PUBLIC HEARINGS ON SALMON ALTERNATIVES

2025 Schedule of Salmon Fishery Management Alternative Hearings						
	WASHINGTON		CALIFORNIA		OREGON	
7 p.m.	Monday, March 24	7 p.m.	Monday, March 24	7 p.m.	Tuesday, March 25	
	Chateau Westport		Courtyard by Marriot Santa Rosa		On-line	
	Franklin Room		Sonoma Ballroom		Ring Central meeting platform	
	710 West Hancock		175 Railroad St		Meeting ID: 513 061 244	
	Westport, WA		Santa Rosa, CA			
	98595		95401		Listen only phone line	
	360-268-9101		707-573-9000		650-419-1505, 513-061-244#	

Written public comment on the Alternatives may be submitted to the PFMC (<u>www.pcouncil.org</u>) Public Comment Electronic Portal (<u>E-Portal</u>). The written public comment deadline is 5:00 p.m. Pacific Time, April 3, 2025.

Verbal and written public comment on the Alternatives will also be accepted in person or online at the <u>April Council meeting</u> during April 11-15, 2025 during the public comment period for all Salmon Agenda Items.

# **ACKNOWLEDGMENTS**

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The Salmon Technical Team and the Council staff express their thanks for the expert assistance provided by Ms. Stephanie Thurner (Northwest Indian Fisheries Commission); Ms. Erica Weyland, Ms. Danielle Williams, and Mr. Kyle Van de Graaf (Washington Department of Fish and Wildlife); Ms. Justine Kenyon-Benson (Oregon Department of Fish and Wildlife); Mr. Ian Pritchard and Dr. Dylan Stompe (California Department of Fish and Wildlife); Dr. Ed Waters (economist on contract with Pacific Fishery Management Council); and to numerous other tribal and agency personnel in completing this report.

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A report of the Pacific Fishery Management Council pursuant to National Oceanic and Atmospheric Administration Award Number NA25NMFX441C0005-T1-01.

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#### LIST OF ACRONYMS AND ABBREVIATIONS

AABM Aggregate Abundance Based Management

ABC acceptable biological catch

ACL annual catch limit
AI abundance index
BiOp 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)
OPIH Oregon Production Index Hatchery

OSP Oregon State Police

PDO Pacific (inter) Decadal Oscillation PFMC Pacific Fishery Management Council

PSC Pacific Salmon Commission PST Pacific Salmon Treaty

S<sub>ABC</sub> 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<sub>MSY</sub> 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 2025¹ (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 3, 2025. Verbal public comment on the Alternatives will also be accepted in person or online at the 2025 April Council meeting beginning April 11 during the public comment periods for Salmon Agenda Items.

This report constitutes the second part of an Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements for the 2025 ocean salmon management measures. The first part of this EA (Preseason Report I; <a href="PFMC 2025b">PFMC 2025b</a>, 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 Salmon 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 forums 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 2025 Council meeting. At this point in the planning cycle, the STT's

Preseason II Chapters 1-2

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<sup>&</sup>lt;sup>1</sup> The fishery management measures under consideration would cover the period May 16, 2025 through May 15, 2026. For ease of reference, we refer to this time period as 2025.

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

- 1) abundance levels for north and mid-Oregon coastal Chinook and Canadian Chinook and coho stocks are identical to 2024 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), 2025 fisheries were modeled using fishing effort scalars from the final 2024 preseason model run;
- 3) for Canadian Chinook fisheries managed under individual stock-based management (ISBM) regimes, the 2025 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 2024 final preseason fishery inputs;
- 5) for Southern U.S. inside fisheries for Chinook and inside and coastal terminal fisheries for coho, the 2024 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. 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 TECHNICAL TEAM CONCERNS

Alternative II for the California Commercial troll fishery specifies a 4,200 Chinook quota in the San Francisco management area and a 4,000 Chinook quota in the Monterey management area for the month of August. In the month of September, an 8,000 Chinook quota is specified in the area from Point Reyes to Point Sur. These quota fisheries pose several issues with regard to assessing impacts during the preseason planning process. In particular, the Winter Run Harvest Model does not have the capability to assess impacts from quota fisheries. Relative to other salmon stocks in the fishery, winter Chinook have low abundance, and projections of the proportion of the total catch comprised of winter run would be highly uncertain. In addition, the spatial extent of the September fishery spans portions of two established management areas (San Francisco and Monterey) which complicates assessment of impacts for that region.

# 4.0 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<sub>MSY</sub>), 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" as required by the Magnuson Stevens Act (MSA). These objectives are intended to meet the requirements of other laws including the Endangered Species Act (ESA), international treaties, and tribal treaties and executive orders. The Salmon FMP refers to measures needed to protect ESA listed species analyzed in or required by biological opinions (BiOps) issued by NMFS under ESA section 7(a)(2) 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.

The Salmon FMP requires the Council to abide by Court orders regarding tribal treaties and other tribal fishing rights 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.

#### 5.0 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:

			Federal Register Notice			
Species	ESU	Status	Most Recent		Original Listing	
	Chinook					
Chinook Salmon	Sacramento River Winter	Endangered	81 FR 33468	5/26/2016	54 FR 32085	8/1/1989
(O. tshawytscha)	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 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	Hood Canal Summer-Run	Threatened	81 FR 33468	5/26/2016	64 FR 14508	3/25/1999
(O. keta)	Columbia River	Threatened	81 FR 33468	5/26/2016	64 FR 14508	3/25/1999
	Coho					
Coho Salmon (O. kisutch)	Central California Coast S. Oregon/ N. California	Endangered	81 FR 33468	5/26/2016	61 FR 56138	10/31/1996
	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	Snake River	Endangered	81 FR 33468	5/26/2016	56 FR 58619	11/20/1991
(O. nerka)	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 BiOps 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 and/or analyzed in 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 salmonid BiOps 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 and 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)
4/09/2015	Lower Columbia River natural coho (until reinitiated)
4/26/2018	Sacramento River winter Chinook (until reinitiated)
4/28/2022	Southern Oregon/Northern California coast coho (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 <u>letter</u> received by the Council (dated February 25, 2025), NMFS summarized existing consultation standards and provided guidance on measures needed to protect species listed under the ESA during the 2025 fishing season. The letter summarized the measures analyzed and/or recommended in the relevant NMFS BiOps on the effects of fisheries managed under the Salmon FMP on listed salmon and specified limits applicable for the 2025 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 2025 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:

CI	hi	n	o	o	k

Snake River spring/summer (threatened)

Upper Willamette (threatened)

Puget Sound (threatened)

Upper Columbia River spring (endangered)

#### **Sockeye**

Snake River (endangered)

Ozette Lake Sockeye (threatened)

#### Chum

Columbia River (threatened)

Hood Canal summer (threatened)

#### **Steelhead**

Southern California (endangered)

South-central California coast (threatened)

Upper Columbia River (endangered)

Middle Columbia River (threatened)

Snake River Basin (threatened)

Puget Sound (threatened)

Central Valley, California (threatened)

Central California coast (threatened)

Upper Willamette River (threatened)

Lower Columbia River (threatened)

Northern California (threatened)

#### 6.0 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.

#### 6.1 Chinook Salmon Management

A ten-year agreement under the PST was adopted by both the U.S. and Canada and implemented beginning with the 2019 fishing year. The 2019 Agreement includes reductions to catch ceilings for the SEAK and WCVI AABM fisheries relative to the 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, with the implementation of the 2019 Agreement, the allowable catches for SEAK fisheries were no longer determined using the abundance index (AI) produced by the PSC Chinook Model, rather, they were 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 PST Agreement for specifics). Use of this approach continued through 2022, however, in 2023 the PSC agreed to suspend the use of the CPUE approach and adopted a new multivariate model for setting the 2023 SEAK AABM catch limit, which incorporates PSC Chinook Model AIs and the early winter power troll CPUE. In 2024, the PSC reverted back to use of the PSC Chinook Model AI to set the catch limit for the SEAK AABM fishery.

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 2025 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 PST obligations (both CYER limits and escapement targets); (3) meeting First Nations Food, Social and Ceremonial and treaty obligations for Chinook harvests by First Nations; and (4) monitoring of incidental impacts during commercial and First Nations fisheries directed at sockeye, pink, 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, PST obligations, 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.

#### 6.2 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. The following 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 treaty 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 2025 Puget Sound and Washington coast coho constraints are provided in Table 9.

Key considerations for Canadian fishery management for coho in 2025 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 pink salmon. 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.

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 2025 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 2025 Southern U.S. fisheries to a maximum of 10.0 percent.

#### 7.0 DESCRIPTION OF THE ALTERNATIVES

Detailed information on the proposed 2025 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 (2024 fishery structure) are detailed in Preseason Report I (PFMC 2025b).

Fisheries scheduled to occur prior to May 16, 2025<sup>2</sup>, which were adopted as part of the 2024 management measures, may have been modified by inseason action at the March 2025 Council meeting. The Alternatives under consideration by the Council are from May 16, 2025 through May 15, 2026.

On March 10, 2025, NMFS took inseason action to close the non-tribal commercial troll fisheries between Cape Falcon, OR and Humbug Mountain, OR through April 9 and between Humbug Mountain and the Oregon/California border through April 14, as well as all non-tribal commercial troll and recreational fisheries planned prior to May 16 off the California coast<sup>3</sup>. The modeled impacts for March, April, and May 1-15, as displayed in Table 5, Table 7, and Appendix A, reflect potential pre-May 16 season structures. In each alternative, commercial fisheries north of Cape Falcon, OR are open from May 1-May 15. In Alternative 1, from Cape Falcon to Humbug Mountain the commercial fishery would be open from April 10 to May 15 and the recreational fishery would be open from March 15 to May 15. In Alternative 2, from Cape Falcon to the Oregon/California border, the commercial fishery would be open from April 15 to May 15 and the recreational fishery would be open from Cape Falcon to Humbug Mountain from March 15 to April 30. In Alternative 3, from Cape Falcon to the Heceta Bank Line, the commercial fishery would be open from April 15 to May 15 and from Humbug Mountain to the OR/CA border from April 15-30. At the time this document was published, inseason actions could still modify fisheries prior to May 16. The purpose of modeling the various impacts is to provide the Council and the public with an understanding of how potential pre-May 16 season structures would affect the impacts to stocks of concern.

For the April 2025 Council meeting and Preseason Report III, impact assessments will project impacts for pre-May 16 fisheries based on regulations in place at the time, including the 2024 regulations that authorized fisheries through May 16, 2025 and any inseason actions to date. Any changes to the model runs will reflect the management measures being considered by the Council for the May 16, 2025 through May 15, 2026 ocean salmon fishery regulatory period.

#### 7.1 Commercial

Alternatives for the area north of Cape Falcon reflect increased total abundances of Columbia River Chinook and Columbia River hatchery coho compared to 2024 forecasts. In 2025, allowable harvest of Chinook will likely be increased from 2024 due to higher predicted returns for Lower Columbia River tule Chinook. Coho quotas will be comparatively higher in 2025 due to higher forecasted abundance of Oregon Production Index Hatchery (OPIH) 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 67 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 all Alternatives, the May-June fishery opens on May 16, seven days per week and subquotas in the areas north of the Queets River and in the area south of Leadbetter Point are in place during

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<sup>&</sup>lt;sup>2</sup>See March 2025 Agenda Item E.3 Attachment 4. Available at https://www.pcouncil.org/documents/2025/02/e-3-attachment-4-list-of-2025-salmon-fisheries-scheduled-to-occur-prior-to-may-16-2025.pdf/

<sup>&</sup>lt;sup>3</sup> See Inseason Action #17-18 in Ocean Salmon Fisheries, South of Cape Falcon, OR, to the U.S./Mexico border. Available at https://www.fisheries.noaa.gov/bulletin/inseason-actions-17-18-ocean-salmon-fisheries-south-cape-falcon-or-us-mexico-border

the May-June time period. In Alternative I, there is a per week (Thursday-Wednesday) landing and possession limit in the area south of Leadbetter Point. In Alternatives II and III, there is a per week (Thursday-Wednesday) landing and possession limit in all areas. The summer all-salmon fishery in Alternatives I and II opens seven days per week beginning July 1 through September 30 while Alternative III opens seven days per week beginning July 1 through September 22 with Chinook landing and possession limits in place for Alternatives II and III 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 2026 on May 1.

Commercial fisheries south of Cape Falcon will again be heavily constrained or closed owing to low abundance forecasts for Sacramento River fall Chinook (SRFC) and KRFC. Conservation concerns for ESA listed CCC and Southern Oregon/Northern California (SONCC) coho will also limit fisheries in 2025. All Alternatives were structured to achieve Council guidance for a maximum KRFC exploitation rate of 10 percent, NMFS guidance for implementing regulations addressing California Coastal Chinook for a maximum KRFC age-4 ocean harvest rate of 7.7 percent, and a minimum hatchery and natural-area escapement of 122,000 adult SRFC.

For the area between Cape Falcon and Humbug Mountain the fishery would open on May 16 for Alternatives I and II. In Alternative III, the fishery would open from Cape Falcon to Heceta Bank Line on May 16. Periods allowing retention of all salmon except coho are included for May, June, July, and October with number of days and areas open differing for each alternative. All Alternatives provide for an all salmon season with a non-mark-selective coho quota in September.

The commercial fishery in the area between Humbug Mountain and the OR/CA border (Oregon KMZ) would be open for Chinook retention for the last two weeks of May under Alternative II. The Oregon KMZ would be closed under Alternative I and III.

The area between the Oregon/California border to latitude 40°10'N. (California KMZ) is closed under Alternatives I and III, but open under a 550 Chinook quota under Alternative II.

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 12 days of fishing, split between three short periods in May, for each of these management areas. Harvest limits differ by management area. Alternative II specifies August quotas that vary by management area. Following the August quota fisheries, part of the San Francisco and Monterey management areas from Point Reyes to Point Sur would be open for a portion of September with landing and possession limits.

All commercial salmon fisheries in California would be closed under Alternative III.

#### 7.2 Recreational

North of Cape Falcon under Alternative I, areas north of the Queets River would open June 21 through June 30 for an all salmon species except coho with a daily bag limit of two salmon, and areas south of the Queets River would open June 21 through June 27 for an all salmon species except coho with a daily bag limit of one salmon. The areas north of the Queets River would then be open July 1 for all salmon species with a daily bag limit of two salmon, and areas south of the Queets River would be open June 28 for all salmon species with a daily bag limit of two salmon, only one of which may be a Chinook. The closing date for all areas in Alternative I is September 30.

North of Cape Falcon under Alternative II, the areas south of Leadbetter Point would open June 25 while the areas north of Leadbetter Point would open June 28. All areas would be open for all salmon species, seven days per week, except the area between the Queets River and Leadbetter Point, which would be open 5 days per week (Sunday-Thursday) beginning August 3. The daily bag limits in the areas north of the Queets River would be two salmon, only one of which may be a Chinook through July 6, two salmon beginning July 7. The daily bag limit in the areas south of the Queets River in all open periods would be two salmon, only one of which may be a Chinook. The closing date in the areas north of the Queets River would be September 14, the closing date in the area between the Queets River and Leadbetter point would be September 28, and the closing date in the area south of Leadbetter Point would be September 30.

In Alternative III, the areas north of the Queets River and the area south of Leadbetter Point would open June 28. The area between the Queets River and Leadbetter Point would open June 29. Areas north of the Queets River would be open for all salmon species, seven days per week, with a daily bag limit of two salmon. The area south of Leadbetter Point would be open for all salmon species, seven days per week, with a daily bag limit of two salmon, only one may be a Chinook. The area between the Queets River and Leadbetter Point would be open five days per week (Sunday-Thursday) through July 24 and open seven days per week beginning on July 25. The closing date in the areas north of the Queets River would be September 8, the closing date in the area south of Leadbetter Point would be September 15, and the closing date in the area between the Queets River and Leadbetter Point would be September 21.

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 May 16-31 and for the month of October. In Alternative II and III, the fishery would be open for all salmon except coho salmon for the month of October. An all salmon fishery with a non-mark-selective coho quota would be open in this area for the month of September in all three Alternatives. In all three Alternatives, the fishery is open shoreward of the 40-fathom regulatory line during the month of October.

In the area between Cape Falcon and the OR/CA border, a mark-selective coho fishery world be open early-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, Alternative I is open May 16 through June 4 for an all salmon except coho fishery.

For the California management areas (California KMZ, Fort Bragg, San Francisco, and Monterey), Alternative I would allow fishing for four days in June and five days in July. In August, The KMZ and Fort Bragg areas would be open for seven days, while the San Francisco and Monterey areas would be open for 10 days. In September, The California KMZ and Fort Bragg areas would be closed, while the portion of the San Francisco and Monterey areas from Point Reyes to Point Sur would be open for 10 days. In October, the portion of the San Francisco management area from Point Reyes to Pigeon Point would be open for 5 days.

Alternative II is similar to Alternative I, except that the September and October fisheries in the San Francisco and Monterey management areas would be closed and the August fishery is lengthened by three days.

# 7.3 Treaty Indian

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

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The proposed Alternatives include a May-June Chinook directed fishery and an all-species fishery targeting coho and Chinook from July 1 to an end date of no later than September 30. Season structure with regard to the closing date is still under discussion among the tribes. 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.

#### 8.0 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

# 8.1 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 2025b). 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. 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 2024 Ocean Salmon Fisheries (PFMC 2025a). The current status (2025 ocean abundance forecasts) of the environmental components expected to be affected by the 2025 ocean salmon fisheries regulation Alternatives (FMP salmon stocks) are described in the 2025 Preseason Report I (PFMC 2025b). 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, the ESA consultation standards are considered to help 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 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 considerations for determining the significance of fishery management actions. In addition, NMFS has conducted NEPA analysis for most of these standards and has concluded that their effects are insignificant.

# 8.1.1 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 provides 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.

# 8.1.1.1 North of Cape Falcon

The abundance projection important to Chinook harvest management north of Cape Falcon in 2025 is:

• 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 306,200, which is greater than the 2024 preseason expectation of 215,300. The LRH forecast is 121,500, which is greater than the forecast of 85,500 in 2024. The SCH forecast is 184,700, which is greater than the 2024 forecast of 129,800.

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

• Consultation standards and NMFS 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:

- LCR natural tule fall Chinook. The Alternatives have exploitation rates on LCR natural tule fall Chinook that range from 38.5 percent to 41.9 percent when combined with 2024 preseason harvest rates for Columbia River fisheries. In-river fisheries have yet to be shaped. In Alternative I, the exploitation rate exceeds the NMFS ESA guidance for 2025 (41 percent). Additional shaping of PSC and in-river fisheries prior to the April Council meeting may result in changes to the anticipated exploitation rates presented in the Alternatives. LCR tules are a constraining Chinook stock for fisheries north of Cape Falcon in 2025.
- *LRW fall Chinook*. The Alternatives have ocean escapement values ranging from 14,100 to 14,300, which exceed the 6,900 minimum ocean escapement needed to attain the ESA consultation standard of 5,700 spawners to the North Fork Lewis River. LRW Chinook will not constrain ocean fisheries north of Cape Falcon in 2025.
- *SRW fall Chinook.* The Alternatives have ocean exploitation rates ranging from 47.4 percent to 59.4 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 2025.

For Chinook fisheries north of Cape Falcon, Alternatives II and III satisfy all consultation standards and NMFS guidance, FMP conservation objectives, and all other objectives for relevant Chinook stocks (Table 5). The NMFS 2025 ESA guidance for LCR natural tule fall Chinook is exceeded in Alternative I.

# 8.1.1.2 South of Cape Falcon

Status of Chinook stocks important to 2025 Chinook harvest management south of Cape Falcon are:

• *SRFC*. The Sacramento Index forecast is 165,655, which is lower than the 2024 forecast of 213,622.

- *KRFC*. The ocean abundance forecast for this stock is 82,672, including 14,333 age-4 fish, which is lower than the 2024 forecasts of 180,681, including 39,531 age-4 fish.
- *SRWC*. The forecast of age-3 escapement absent fishing is 4,507, which is higher than the 2024 forecast of 1,013.

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

- A KRFC maximum exploitation rate of 10.0 percent (FMP control rule).
- A KRFC age-4 ocean harvest rate of 7.7 percent (regulatory framework for California Coastal Chinook and NMFS guidance).
- A SRFC hatchery and natural area spawner escapement of at least 122,000 adults (FMP control rule and NMFS guidance).
- Consultation standards and NMFS 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.

For 2025, the Klamath River fall Chinook (KRFC) harvest control rule specifies a *de minimis* maximum allowable exploitation rate of 10 percent. The Salmon Fishery Management Plan (FMP) requires consideration of several factors when recommending *de minimis* exploitation rates. From the Salmon FMP:

"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 high. The 2025 minimum natural-area adult spawner escapement of 18,687 adults is lower than the minimum stock size threshold (MSST; 30,525) and  $S_{MSY}$  (40,700 natural-area adult spawners). A natural-area adult escapement of 18,687 adults would represent the seventh lowest value over the past 49 years of data.

#### Substocks

To assess the potential for critically low abundance of substocks, a statistical model (<u>PFMC 2007</u>, 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 18,687 adults in 2025. The 720 adult 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 0.56.

#### Recent spawner abundance

The natural-area adult spawner escapement has been lower than the MSST in eight of the last ten years and four of the last five years. The 2025 forecast of natural-area adult spawners in the absence of fishing is 20,763 adults, which is lower than  $S_{MSY}$  and the MSST. If fishing seasons are structured such that the maximum allowable exploitation rate of 10 percent is met, the natural-area adult spawner expectation is 18,687, which is lower than the MSST and  $S_{MSY}$ .

#### Comingled stocks

With regard to co-mingled stocks, Sacramento River fall Chinook have a low abundance forecast and are likely to constrain ocean fisheries in 2025. SONCC coho may also constrain 2025 ocean fisheries in California and Oregon.

#### Indicators of marine and freshwater environmental conditions

The 2024-2025 California Current Integrated Ecosystem Assessment (CCIEA) Ecosystem Status Report (CCIEA 2025) provides indicator-based outlooks for KRFC for the 2025 and 2026 return years. The indicator-based outlook is "consistent with low returns in 2025". Appendix J of the CCIEA report provides more detailed information on the habitat indicators relevant to the 2025 return year.

#### Approaching an overfished condition

KRFC currently meets the criteria for being at risk of approaching an overfished condition.

#### Overfished status

KRFC was declared overfished following the 2017 escapement and continues to meet the criteria for overfished status in 2025.

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

- *SRFC*. The minimum of 122,000 hatchery and natural area adult spawners is met by each of the Alternatives.
- *KRFC*. The minimum natural area adult spawners of 18,687 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 2025 fisheries south of Point Arena to a maximum of 20 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.* Limiting the forecast KRFC age-4 ocean harvest rate to a maximum of 7.7 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 rate for KRFC is lower than the maximum level specified by the control rule for 2025. However, KRFC does not meet its conservation objective of 40,700 natural area adult spawners under any of the Alternatives (Table 5).

#### 8.1.2 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,

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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 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 2025 are:

- *OPIH coho*. At the March 2025 Council meeting, Council adopted an alternative OPIH forecast for preseason management use in 2025 than what was presented in Pre-I. The adopted forecast of 493,600 is higher than the 2024 forecast of 403,100. The Columbia River early coho forecast is 338,100 compared to the 2024 forecast of 227,500, and the Columbia River late coho forecast is 141,600 compared to the 2024 forecast of 173,600.
- OCN coho. The OCN forecast is 289,000 compared to the 2024 forecast of 233,200.
- LCN coho. The LCN forecast is 72,000 compared to the 2024 forecast of 87,800.
- Puget Sound coho. Among Puget Sound natural stocks, Skagit and Stillaguamish coho are in the normal category, Snohomish and Strait of Juan de Fuca coho are in the low category, and Hood Canal coho are in the critical 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 natural coho stocks are a mixed bag. As an aggregate, the hatchery stock components increased compared to 2024 while the natural stock components decreased compared to 2024, with the exception of Quillayute fall coho which increased compared to 2024. Among Washington coastal natural stocks, Hoh and Grays Harbor coho are in the abundant category. Quillayute fall coho are also in the abundant category for 2025, compared to their moderate category in 2024 under the PST Southern Coho Management Plan. Queets coho are in the moderate category.

Key coho salmon management objectives shaping the Alternatives are:

- Consultation standards and NMFS 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 2025 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 2025; these stocks contribute to fisheries off Washington. Forecasts for some Puget Sound and Interior Fraser coho stocks in 2025 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*. All Alternatives satisfy the maximum 16.0 percent total exploitation rate ceiling for the Trinity Natural component and the maximum 15.0 percent total exploitation rate ceiling for the Klamath, Rogue, and Other Natural SONCC components.
- *OCN coho*. All Alternatives satisfy the maximum 30.0 percent exploitation rate when 2025 projected marine impacts are combined with preliminary 2025 freshwater impacts. Total exploitation rates projected for 2025 Alternatives range from 23.5 percent to 25.8 percent.
- LCN coho. All Alternatives satisfy the maximum 23.0 percent exploitation rate when 2025 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 2025. Marine exploitation rates projected for the 2025 Alternatives range from 15.3 percent to 10.9 percent.
- Interior Fraser coho. Alternatives II and III satisfy the 10.0 percent Southern U.S. exploitation rate limit required by the PST Southern Coho Management Plan when 2025 projected marine impacts are combined with the 2024 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 Grays Harbor coho, total exploitation rates in all Alternatives fall below the FMP and PST constraints when 2025 projected marine impacts are combined with 2024 preseason modeled impacts for Washington coastal freshwater fisheries. For Grays Harbor coho, 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 natural stocks, except for Hood Canal coho in all Alternatives, under the FMP matrix when 2025 projected marine impacts are combined with the 2024 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.

#### 8.1.3 Pink Salmon

Pink salmon merit management consideration in 2025. 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.

# 8.1.4 Summary of 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 catch 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 2025 Council area ocean salmon fisheries.

# 8.1.4.1 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 exceptions of Interior Fraser coho in Alternative I and Hood Canal coho and Grays Harbor coho in all three Alternatives (Table 5).

#### 8.1.4.2 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 and guidance, with the exception of LCR natural tule fall Chinook in Alternative I (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.

#### 8.2 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 2024 Ocean Salmon Fisheries (<u>PFMC 2025a</u>) provides 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 2024 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 2024 fishery indicate the expected short-term impact of the Alternative compared with taking no action, (i.e., if 2024 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 2024 (or 2023), these patterns were inferred from 2022 data. For example, landings data typically 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) small amounts 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 2024 (or 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 the current 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 current 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 coho and Chinook salmon 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.

#### 8.2.1 Alternative I

Under Alternative I, total coastwide community personal income impacts from commercial salmon fisheries are projected to be 64 percent greater than last year's (2024) level but 57 percent below the recent (2019-2023) inflation-adjusted average. Coastwide income impacts from recreational fishing are projected to be 36 percent above last year's level but 29 percent below the 2019-2023 inflation-adjusted average.

Commercial fishery income impacts north of Cape Falcon are projected to be 58 percent above last year and 139 percent above the 2019-2023 inflation-adjusted average.

South of Cape Falcon, total commercial fishery income impacts are projected to exceed last year's historically low or zero levels by 76 percent but fall below the 2019-2023 inflation-adjusted average by 81 percent. Areas between Cape Falcon and Humbug Mountain account for most of the projected salmon landings and associated income impacts south of Cape Falcon. The near complete closure of commercial Chinook harvest south of Humbug Mountain in 2024 would largely continue with all areas projected to see very low or zero income impacts from commercial salmon fishing. Relative to 2024 and the 2019-2023 inflation-adjusted average, increases in commercial fishery income impacts are projected overall between Cape Falcon and Humbug Mountain. Areas south of Humbug Mountain would generally see increases in commercial fishery income impacts compared with 2024 but decreases are projected for all areas south of Humbug Mountain compared with the 2019-2023 inflation-adjusted average. Based on historical landings patterns, small amounts of commercial landings and associated income impacts are projected to occur in the California KMZ but not in the Oregon KMZ area.

Income impacts from recreational fisheries north of Cape Falcon are projected to be 14 percent above last year and 19 percent above the 2019-2023 inflation-adjusted average.

Total recreational fishery income impacts south of Cape Falcon are projected to be 78 percent above last year but 53 percent below the 2019-2023 inflation-adjusted average. Due to the complete closure of recreational Chinook harvest in California in 2024, all areas south of the Oregon/California Border are projected to see very slight increases in recreational fishery income impacts compared with last year's historically low or zero levels. However, relative to the 2019-2023 inflation-adjusted average, large decreases in recreational fishery income impacts are projected for all areas south of Humbug Mountain.

Under Alternative I overall coastwide income impacts for combined non-Indian commercial and recreational ocean salmon fisheries are projected to be 46 percent above last year's level but 44 percent below the 2019-2023 inflation-adjusted average. Combined income impacts north of Cape Falcon are projected to be 29 percent above last year's level and 50 percent above the 2019-2023 inflation-adjusted average. In aggregate, combined income impacts south of Cape Falcon are projected to be 77 percent above last year's level but 69 percent below the 2019-2023 inflation-adjusted average. Due to the near complete closure of commercial and recreational Chinook harvest south of the Oregon/California border in 2024, combined income impacts in all areas in California are projected to be at least somewhat above last year's levels. However, relative to the 2019-2023 inflation-adjusted average, large decreases in combined commercial and recreational income impacts are projected for all areas south of Humbug Mountain.

Tribal ocean fisheries north of Cape Falcon would be allocated 55,000 Chinook and 50,000 coho for ocean area harvest under Alternative I. This compares with the actual 2024 allocation of 42,500 Chinook and 42,500 coho.

#### 8.2.2 Alternative II

Under Alternative II, total coastwide community personal income impacts from commercial salmon fisheries are projected to be 49 percent greater than last year's (2024) level but 61 percent below the recent (2019-2023) inflation-adjusted average. Coastwide income impacts from recreational fishing are projected to be 28 percent above last year's level but 33 percent below the 2019-2023 inflation-adjusted average.

Commercial fishery income impacts north of Cape Falcon are projected to be 43 percent above last year and 117 percent above the 2019-2023 inflation-adjusted average.

South of Cape Falcon, total commercial fishery income impacts are projected to exceed last year's historically low or zero levels by 61 percent but fall below the 2019-2023 inflation-adjusted average by 83 percent. Areas between Cape Falcon and Humbug Mountain account for nearly half of the projected salmon landings and associated income impacts south of Cape Falcon. The near complete closure of commercial Chinook harvest south of Humbug Mountain in 2024 would largely continue in all areas (with the exception of Point Arena to Pigeon Point), with very low or zero projected income impacts from commercial salmon fishing in those areas. Relative to the 2019-2023 inflation-adjusted average, decreases in commercial fishery income impacts are projected for all areas south of Cape Falcon. Based on historical landings patterns, very small amounts of commercial landings and associated income impacts are projected to occur in both the California KMZ and Oregon KMZ areas.

Income impacts from recreational fisheries north of Cape Falcon are projected to be 9 percent above last year and 14 percent above the 2019-2023 inflation-adjusted average.

Total recreational fishery income impacts south of Cape Falcon are projected to be 64 percent above last year but 56 percent below the 2019-2023 inflation-adjusted average. Due to the complete closure of recreational Chinook fishing in California in 2024, all areas south of the Oregon/California border are projected to see very slight increases in recreational fishery income impacts compared with last year's historically low or zero levels. However relative to the 2019-2023 inflation-adjusted average, large decreases in recreational fishery income impacts are projected for all areas south of Humbug Mountain.

Under Alternative II overall coastwide income impacts for combined non-Indian commercial and recreational ocean salmon fisheries are projected to be 35 percent above last year's level but 48 percent below the 2019-2023 inflation-adjusted average. Combined income impacts north of Cape Falcon are projected to be 20 percent above last year's level and 40 percent above the 2019-2023 inflation-adjusted average. In aggregate, combined income impacts south of Cape Falcon are projected to be 63 percent above last year's level but 72 percent below the 2019-2023 inflation-adjusted average. Due to the near complete closure of commercial and recreational Chinook harvest south of the Oregon/California border in 2024, combined income impacts in all areas in California are projected to be above last year's levels. However, relative to the 2019-2023 inflation-adjusted average, large decreases in combined commercial and recreational income impacts are projected for all areas south Humbug Mountain.

Tribal ocean fisheries north of Cape Falcon would be allocated 45,000 Chinook and 37,500 coho for ocean area harvest under Alternative II. This compares with the actual 2024 allocation of 42,500 Chinook and 42,500 coho.

#### 8.2.3 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 (2024) level and 76 percent below the recent (2019-2023) inflation-adjusted average. Coastwide income impacts from recreational fishing are projected to be 15 percent below last year's level and 55 percent below the 2019-2023 inflation-adjusted average.

Commercial fishery income impacts north of Cape Falcon are projected to be 15 percent above last year and 74 percent above the 2019-2023 inflation-adjusted average. This is the only area projected to see increases relative both to last year and the 2019-2023 inflation-adjusted average.

South of Cape Falcon, total commercial fishery income impacts are projected to fall below last year's historically low or zero levels by 43 percent and below the 2019-2023 inflation-adjusted average by 94 percent. Areas between Cape Falcon and Humbug Mountain account for nearly all the projected salmon landings and associated income impacts south of Cape Falcon. The near complete closure of commercial Chinook harvest south of Humbug Mountain in 2024 would continue in all areas, with near zero projected income impacts from commercial salmon landings in all areas south of Humbug Mountain.

Income impacts from recreational fisheries north of Cape Falcon are projected to be 18 percent below last year and 14 percent below the 2019-2023 inflation-adjusted average.

Total recreational fishery income impacts south of Cape Falcon are projected to be 9 percent below last year and 76 percent below the 2019-2023 inflation-adjusted average. As in 2024, all areas south of the Oregon/California border are projected to see zero recreational fishery income impacts resulting in essentially 100 percent decreases in recreational fishery income impacts relative to the 2019-2023 inflation-adjusted average projected for all areas south of Humbug Mountain.

Under Alternative III overall coastwide income impacts for combined non-Indian commercial and recreational ocean salmon fisheries are projected to be 12 percent below last year's level and 66 percent

below the 2019-2023 inflation-adjusted average. Combined income impacts north of Cape Falcon are projected to be 7 percent below last year's level but 9 percent above the 2019-2023 inflation-adjusted average. In aggregate, combined commercial and recreational income impacts south of Cape Falcon are projected to be 21 percent below last year's level and 86 percent below the 2019-2023 inflation-adjusted average. The near complete closure of commercial and recreational salmon fishing south of the Oregon/California border in 2024 would continue in all areas in California, with essentially zero projected income impacts from commercial or recreational salmon fishing in those areas. Essentially no commercial landings or recreational trips or associated income impacts are projected to occur in the California KMZ and Oregon KMZ areas.

Tribal ocean fisheries north of Cape Falcon would be allocated 35,000 Chinook and 20,000 coho for ocean area harvest under Alternative III. This compares with the actual 2024 allocation of 42,500 Chinook and 42,500 coho.

# 8.2.4 Summary of Impacts on the Socioeconomic Environment

Coastwide combined commercial and recreational salmon fishery income impacts under the Alternatives are projected to range from 46 percent above (Alternative I) to 12 percent below (Alternative III) last year's (2024) historically low levels. Projected levels under the Alternatives also represent reductions relative to the recent (2019-2023) inflation-adjusted averages of 44 percent under Alternative II, and 66 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 2019-2023 inflation-adjusted average by at least 57 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 2019-2023 inflation-adjusted average under all three Alternatives. All areas south of Cape Falcon with the exception of Humbug Mountain to the Oregon/California border would see some increase in commercial fisheries income impacts compared with last year under Alternative I and, with the additional exception of South of Pigeon Point, also under Alternative II. With respect to the 2019-2023 inflation-adjusted average, reductions are projected for all areas south of Cape Falcon under all three Alternatives (with the exception of Cape Falcon to Humbug Mountain under Alternative I). 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 (36 percent) and Alternative II (28 percent), but below last year by 15 percent under Alternative III, and below the 2019-2023 inflation-adjusted average by at least 29 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 (14 percent) and Alternative II (9 percent) but below last year under Alternative III (18 percent). Compared with the 2019-2023 inflation-adjusted average, areas north of Cape Falcon are projected to see increases in recreational salmon fisheries income impacts under Alternative I (19 percent) and Alternative II (14 percent) but fall below the recent average by 14 percent under Alternative III. The combined areas south of Cape Falcon would see increases in recreational fisheries income impacts compared with last year under Alternative I (78 percent) and Alternative II (64 percent),but fall below last year's value by 9 percent under Alternative III. All areas south of Humbug Mountain 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 management areas north

of Humbug Mountain, between 40°10' N. Lat. and Point Arena, and south of Pigeon Point. Projections for Alternative II show the most positive or least negative combined commercial and recreational fisheries income impacts for management areas between the Oregon/California border and 40°10' N. Lat., and between Point Arena and Pigeon Point. Projections for Alternative III include the least positive or most negative combined commercial and recreational fisheries income impacts coastwide and for all areas. All commercial and recreational ocean salmon fisheries south of Humbug Mountain would essentially be closed under Alternative III.

Under the three action Alternatives, ocean tribal fisheries occurring north of Cape Falcon would be allocated a maximum of 55,000 Chinook and 50,000 coho under Alternative I, 45,000 Chinook and 37,500 coho under Alternative II, and 35,000 Chinook and 20,000 coho under Alternative III. These compare with the no-action Alternative, which is the actual 2024 allocation of 42,500 Chinook and 42,500 coho.

# 8.3 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 (see, for example, NMFS 2024; NMFS 2023). 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 EAs 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 2025 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 EAs 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 2025 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 (NMFS 2022). Previous EAs 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 2025 ocean salmon regulation Alternatives include Pacific halibut landing restrictions within ranges considered 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 2025 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.

#### 8.4 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 (89 FR 12257, February 16, 2024). 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 2025 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.

# 8.5 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 consistent with applicable BiOps for listed ESUs of these species as listed in Chapter 4 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. 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 (<u>SRKW Workgroup 2020</u>) presented at the Council's March 2020 meeting, provides information on SRKW and their predator-prey interaction with Pacific salmon.

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 BiOp 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 (NMFS 2021a). 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 (NMFS 2021b).

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 prefishing Chinook salmon abundance in the area North of Cape Falcon (1994-1996, 1998-2000, and 2007). The current Chinook abundance threshold is 623,000 Chinook.

The annual management measures for Council salmon fisheries are developed to be consistent with the Salmon FMP. In 2025, the projected pre-fishing Chinook abundance in the north of Cape Falcon area is 928,800, which is greater than the threshold value (Table 5).

## 8.6 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.

# 8.7 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.

# 8.8 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.

# 8.9 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. For fisheries north of the Oregon/California border, the Alternatives for 2025 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. For California fisheries, under Alternatives I and II seasons were planned to limit the risk to human health or safety at sea by spreading small openers out across the season and by/or by coinciding opener dates across management areas to avoid concentrating fishing effort in one management area. Under Alternative III for California, the fishery would be closed so there is not expected to be any significant increase in the risk to human health or safety at sea under Alternative III.

# 8.10 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.

# 8.10.1 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 8.0 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.

# 8.10.2 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 boundaries also includes internal waters (e.g., Puget Sound) and rivers that salmon use to migrate towards their spawning grounds.

# 8.10.3 Temporal Boundaries

The temporal scope of past and present actions considered in this analysis for the affected resources is primarily focused on actions that have occurred after framework FMP implementation (1984). The temporal scope of future actions considered 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.

# 8.10.4 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 consultation standards 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 consistent with the requirements of the FMP.

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 poor 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 coho salmon that will contribute to 2025 harvest and escapement would experience generally average survival, while Chinook have encountered a mix of good and intermediate conditions (for salmon returning to the Columbia Basin). Stoplight charts for SRFC and Central Valley Spring Chinook indicate the potential for moderate returns. For Klamath River fall Chinook, indicator-base outlooks are consistent with low returns in 2025.

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.

# 8.10.5 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.

## 8.10.5.1 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 the various objectives and requirements described in the FMP. 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 northern fisheries managed according to 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 not significant.

### 8.10.5.2 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. The framework for managing the fisheries, including exploitation limits, escapement goals, control rules and other measures to limit effects on listed species, has been considered in BiOps and determined not likely to jeopardize listed species. NMFS provides annual guidance applying those limits to annual 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. The Council also implements Amendment 21 to the FMP to limit the impact of the fisheries on SRKW. Therefore, the magnitude and significance of cumulative effects, including the proposed action on ESA listed species are expected to be not significant.

# 8.10.5.3 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 (<u>PFMC and NMFS 2014</u>) and in the EIS for Puget Sound Chinook Harvest Resource Management Plan (<u>NMFS 2004</u>). Council fisheries are designed to provide escapement of salmon to provide for natural spawning and transport of marine derived nutrients.

## 8.10.5.4 Socioeconomic Environment

Each year the Council evaluates the socioeconomic impact of past salmon fisheries in the stock assessment and fishery evaluation document (e.g., <u>PFMC 2025a</u>) 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 or negative, and not significant.

### 9.0 CONCLUSION

This analysis has identified no significant impacts that would result from the 2025 ocean salmon regulation Alternatives, from final regulations selected from within the range presented in these Alternatives.

## 10.0 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 13-18, 2024: Pacific Fishery Management Council meeting, Costa Mesa, CA.

January 21-24, 2025: Salmon Technical Team meeting (Review preparation), Portland OR.

February 12-13: California Fish and Game Commission meeting, Sacramento, CA.

February 18-21: Salmon Technical Team meeting (Preseason Report I preparation), Portland, OR.

February 26: California Department of Fish and Wildlife public meeting, on-line.

February 28: Oregon Ocean Salmon public meeting, hybrid meeting in Newport, OR. February 28: Washington Department of Fish and Wildlife hybrid public meeting.

March 4-11: Washington Department of Fish and Whathe hybrid public meeting.

Pacific Fishery Management Council meeting, in Vancouver, WA.

March 19: North of Falcon hybrid meeting No 1. Discussion of management objectives and

proposed fishery plans for sport and commercial fisheries in Puget Sound.

March 24-25: 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 25: North of Falcon hybrid meeting No 2 – Statewide fishery proposals, including

Puget Sound.

April 11-15: **Pacific Fishery Management Council meeting**, in San Jose, CA.

April 16-17: California Fish and Game Commission meeting, Sacramento, CA.

April 18: Oregon Fish and Wildlife Commission meeting, Winchester Bay, 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

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TABLE 1. 2025 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council adopted. (Page 1 of 14)

	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE I ALTERNATIVE II	
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon
Supplemental Management Information	Supplemental Management Information	Supplemental Management Information
Model #: Coho-2510, Chinook-1025	Model #: Coho-2511, Chinook-1125	Model #: Coho-2512, Chinook-1225
Overall non-Indian TAC: 122,500 Chinook and 120,000 coho marked with a healed adipose fin clip (marked).	Overall non-Indian TAC: 112,500 Chinook and 115,000 coho marked with a healed adipose fin clip (marked).	Overall non-Indian TAC: 92,500 Chinook and 85,000 coho marked with a healed adipose fin clip (marked).
Non-Indian commercial troll TAC: 63,500 Chinook and 19,200 marked coho.	Non-Indian commercial troll TAC: 57,500 Chinook and 18,400 marked coho.	Non-Indian commercial troll TAC: 46,250 Chinook and 13,600 marked coho.
3. Trade: May be considered at the April Council meeting.	3. Trade: Same as Alternative 1.	3. Trade: Same as Alternative 1.
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.	4. Same as Alternative 1.	4. Same as Alternative 1.

Preseason II Table 1

A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
North of Cape Falcon	North of Cape Falcon	North of Cape Falcon	
U.S./Canada Border to Cape Falcon  May 1-15. See 2024 management measures, which are subject to inseason action and the 2025 season described below.	U.S./Canada Border to Cape Falcon     May 1-15. See 2024 management measures, which are subject to inseason action and the 2025 season described below.	U.S./Canada Border to Cape Falcon  May 1-15. See 2024 management measures, which are subject to inseason action and the 2025 season described below.	
<ul> <li>May 16 through the earlier of June 29, or 42,300 Chinook.</li> </ul>	May 16 through the earlier of June 29, or 38,300 Chinook.	May 16 through the earlier of June 29, or 23,125 Chinook.	
Catch limits in place for the following areas (C.8):	Catch limits in place for the following areas (C.8):	Catch limits in place for the following areas (C.8):	
U.S./Canada border to Queets River - No more than 11,190 Chinook.	U.S./Canada border to Queets River - No more than 10,180 Chinook.	U.S./Canada border to Queets River - No more than 6,110 Chinook.	
Leadbetter Pt. to Cape Falcon - No more than 7,430 Chinook.	Leadbetter Pt. to Cape Falcon - No more than 6,780 Chinook.	Leadbetter Pt. to Cape Falcon - No more than 4,060 Chinook.	
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.6, C.8).	Same as Alternative 1.	Same as Alternative 1.	
U.S./Canada border to Queets River - No landing limit.	U.S./Canada border to Queets River - 100 Chinook per vessel per landing week.	U.S./Canada border to Queets River - 60 Chinook per vessel per landing week.	
Queets River to Leadbetter Pt No landing limit.	Queets River to Leadbetter Pt 150 Chinook per vessel per landing week.	Queets River to Leadbetter Pt 100 Chinook per vessel per landing week.	
Leadbetter Pt. to Cape Falcon - 100 Chinook per vessel per landing week.	Leadbetter Pt. to Cape Falcon - 80 Chinook per vessel per landing week.	Leadbetter Pt. to Cape Falcon 60 Chinook per vessel per landing week.	
Open seven days per week (C.1). 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).	Same as Alternative 1.	Same as Alternative 1.	
If the Chinook quota is exceeded, the excess will be deducted from the all-salmon season (C.8).	Same as Alternative 1.	Same as Alternative 1.	
In 2026, the season will open May 1 consistent with all preseason regulations in place in this area and subareas during May 16-June 29, 2025, 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 2026 meetings	In 2026, same as Alternative 1.	In 2026, same as Alternative 1.	

TABLE 1. 2025 Commercial troll management Alternatives f	for non-Indian ocean salmon fisheries – Council adopted. (Page	3 of 14)		
A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III		
U.S./Canada Border to Cape Falcon (continued)  July 1 through the earlier of September 30, or 21,200 Chinook or 19,200 marked coho (C.8).	U.S./Canada Border to Cape Falcon (continued)  July 1 through the earlier of September 30, or 19,200 Chinook or 18,400 marked coho. (C.8).	U.S./Canada Border to Cape Falcon (continued)  July 1 through the earlier of September 22, or 23,125 Chinook or 13,600 marked coho (C.8).		
Open seven days per week. 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).	Same as Alternative 1.	Same as Alternative 1.		
Landing and possession limit of 150 marked coho per vessel per landing week (ThursWed.).	Landing and possession limits: <u>July 1-9</u> : 120 Chinook and 100 marked coho per vessel for the open period; <u>Beginning July 10</u> : 100 Chinook and 100 marked coho per vessel per landing week (ThursWed.).	Landing and possession limits: <u>July 1-9</u> : 60 Chinook and 100 marked coho per vessel for the open period; <u>Beginning July 10</u> : 50 Chinook and 50 marked coho per vessel per landing week (ThursWed.).		
Landing limits will be evaluated weekly, inseason (C.1, C.8.f).	Same as Alternative 1.	Same as Alternative 1.		

#### For all commercial troll fisheries north of Cape Falcon:

Mandatory closed areas include Salmon Troll Yelloweye Rockfish Conservation Area, Cape Flattery, and Columbia Control Zone. (C.5.a, C.5.b, C.5.d).

Vessels must land and deliver their salmon within 24 hours of any closure of this fishery (C.6). Vessels may not land fish east of the Sekiu River or east of Tongue Point, Oregon.

### During any single trip, only one side of the Leadbetter Point line may be fished (C.11).

Vessels fishing for 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 WDFW 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.

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 (C.11); Washington permitted vessels may also land all species of fish north of Leadbetter Point. <u>For delivery to Washington ports north of Leadbetter Point</u>, vessels must notify WDFW 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. 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.).

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 (C.11). 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).

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).

Vessels fishing in a subarea north of Cape Falcon with a higher limit may transit through and land in a subarea with a lower limit. Prior to crossing the subarea line at Leadbetter Point or Queets River, vessels must notify WDFW at 360-249-1215 with area fished, total Chinook, coho, and halibut catch aboard, and destination with approximate time of delivery (C.11).

	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	
Sacramento River fall Chinook spawning escapement of 141,316 hatchery and natural area adults.	Sacramento River fall Chinook spawning escapement of 127,435 hatchery and natural area adults.	Sacramento River fall Chinook spawning escapement of 156,286 hatchery and natural area adults.	
2. Sacramento Index exploitation rate of 14.7%.	2. Sacramento Index exploitation rate of 23.1%.	2. Sacramento Index exploitation rate of 5.7%.	
Klamath River recreational fishery allocation: 532 adult Klamath River fall Chinook.	Klamath River recreational fishery allocation: 148     adult Klamath River fall Chinook.	Klamath River recreational fishery allocation: 7 adult Klamath River fall Chinook.	
Klamath tribal allocation: 1,384 adult Klamath River fall Chinook.	Klamath tribal allocation: 989 adult Klamath River fall Chinook.	Klamath tribal allocation: 44 adult Klamath River fall Chinook.	
5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 58% /42%.	5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 57%/43%.	5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 0% /100%.	
6. Overall commercial troll coho TAC: 5,000.	6. Overall commercial troll coho TAC: 5,000.	6. Overall commercial troll coho TAC: 7,500.	
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.	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.	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.	
Cape Falcon to Heceta Bank Line  June 1-30;  July 16-31.	Cape Falcon to OR/CA Border  April 15-May 15. See 2024 management measures and 2025 inseason actions. Dates may be subject to further inseason action.  May 16-May 31.	Cape Falcon to Heceta Bank Line  April 15-May 15. See 2024 management measures and 2025 inseason actions. Dates may be subject to further inseason action.  May 16-31;  June 15-30.	
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).	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).	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).	
	In 2026, the season will open March 15 for all salmon except coho. 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. Gear restrictions (C.2, C.3) same as in 2025. This opening could be modified following Council review at its March 2026 meeting (C.8).at its March 2026 meeting (C.8).		

Preseason II Table 1

TABLE 1. 2025 Commercial troll management Alternatives	TABLE 1. 2025 Commercial troll management Alternatives for non-Indian ocean salmon fisheries – Council adopted. (Page 5 of 14)  A. SEASON ALTERNATIVE DESCRIPTIONS			
A. SEASON ALTERNATIVE DESCRIPTIONS  ALTERNATIVE II ALTERNATIVE III ALTERNATIVE III				
Cape Falcon to Humbug Mt.	Cape Falcon to Humbug Mt.	Cape Falcon to Humbug Mt.		
<ul> <li>April 10-May 15. See 2024 management measures and 2025 inseason actions. Dates may be subject to further inseason action.</li> <li>May 16-31;</li> <li>September 1-October 31.</li> </ul>	<ul> <li>June 15-30;</li> <li>July 26-30;</li> <li>September 1-October 31.</li> </ul>	September 1-October 31		
Open seven days per week. All salmon except coho (C.4, C.7), except during the non-mark-selective coho fishery as described below (C.5). Chinook minimum size limit of 28 inches total length, coho minimum size limit of 16 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).	Same as Alternative 1.	Same as Alternative 1.		
Beginning September 1, all salmon until the earlier of September 30 or a 5,000 non-mark-selective coho quota met. If the coho quota is met prior to September 30, then all salmon except coho season continues (C.4, C.7). No more than 75 coho per vessel per landing week when retention allowed and no more than 75 Chinook allowed per vessel per landing week (ThursWed.). Vessel limits may be modified inseason.	Beginning September 1, all salmon until the earlier of September 30 or a 5,000 non-mark-selective coho quota met. If the coho quota is met prior to September 30, then all salmon except coho season continues (C.4, C.7). No more than 50 coho per vessel per landing week when retention allowed and no more than 75 Chinook allowed per vessel per landing week (ThursWed.). Vessel limits may be modified inseason.	Beginning September 1, all salmon until the earlier of September 30 or a 7,500 non-mark-selective coho quota met. If the coho quota is met prior to September 30, then all salmon except coho season continues (C.4, C.7). No more than 25 coho per vessel per landing week when retention allowed and no more than 75 Chinook allowed per vessel per landing week (ThursWed.). Vessel limits may be modified inseason.		
Oregon State regulations require all fishers landing coho salmon into Oregon from any fishery between Cape Falcon, OR and Humbug Mountain 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 <a href="mailto:nfalcon.trollreport@odfw.oregon.gov">nfalcon.trollreport@odfw.oregon.gov</a> (C.11.). Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery.	Same as Alternative 1.	Same as Alternative 1.		
In 2026, the season will open March 15 for all salmon except coho. 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. Gear restrictions (C.2, C.3) same as in 2025. This opening could be modified following Council review at its March 2026 meeting (C.8).	Same as Alternative 1.	Same as Alternative 1.		

TABLE 1. 2025 Commercial troll management Alternatives	' <u>'</u>	ed. (Page 6 of 14)
	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
Humbug Mt. to OR/CA Border.  Closed.		Humbug Mt. to OR/CA Border.  April 15-30. See 2024 management measures and 2025 inseason actions. Dates may be subject to further inseason action (C.9.a).  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
In 2026, 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 2026 meeting (C.8).		their salmon in the State of Oregon. See gear restrictions and definitions (C.2, C.3).  In 2026, 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 2025. This opening could be modified following Council review at its March 2026 meeting (C.8).

	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
OR/CA Border to Humboldt South Jetty (California KMZ)  • Closed.	OR/CA Border to Humboldt South Jetty (California KMZ)  • August 1-29 or a 550 Chinook quota.	OR/CA Border to Humboldt South Jetty (California KMZ)  • Closed.
	Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f).  Open five days per week (FriTue.). 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.  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)  Inseason action may be considered when total harvest is approaching the quota. Fishery will close upon reaching the quota.	
In 2026, 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 20 Chinook per vessel per week (C.8.f). Open five days per week (FriTue.). 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). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). 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 and/or April 2026 meetings.	In 2026, Same as Alternative 1.	In 2026, Same as Alternative 1.
Humboldt South Jetty to Latitude 40°10' N.  Closed.	Humboldt South Jetty to Latitude 40°10' N.  • Closed.	Humboldt South Jetty to Latitude 40°10' N.  • Closed.

	A CEACON ALTERNATIVE DESCRIPTIONS	· · · · · · · · · · · · · · · · · · ·
ALTERNATIVE !	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III
<ul> <li>Latitude 40°10' N. to Point Arena (Fort Bragg)</li> <li>May 16-20; 23-27; 30-31 (C.9.b), or attainment of a harvest limit of 4,500 Chinook.</li> </ul>	<ul> <li>Latitude 40°10' N. to Point Arena (Fort Bragg)</li> <li>August 1-29 (C.9.b), or attainment of a 2,100 Chinook quota.</li> </ul>	Latitude 40°10' N. to Point Arena (Fort Bragg)  • Closed.
Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f).	Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f). Open five days per week (FriTue.).	
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).	Same as Alternative 1.	
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.11). Electronic Fish tickets must be submitted within 24 hours of landing (C.12).	Same as Alternative 1.	
Inseason action may be considered when total harvest is approaching the harvest limit. Fishery will close upon reaching the harvest limit.	Inseason action may be considered when total harvest is approaching the quota. Fishery will close upon reaching the quota.	
In 2026, the season opens 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 2025 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.	In 2026, Same as Alternative 1.	In 2026, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.

A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
Pt. Arena to Pigeon Pt. (San Francisco)  May 16-20; 23-27; 30-31 (C.9.b), or attainment of a harvest limit of 2,500 Chinook.	Pt. Arena to Pigeon Pt. (San Francisco)  • August 1-29 (C.9.b), or attainment of a 4,200 Chinook quota.	Pt. Arena to Pigeon Pt. (San Francisco)  Closed.	
Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f).	Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f). Open five days per week (FriTue.).		
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). 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.11). Electronic Fish tickets must be submitted within 24 hours of landing (C.12). Inseason action may be considered when total harvest is approaching the harvest limit. Fishery will close upon reaching the harvest limit.	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). 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.11). Electronic Fish tickets must be submitted within 24 hours of landing (C.12). Inseason action may be considered when total harvest is approaching the quota. Fishery will close upon reaching the quota.		
In 2026, the season opens 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 2025 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.	In 2026, Same as Alternative 1.	In 2026, the season opens 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 2022 (C.2, C.3) Harvest guidelines and vessel-based landing and possessior limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.	

TABLE 1. 2025 Commercial troll management Alternatives for r	non-Indian ocean salmon fisheries – Council adopted. (Page 10	of 14)		
A. SEASON ALTERNATIVE DESCRIPTIONS  ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III				
ALTERNATIVET	Point Reyes to Point Sur (San Francisco and Monterey	ALTERNATIVE III		
	Subarea)			
	September 1-30, or attainment of an 8,000 Chinook quota (C.9.b).			
	Landing and possession limit of 15 Chinook per vessel per landing week (C.8.f). Open five days per week (FriTue.).			
	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 26 inches total length (B, C.1). All salmon caught in this area must be landed within the area, within 24 hours of any closure of the fishery (C.6, C.11). Electronic Fish tickets must be submitted within 24 hours of landing (C.12). Inseason action may be considered when total harvest is approaching the			
	quota. Fishery will close upon reaching the quota.			
<ul> <li>Pigeon Point to U.S./Mexico Border (Monterey)</li> <li>May 16-20; 23-27; 30-31 (C.9.b), or attainment of a harvest limit of 3,500 Chinook.</li> </ul>	Pigeon Point to U.S./Mexico Border (Monterey)  August 1-29 (C.9.b), or attainment of the 4,000 Chinook quota.	Pigeon Point to U.S./Mexico Border (Monterey)  Closed.		
Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f).	Landing and possession limit of 10 Chinook per vessel per landing week (C.8.f). Open five days per week (FriTue.).			
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).	Same as Alternative 1.			
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.11). Electronic Fish tickets must be submitted within 24 hours of landing (C.12).	Same as Alternative 1.			
Inseason action may be considered when total harvest is approaching the harvest limit. Fishery will close upon reaching the harvest limit.	Inseason action may be considered when total harvest is approaching the quota. Fishery will close upon reaching the quota.			
In 2026, the season opens 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 2025 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.	In 2026, Same as Alternative 1.	In 2026, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.		

TABLE 1. 2025 Commercial troll management Alternatives for non-Indian ocean salmon fisheries - Council adopted. (Page 11 of 14)

#### A. SEASON ALTERNATIVE DESCRIPTIONS

When the fishery is closed from Humbug Mountain to the OR/CA Border 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).

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).

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

	Chir	iook	Co	ho	
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
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	-	-	-	27
Latitude 40°10' N. to Pt. Arena	27	-	-	-	27
Pt. Arena to Pigeon Pt.	27	-	-	-	27
Pt. Reyes to Pt San Pedro	26	-	-	-	26
Pigeon Pt. to U.S./Mexico Border	27	-	-	-	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 prohibited 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.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°16.50' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' 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 Humbug Mt. (50 CFR 660.71 (o) (12)-(62)), when in place.

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

C.6. <u>Notification When Unsafe Conditions Prevent Compliance with Regulations</u>: 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 (81.3 cm) in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on.
  - b. During the salmon troll season, incidental harvest is allowed if quota is available. 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-tribal 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 2025, prior to any 2025 inseason action, will be in effect when incidental Pacific halibut retention opens on April 1, 2025 unless otherwise modified by inseason action at the March 2025 Council meeting.
  - d. At the 2025 March meeting, the Council considered the following options for public review:

    Beginning May 16, 2025, through the end of the 2025 salmon troll fishery, and beginning April 1, 2026, until modified through inseason action or superseded by the 2026 management measures, permit holders may land or possess no more than one Pacific halibut per two 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 40 halibut may be possessed or landed per trip.

Option III - no more than 30 halibut may be possessed or landed per trip.

Option IV – 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:

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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°01' 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.;

and connecting back to 48°18' N. lat.; 125°18' W. long.
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- 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:
  - a. 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.
  - b. 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.
  - c. 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.
  - d. 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.
  - e. 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.
  - f. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.
  - g. Deviations from the allocation of allowable ocean harvest of coho salmon in the area south of Cape Falcon may be allowed to meet consultation standards for ESA-listed stocks (FMP 5.3.2). Therefore, if fisheries are constrained to meet ESA-conservation objectives as described in the preamble to the rule, then any rollovers resulting in a deviation from the south of Cape Falcon coho allocation schedule would fall underneath this exemption.
- C.9. State Waters Fisheries: Consistent with Council management objectives:
  - a. The State of Oregon may establish additional late-season fisheries in state waters.
  - b. The State of California may establish limited fisheries in selected state waters.
  - c. 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: 2024 West Coast federal salmon regulations, Chapter 5

https://www.federalregister.gov/documents/2024/05/21/2024-11046/fisheries-off-west-coast-states-west-coast-salmon-fisheries-2024-specifications-and-management

U.S. / Canada border	49°00′00″ N lat.	Humboldt South Jetty, CA	40°45′53″ N lat.
Cape Flattery, WA	48°23′00″ N lat.	40°10' line (near Cape Mendocino, CA)	40°10′00" N lat.
Cape Alava, WA	48°10′00″ N lat.	Horse Mountain, CA	40°05′00″ N lat.
Queets River, WA	47°31′42″ N lat.	Point Arena, CA	38°57′30″ N lat.
Leadbetter Point, WA	46°38′10″ N lat.	Point Reyes, CA	37°59′44″ N lat.
Cape Falcon, OR	45°46′00″ N lat.	Point San Pedro, CA	37°35′40″ N lat.
South end Heceta Bank line, OR	43°58′00″ N lat.	Pigeon Point, CA	37°11′00" N lat.
Humbug Mountain, OR	42°40′30″ N lat.	Point Sur, CA	36°18′00″ N lat.
Oregon-California border	42°00′00" N lat.	Point Conception, CA	34°27′00" N lat.

C.12. <u>California 24-hour reporting requirements</u>: 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 <a href="https://etix.psmfc.org">https://etix.psmfc.org</a>

TABLE 2. 2025 Recreational management Alternatives for non-Indian ocean salmon fisheries - Council adopted. (Page 1 of 11)

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	
<ol> <li>Overall non-Indian TAC: 122,500 Chinook and 120,000 coho marked with a healed adipose fin clip (marked).</li> <li>Recreational TAC: 59,000 Chinook and 100,800 marked coho; all retained coho must be marked.</li> <li>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.</li> <li>Trade: May be considered at the April Council meeting.</li> <li>No Area 4B add-on fishery.</li> <li>Buoy 10 fishery opens August 1 with an expected landed catch of 20,000 marked coho in August and September.</li> <li>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.</li> </ol>	1. Overall non-Indian TAC: 112,500 Chinook and 115,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 55,000 Chinook and 96,600 marked coho; all retained coho must be marked. 3. Same as Alternative 1. 4. Trade: Same as Alternative 1. 5. Same as Alternative 1. 6. Buoy 10 fishery opens August 1 with an expected landed catch of 25,000 marked coho in August and September. 7. Same as Alternative 1.	1. Overall non-Indian TAC: 92,500 Chinook and 85,000 coho marked with a healed adipose fin clip (marked). 2. Recreational TAC: 46,250 Chinook and 71,400 marked coho; all retained coho must be marked. 3. Same as Alternative 1.  4. Trade: Same as Alternative 1 5. Same as Alternative 1. 6. Buoy 10 fishery opens August 1 with an expected landed catch of 30,000 marked coho in August and September. 7. Same as Alternative 1.	

Preseason II

TABLE 2. 2025 Recreational management Alternatives for non-Indian ocean salmon fisheries – Council adopted. (Page 2 of 11)			
	A. SEASON ALTERNATIVE DESCRIPTIONS		
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
U.S./Canada Border to Cape Alava (Neah Bay Subarea)  June 21 through earlier of September 30, or 10,480 marked coho subarea quota, with a subarea guideline of 14,330 Chinook (C.5).	U.S./Canada Border to Cape Alava (Neah Bay Subarea)  June 28 through earlier of September 14, or 10,050 marked coho subarea quota, with a subarea guideline of 13,360 Chinook (C.5).	U.S./Canada Border to Cape Alava (Neah Bay Subarea)  June 28 through earlier of September 8, or 7,420 marked coho subarea quota, with a subarea guideline of 11,230 Chinook (C.5).	
Open seven days per week. All salmon except coho June 21-30, two salmon per day. Beginning July 1, all salmon, two salmon per day. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).	Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook through July 6. Beginning July 7, two Chinook allowed as part of the daily limit. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).	Open seven days per week, All salmon, two salmon per day. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).	
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).	Same as Alternative 1.	Same as Alternative 1.	
Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery.	Same as Alternative 1.	Same as Alternative 1.	
<ul> <li>Cape Alava to Queets River (La Push Subarea)</li> <li>June 21 through earlier of September 30, or 2,620 marked coho subarea quota, with a subarea guideline of 2,400 Chinook (C.5).</li> </ul>	Cape Alava to Queets River (La Push Subarea)     June 28 through earlier of September 14, or 2,510 marked coho subarea quota, with a subarea guideline of 2,230 Chinook (C.5).	Cape Alava to Queets River (La Push Subarea)     June 28 through earlier of September 8, or 1,860 marked coho subarea quota, with a subarea guideline of 1,880 Chinook (C.5).	
Open seven days per week. All salmon except coho June 21-30, two salmon per day. Beginning July 1, all salmon, two salmon per day. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).	Open seven days per week. All salmon, two salmon per day, no more than one of which may be a Chinook through July 6. Beginning July 7, two Chinook allowed as part of the daily limit. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).	Open seven days per week, All salmon, two salmon per day. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).	
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).	Same as Alternative 1.	Same as Alternative 1.	

TABLE 2. 2025 Recreational management Alternatives for non-Indian ocean salmon fisheries – Council adopted. (Page 3 of 11)  A. SEASON ALTERNATIVE DESCRIPTIONS			
A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
Queets River to Leadbetter Point (Westport Subarea)	Queets River to Leadbetter Point (Westport Subarea) The following seasons will be managed for a total subarea quota of 35,740 marked coho or subarea guideline of 22,320 Chinook (C.5).	Queets River to Leadbetter Point (Westport Subarea) The following seasons will be managed for a total subarea quota 26,420 marked coho or subarea guideline of 18,770 Chinook (C.5).	
June 21 through earlier of September 30, or 37,300 marked coho subarea quota, with a subarea guideline of 23,940 Chinook (C.5).	June 28 through August 2, or until subarea guideline/quota is met (C.5).	June 29 through July 24, or until subarea guideline/quota is met (C.5).	
Open seven days per week. All salmon except coho June 21-27, one salmon per day. Beginning June 28, 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).	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).	Open five days per week (Sun – Thur.). 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).	
of 22 mores total length (b).	August 3 through September 28, or until subarea guideline/quota is met (C.5).	July 25 through September 21 or until subarea guideline/quota is met (C.5)	
	Open five days per week (SunThurs.). 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).	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).	
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).	Same as Alternative 1.	Same as Alternative 1.	
Leadbetter Point to Cape Falcon (Columbia River Subarea)  • June 21 through the earlier of September 30, or 50,400 marked coho subarea quota, with a subarea guideline of 18,330 Chinook (C.5).	Leadbetter Point to Cape Falcon (Columbia River Subarea)  • June 25 through the earlier of September 30, or 48,300 marked coho subarea quota, with a subarea guideline of 17,090 Chinook (C.5).	Leadbetter Point to Cape Falcon (Columbia River Subarea)  • June 28 through the earlier of September 15 or 35,700 marked coho subarea quota, with a subarea guideline of 14,370 Chinook (C.5).	
Open seven days per week. All salmon except coho June 21-27, one salmon per day. Beginning June 28, 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).	Same as Alternative 1.	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).	
Columbia Control Zone closed (C.4.b). 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).	Same as Alternative 1.	Same as Alternative 1.	

Table 2

Preseason II

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		
Sacramento River fall Chinook spawning escapement of 141,316 hatchery and natural area adults.	Sacramento River fall Chinook spawning escapement of 127,435 hatchery and natural area adults.	Sacramento River fall Chinook spawning escapement of 156,286 hatchery and natural area adults.		
2. Sacramento Index exploitation rate of 14.7%.	2. Sacramento Index exploitation rate of 23.1%.	2. Sacramento Index exploitation rate of 5.7%.		
3. Sacramento River fall Chinook river recreational impacts: 6,548	Sacramento River fall Chinook river recreational impacts: 21,612	Sacramento River fall Chinook river recreational impacts: 6,548		
4. Klamath River recreational fishery allocation: 532 adult Klamath River fall Chinook.	Klamath River recreational fishery allocation: 148 adult Klamath River fall Chinook.	Klamath River recreational fishery allocation: 7 adult Klamath River fall Chinook.		
5. Klamath tribal allocation: 1,384 adult Klamath River fall Chinook.	Klamath tribal allocation: 989 adult Klamath River fall Chinook.	Klamath tribal allocation: 44 adult Klamath River fall Chinook.		
<ol> <li>Overall recreational coho TAC: 44,000 coho marked with a healed adipose fin clip (marked), and 30,000 coho in the non-mark-selective coho fishery.</li> </ol>	Overall recreational coho TAC: 42,000 coho marked with a healed adipose fin clip (marked), and 27,500 coho in the non-mark-selective coho fishery.	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.		
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.	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.	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.		
<ul> <li>Cape Falcon to Humbug Mt.</li> <li>March 15-May 15. See 2024 management measures, and 2025 inseason actions. Dates may be subject to further inseason action.</li> <li>May 16-31;</li> <li>September 1-October 31 (C.6).</li> </ul>	Cape Falcon to Humbug Mt.  March 15-April 30. See 2024 management measures, and 2025 inseason actions. Dates may be subject to further inseason action.  September 1-October 31 (C.6).	Cape Falcon to Humbug Mt.  • September 1-October 31 (C.6).		
Open seven days per week. All salmon except coho, except as provided below during the 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, coho minimum size limit of 16 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.		
Non-mark-selective coho fishery:  • September 1 through the earlier of September 30, or a 30,000 non-mark-selective coho quota (C.6). Open days may be modified inseason (C.5).	Non-mark-selective coho fishery:  • September 2 through the earlier of September 30, or a 27,500 non-mark-selective coho quota (C.6). Open days may be modified inseason (C.5).	Non-mark-selective coho fishery:  September 6 through the earlier of September 30, or a 25,000 non-mark-selective coho quota (C.6). Open days may be modified inseason (C.5).		
Beginning October 1, the fishery is only open shoreward of the 40-fathom management line (C.4.e).	Same as Alternative 1.	Same as Alternative 1.		

For Recreational Fisheries from Cape Falcon to Humbug Mt.: 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.c).

Preseason II Table 2

	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE I ALTERNATIVE II ALTERNATIVE III		
Cape Falcon to OR/CA Border.  Mark-selective coho fishery:  June 7 through the earlier of August 24, or 44,000 marked coho quota (C.6).	Cape Falcon to OR/CA Border.  Mark-selective coho fishery:  June 14 through August 24 or the Cape Falcon to OR/CA Border quota of 42,000 marked coho (C.6).	Cape Falcon to OR/CA Border.  Mark-selective coho fishery:  June 21 through August 16 or the Cape Falcon to OR/CA Border quota of 40,000 marked coho (C.6).
Open seven days per week. 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, C.1). See gear restrictions and definitions (C.2, C.3).	Same as Alternative 1.	Same as Alternative 1.
Any remainder of the mark-selective coho quota may be transferred inseason on an impact neutral basis to the September non-mark-selective coho fishery from Cape Falcon to Humbug Mountain (C.5).	Same as Alternative 1.	Same as Alternative 1.
In 2026, 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, C.1); and the same gear restrictions as in 2025 (C.2, C.3). This opening could be modified following Council review at its March 2026 meeting.	In 2026, same as Alternative 1.	In 2026, same as Alternative 1.
Humbug Mt. to OR/CA Border  May 16-June 4 (C.6).		
Open seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit 24 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).		

For Recreational Fisheries from Cape Falcon to Humbug Mt.: 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.c).

TABLE 2. 2025 Recreational management Alternatives for I	non-Indian ocean salmon fisheries – Council adopted. (Page	6 of 11)
	A. SEASON ALTERNATIVE DESCRIPTIONS	
ALTERNATIVE II ALTERNATIVE III ALTERNATIVE III		
OR/CA Border to latitude 40°10' N. (California KMZ)  June 5-8;  July 3-6;  July 31-August 3;  August 28-31 (C.6).	OR/CA Border to latitude 40°10' N. (California KMZ)  • June 5-8;  • July 3-6;  • July 31-August 3;  • August 28-31 (C.6).	OR/CA Border to latitude 40°10' N. (California KMZ)  • Closed (C.7).
Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.	Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.	
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).	Same as Alternative 1.	
Klamath Control Zone closed in August (C.4.d). See California State regulations for additional closures adjacent to the Smith, Eel, and Klamath Rivers.	Same as Alternative 1.	
In 2026, the 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March and/or April 2026 meeting.	In 2026, same as Alternative 1.	In 2026, 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 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March and/or April meeting.

TABLE 2. 2025 Recreational management Alternatives for non-Indian ocean salmon fisheries – Council adopted. (Page 7 of 11)				
A. SEASON ALTERNATIVE DESCRIPTIONS				
ALTERNATIVE I	ALTERNATIVE II ALTERNATIVE III			
Latitude 40°10' N. to Point Arena (Fort Bragg)  June 5-8;  July 3-6;  July 31-August 3;  August 28-31 (C.6).  Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.  Open seven days per week. All salmon except coho, two	Latitude 40°10' N. to Point Arena (Fort Bragg)  June 5-8;  July 3-6;  July 31-August 3;  August 28-31 (C.6).  Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.  Same as Alternative 1.	Latitude 40°10' N. to Point Arena (Fort Bragg)  • Closed (C.7).		
salmon per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).  In 2026, season opens April 4 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.	In 2026, same as Alternative 1.	In 2026, season opens April 4 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 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.		

A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE II ALTERNATIVE III ALTERNATIVE III			
Point Arena to Pigeon Point (San Francisco)	Point Arena to Pigeon Point (San Francisco)	Point Arena to Pigeon Point (San Francisco)	
• June 5-8;	• June 5-8;	Closed (C.7).	
• July 3-6;	• July 3-6;		
<ul><li>July 31-August 3;</li></ul>	July 31-August 3;		
• August 28-31 (C.6).	August 25-31 (C.6).		
Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.	Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.		
Point Reyes to Pigeon Point Subarea  • September 1-8; 29-30;  • October 1-5; 27-31 (C.6).			
Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,500 Chinook, applicable to the September and October open dates between Point Reyes and Point Sur.			
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).	Same as Alternative 1.		
In 2026, season opens April 4 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.	In 2026, same as Alternative 1.	In 2026, season opens April 4 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 2022 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.	

A. SEASON ALTERNATIVE DESCRIPTIONS			
ALTERNATIVE I	ALTERNATIVE II	ALTERNATIVE III	
Pigeon Point to U.S./Mexico Border (Monterey)  June 5-8;  July 3-6;  July 31; August 1-3;  August 28-31 (C.6).	Pigeon Point to U.S./Mexico Border (Monterey)  June 5-8;  July 3-6;  July 31; August 1-3;  August 25-31 (C.6).	Pigeon Point to U.S./Mexico Border (Monterey)  Closed (C.7).	
Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 6,500 Chinook.  Pigeon Point to Point Sur Subarea  • September 1-8; 29-30 (C.6).	Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.		
Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,500 Chinook, applicable to the September and October open dates between Point Reyes and Point Sur.  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).  In 2026, season opens April 4 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.	In 2026, same as Alternative 1.	In 2026, season opens April 4 for all salmon except coho, two salmon per day (C.1). Chinook minimum size limit of 24 inchestotal length (B); and the same gear restrictions as in 2022 (C.2 C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.	

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).

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 Latitude 40°10' N.	20	-	20
Latitude 40°10' N. to Point Arena	20	-	20
Pt. Arena to Pigeon Pt.	20	-	20
Pigeon Pt. to U.S./Mexico Border	20	-	20
_	4		

#### 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.
  - a. 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.
  - b. 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:

- a. 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.
- b. 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
- 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.
- 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).

e. Waypoints for the 40 fathom regulatory line from Cape Falcon to Humbug Mt. (50 CFR 660.71 (o) (12)-(62), when in place.

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45°46.00′ N. lat., 124°04.49′ W. long.;
                                          44°44.96′ N. lat., 124°14.39′ W. long.;
                                                                                    43°40.49′ N. lat., 124°15.74′ W. long.;
45°44.34′ N. lat., 124°05.09′ W. long.;
                                          44°43.44′ N. lat., 124°14.78′ W. long.;
                                                                                    43°38.77′ N. lat., 124°15.64′ W. long.;
45°40.64′ N. lat., 124°04.90′ W. long.;
                                          44°42.26′ N. lat., 124°13.81′ W. long.:
                                                                                    43°34.52′ N. lat., 124°16.73′ W. long.;
45°33.00′ N. lat., 124°04.46′ W. long.;
                                          44°41.68' N. lat., 124°15.38' W. long.;
                                                                                    43°28.82′ N. lat., 124°19.52′ W. long.;
45°32.27' N. lat., 124°04.74' W. long.;
                                          44°34.87' N. lat., 124°15.80' W. long.;
                                                                                    43°23.91' N. lat., 124°24.28' W. long.;
45°29.26' N. lat., 124°04.22' W. long.;
                                          44°33.74′ N. lat., 124°14.44′ W. long.;
                                                                                    43°20.83′ N. lat., 124°26.63′ W. long.;
45°20.25' N. lat., 124°04.67' W. long.;
                                          44°27.66′ N. lat., 124°16.99′ W. long.;
                                                                                    43°17.96′ N. lat., 124°28.81′ W. long.;
45°19.99' N. lat., 124°04.62' W. long.;
                                          44°19.13' N. lat., 124°19.22' W. long.;
                                                                                    43°16.75′ N. lat., 124°28.42′ W. long.;
45°17.50′ N. lat., 124°04.91′ W. long.;
                                          44°15.35′ N. lat., 124°17.38′ W. long.;
                                                                                    43°13.97′ N. lat., 124°31.99′ W. long.;
45°11.29' N. lat., 124°05.20' W. long.;
                                          44°14.38′ N. lat., 124°17.78′ W. long.;
                                                                                    43°13.72′ N. lat., 124°33.25′ W. long.;
45°05.80' N. lat., 124°05.40' W. long.;
                                          44°12.80′ N. lat., 124°17.18′ W. long.;
                                                                                    43°12.26′ N. lat., 124°34.16′ W. long.;
                                          44°09.23′ N. lat., 124°15.96′ W. long.;
                                                                                    43°10.96' N. lat., 124°32.33' W. long.;
45°05.08' N. lat., 124°05.93' W. long.;
                                          44°08.38' N. lat., 124°16.79' W. long.;
45°03.83' N. lat., 124°06.47' W. long.;
                                                                                    43°05.65′ N. lat., 124°31.52′ W. long.;
45°01.70' N. lat., 124°06.53' W. long.;
                                          44°08.30′ N. lat., 124°16.75′ W. long.;
                                                                                    42°59.66' N. lat., 124°32.58' W. long
44°58.75′ N. lat., 124°07.14′ W. long.;
                                          44°01.18' N. lat., 124°15.42' W. long.;
                                                                                    42°54.97' N. lat., 124°36.99' W. long
44°51.28′ N. lat., 124°10.21′ W. long.;
                                          43°51.61′ N. lat., 124°14.68′ W. long.;
                                                                                    42°53.81′ N. lat., 124°38.57′ W. long.;
44°49.49′ N. lat., 124°10.90′ W. long.;
                                         43°42.66′ N. lat., 124°15.46′ W. long.;
                                                                                    42°50.00' N. lat., 124°39.68' W. long.;
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- C.5. <u>Inseason Management</u>: 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.
  - f. Deviations from the allocation of allowable ocean harvest of coho salmon in the area south of Cape Falcon may be allowed to meet consultation standards for ESA-listed stocks (FMP 5.3.2). Therefore, any rollovers resulting in a deviation from the south of Cape Falcon coho allocation schedule would fall underneath this exemption.
- C.6. <u>Additional Seasons in State Territorial Waters</u>: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.
- C.7. Vessel Operation in Closed Areas with Salmon on Board:
  - a. Except as provided under C.7.b and C.7.c below, it is unlawful for a vessel to fish 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 prohibited salmon are in possession.
  - b. It is unlawful to possess a salmon species within the Oregon KMZ when the fishing for that salmon species is prohibited within the Oregon KMZ regardless of where taken.
  - c. It is unlawful to possess a salmon species within the California KMZ when the fishing for that salmon species is prohibited within the California KMZ regardless of where taken.

TABLE 3. 2025 Treaty Indian troll management Alternatives for ocean salmon fisheries – Council adopted. (Page 1 of 2)

Supplemental Management Information  1. Overall Treaty-Indian TAC: 55,000 Chinook and 50,000 coho.  2. Overall Chinook and 50,000 coho.  2. Overall Chinook and 61,000 coho chinook and 51,000 coho.  2. Overall Chinook and 62,000 coho.  2. Overall Chinook and 67,000 coho.  3. Overall Chinook and 67,000 coho.  4. Overall Chinook and 67,000 coho.  5. Overall Chinook and 67,000 coho.  5. Overall Chinook and 67,000 coho.  6. Overall Chinook and 62,000 coho.	A. SEASON ALTERNATIVE DESCRIPTIONS			
1. Overall Treaty-Indian TAC: 55,000 Chinook and 50,000 coho. 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. 3. In 2026, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2025. All catch in May 2026 applies against the 2026 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2025 meetings.  1. May 1 through the earlier of June 30 or 27,500 Chinook quota.  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).  3. In 2016, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2025 meetings.  1. Overall Treaty-Indian TAC: 35,000 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.  3. In 2026, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2025. All catch in May 2026 applies against the 2026 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2025 meetings.  1. May 1 through the earlier of June 30 or 27,500 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).  2. Overall Chinook and/or coho TiA	ALTERNATIVE I	ALTERNATIVE II ALTERNATIVE III		
Chinook and 50,000 coho.  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.  3. In 2026, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2025. All catch in May 2026 applies against the 2026 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2025 meetings.  • May 1 through the earlier of June 30 or 27,500 Chinook quota.  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).  All Salmon. See size limit (B) and other  All Salmon. See size limit (B) and other  Chinook and 37,500 coho.  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.  S. In 2026, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2025 meetings.  • May 1 through the earlier of June 30 or 27,500 Chinook quota.  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).  • July 1 through a season end date of no later than September XX (TBD), or 27,500 Chinook quota, or 50,000 coho quota.  All Salmon. See size limit (B) and other	Information	Information		
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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).  • July 1 through a season end date of no later than September XX (TBD), or 27,500 Chinook quota, or 50,000 coho quota.  All Salmon. See size limit (B) and other restrictions (C) and other restrictions (C).  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).  July 1 through a season end date of no later than September XX (TBD), or 27,500 Chinook quota, or 50,000 coho quota  All Salmon. See size limit (B) and other  All salmon. See size limit (B) and other  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).  July 1 through a season end date of no later than September XX (TBD), or 22,500 Chinook quota or 37,500 coho quota  All salmon. See size limit (B) and other				
no later than September XX (TBD), or 27,500 Chinook quota, or 50,000 coho quota.  no later than September XX (TBD), or 22,500 Chinook quota or 37,500 coho quota  no later than September XX (TBD), or 17,500 Chinook quota or 20,000 coho quota  no later than September XX (TBD), or 17,500 Chinook quota or 20,000 coho quota  All Salmon. See size limit (B) and other  All salmon. See size limit (B) and other	If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B)	If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B)	If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season (C.5). See size limit (B)	
Teathoriona (O).	no later than September XX (TBD), or 27,500 Chinook quota, or 50,000 coho quota.	no later than September XX (TBD), or 22,500 Chinook quota or 37,500 coho quota	no later than September XX (TBD), or 17,500 Chinook quota or 20,000 coho quota	

# B. MINIMUM LENGTH (TOTAL INCHES)

	Chir	nook	Col		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
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.1. <u>Tribe and Area Boundaries</u>. 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.

<u>S'KLALLAM</u> - 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.

<u>HOH</u> - 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

- 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 2025 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. <u>Inseason Management</u>: 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. 2025 Chinook and coho harvest quotas and guidelines (\*) for ocean salmon fishery management Alternatives - Council adopted.

	Chinook for Alternative			Coho for Alternative			
Fishery or Quota Designation	I	II	III	1	II	III	
	NORTH OF CAPE FALCON						
TREATY INDIAN OCEAN TROLL <sup>a/</sup>							
U.S./Canada Border to Cape Falcon (All Except Coho)	27,500	22,500	17,500	-	-	-	
U.S./Canada Border to Cape Falcon (All Species)	27,500	22,500	17,500	50,000	37,500	20,000	
Subtotal Treaty Indian Ocean Troll	55,000	45,000	35,000	50,000	37,500	20,000	
NON-INDIAN COMMERCIAL TROLL <sup>b/</sup>							
U.S./Canada Border to Cape Falcon (All Except Coho)	42,300	38,300	23,125	-	-	-	
U.S./Canada Border to Cape Falcon (All Species)	21,200	19,200	23,125	19,200	18,400	13,600	
Subtotal Non-Indian Commercial Troll	63,500	57,500	46,250	19,200	18,400	13,600	
RECREATIONAL							
U.S./Canada Border to Cape Alavab/	14,330 *	13,360 *	11,230 *	10,480	10,050	7,420	
Cape Alava to Queets Riverb/	2,400 *	2,230 *	1,880 *	2,620	2,510	1,860	
Queets River to Leadbetter Pt. b/	23,940 *	22,320 *	18,770 *	37,300	35,740	26,420	
Leadbetter Pt. to Cape Falcon <sup>b/c/</sup>	18,330 *	17,090 *	14,370 *	50,400	48,300	35,700	
Subtotal Recreational	59,000	55,000	46,250	100,800	96,600	71,400	
TOTAL NORTH OF CAPE FALCON	177,500	157,500	127,500	170,000	152,500	105,000	
	SOUTH OF CAPE FALCON						
COMMERCIAL TROLL <sup>a/</sup>							
Cape Falcon to Humbug Mt.	-	-	-	5,000	5,000	7,500	
Humbug Mt. to OR/CA Border	-	-		-	-	-	
OR/CA Border to Humboldt South Jetty	-	550	-	-	-	-	
LAT 40°10' N. to Pt. Arena	4,500	2,100	-	=	-	-	
Pt. Arena to Pigeon pt.	2,500 3,500	8,200 8,000	-	-	-	-	
Pigeon Point to U.S./Mexico Border Subtotal Commercial Troll	10,500	18,850	<del>-</del>	5,000	5,000	7,500	
Subtotal Commercial Iron	10,300	10,050	-	3,000	3,000	7,300	
RECREATIONAL							
Cape Falcon to OR/CA Border	-	-	-	74,000 <sup>d/</sup>	69,500 <sup>e/</sup>	65,000 <sup>f/</sup>	
OR/CA Border to U.S./Mexico Border	14,000	7,000	-	-	-	-	
TOTAL SOUTH OF CAPE FALCON	24,500	25,850	-	79,000	74,500	72,500	

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 - 20,000 marked coho; Alternative II - 25,000 marked coho; Alternative III - 30,000 marked coho.

d/ The quota consists of both mark-selective and non-mark-selective coho quotas: 44,000 and 30,000 respectively.

e/ The quota consists of both mark-selective and non-mark-selective coho quotas: 42,000 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 2025 ocean fishery Alternatives - Council adopted <sup>a/</sup> (Page 1 of 3)

TABLE 3.1 Tojected key stock esca	apements (	PROJECTED	SII) OI IIIA	nagement criteria for 2025 ocean fishery Atternatives - Council adopted " (Page 1 of 3)
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted b/
CHINOOK	7.11.	7.11.11	7.11.111	CHINOOK
Columbia Upriver Brights	311.2	314.2	317.5	74.0 Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	82.6	83.5	84.3	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	119.9	122.2	124.7	25.0 Minimum ocean escapement to attain 11.1 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules <sup>c/</sup> (threatened)	41.9%	40.4%	38.5%	≤ 41.0% Total adult equivalent fishery exploitation rate (2025 NMFS ESA guidance).
Columbia Lower River Wild <sup>e/</sup> (threatened)	14.1	14.2	14.3	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	180.8	186.0	191.2	8.2 Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	37.1	38.1	38.5	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	59.4%	53.5%	47.4%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	18,687	19,341	20,694	≥ 18,687 2025 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	50.0%	50.0% Equals 1,384, 989, and 44 adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	10.0%	6.9%	0.3%	≤ 10.0% FMP control rule.
Adult river mouth return	27.2	27.3	27.8	NA Total adults in thousands.
Age-4 ocean harvest rate	4.0%	3.2%	0.1%	≤ 7.7% NMFS guidance for implementing regulations addressing CCC.
KMZ sport fishery share	5.3%	4.5%	0.0%	
River recreational fishery share	38.4%	15.0%	15.0%	Equals 532, 148, and 7 adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	2.1%	3.7%	0.0%	≤ 20% Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: Recreational- 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. Commercial- 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 2025 ESA Guidance).
Sacramento River Fall	141.3	127.4	156.3	≥ 122,000 2025 minimum hatchery and natural area adult escapement (FMP).
Sacramento Index Exploitation Rate	14.7%	23.1%	5.7%	≤ 26.4% FMP control rule.
Ocean commercial impacts	14.0	12.4	2.6	Includes fall (Sept-Dec) 2024 impacts (30 SRFC).
Ocean recreational impacts	3.7	4.2	0.2	Includes fall (Sept-Dec) 2024 impacts (126 SRFC).
River recreational impacts	6,548	21,609	6,548	Alt I and III equals 15.0% of the total harvestable surplus (Council guidance), Alt II based on default model projections of 14.5% of the river run size.
SRKW Prey Abundance				
North of Falcon	928.8	928.9	928.9	≥ 623.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon
Oregon Coast	410.1	410.2	410.4	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Lat. 40°10' N.
California Coast	239.5	239.9	240.2	NA Oct 1 starting abundance of age 3+ Chinook south of Lat. 40°10' N.
Southwest WCVI	774.7	774.7	774.7	NA Oct 1 starting abundance of age 3+ Chinook south of Eat. 40 for N.  NA Oct 1 starting abundance of age 3+ Chinook off Southwest Vancouver Island
Salish Sea	1,229.8	1,229.8	1,229.8	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 2025 ocean fishery Alternatives - Council adopted (Page 2 of 3).

		PROJECTED		2025
Key Stock/Criteria	Alt I	Alt II	Alt III	Criteria Spawner Objective or Other Comparative Standard as Noted <sup>b/</sup>
соно		соно		соно
Interior Fraser (Thompson River)	10.6%(5.1%)	9.6%(4.0%)	8.0%(2.4%)	≤ 10.0% 2025 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	45.4%(4.4%)	44.8%(3.5%)	43.9%(2.1%)	≤ 60.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Stillaguamish	30.3%(3.2%)	29.7%(2.6%)	28.9%(1.6%)	≤ 50.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Snohomish	31.5%(3.2%)	30.9%(2.6%)	30.0%(1.6%)	≤ 40.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Hood Canal	49.5%(4.8%)	48.9%(3.9%)	47.8%(2.4%)	≤ 20.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Strait of Juan de Fuca	12.8%(4.5%)	12.0%(3.7%)	10.7%(2.4%)	≤ 40.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Quillayute Fall	10.1	10.2	10.3	6.3 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
•	26.5%	25.9%	24.9%	≤ 42% PST total exploitation rate constraint for 2025. d/f/
Hoh	4.5	4.6	4.7	2.0 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
	53.7%	52.7%	50.8%	≤ 63% PST total exploitation rate constraint for 2025. d/f/
Queets Wild	7.3	7.5	7.8	5.8 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	34.8%	33.5%	30.8%	≤ 36% PST total exploitation rate constraint for 2025. dlf/
Grays Harbor	63.2	63.9	65.4	35.4 FMP MSP natural area adult spawner estimate. Value depicted is ocean escapement.
Grays Harbor	54.8%	<b>54.3%</b>	53.2%	≤ 50% PST total exploitation rate constraint for 2025. d/f/
Marie B				17.2 FMP MSY natural area adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay	33.3	33.7	34.9	17.2 Fivil Wo Friatural area adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural	15.3%	14.0%	10.9%	≤23.0% Total marine and mainstem Columbia R. fishery exploitation rate (2025 NMFS ESA guidance).
(threatened)				Value depicted is marine ER before Buoy 10.
Upper Columbia <sup>c/</sup>	60%	60%	64%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	230.4	230.7	241.1	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	81.1	83.5	93.5	9.7 Minimum ocean escapement to attain hatchery egg-take goal of 6.4 late adult coho,
0 0 11111	05.00/	04.00/	00.5%	with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	25.8%	24.6%	23.5%	≤ 30.0% Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)				
Trinity Natural	15.6%	15.5%	15.2%	≤ 16.0% Total exploitation rate ceiling (NMFS ESA consultation standard).
Klamath Natural	8.0%	7.8%	7.5%	≤ 15.0% Total exploitation rate ceiling (NMFS ESA consultation standard).
Rogue Natural	7.0%	6.8%	6.5%	≤ 15.0% Total exploitation rate ceiling (NMFS ESA consultation standard).
Other Natural	2.1%	1.9%	1.6%	≤ 15.0% Total exploitation rate ceiling (NMFS ESA consultation standard).

#### TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2025 ocean fishery Alternatives -Council adopted (Page 3 of 3).

- a/ Coho projections in the table are based on 2024 pre-season stock and fishery inputs for Canadian fisheries. Model results for Chinook in this table used 2024 preseason effort scalars for SEAK, NBC, and WCVI AABM fisheries, recent 2-yr average catches for BC ISBM fisheries, and 2024 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.
- # 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 2025 ocean salmon fishery management Alternatives - Council adopted. (Page 1 of 2)

				2025 B	ycatch Mo	rtality <sup>a/</sup>				Observed in 2024		
_	2025	Catch Proje	ection		Projection	_	2025 B	ycatch Proj	ection <sup>b/</sup>			
Area and Fishery	1	II	Ш	1	II	III	1	II	III	Catch	Bycatch Mortality	
OCEAN FISHERIES:					CHIN	OOK (thou	sands of f	ish)				
NORTH OF CAPE FALCON												
Treaty Indian Ocean Troll	55.0	45.0	35.0	5.6	4.6	3.6	14.1	11.5	9.0	18.8	1.9	
Non-Indian Commercial Troll	63.5	57.5	46.2	24.1	21.9	16.7	85.4	77.4	58.6	38.8	15.2	
Recreational	59.0	55.0	46.3	7.2	6.7	5.7	33.2	31.1	26.1	24.5	3.0	
CAPE FALCON TO HUMBUG MT.C.	/											
Commercial Troll	20.9	10.1	6.6	4.2	2.0	1.3	11.6	5.6	3.7	15.9	3.2	
Recreational	1.2	1.2	1.2	0.7	0.7	0.5	3.4	3.4	2.6	3.0	0.3	
HUMBUG MT. TO OR/CA BORDER	₹											
Commercial Troll	-	0.9	0.0	-	0.2	0.0	-	0.5	0.0	0.0	0.0	
Recreational	0.2	-	-	0.1	0.1	0.1	0.7	0.5	0.3	0.2	0.0 <sup>d/</sup>	
OR/CA BORDER TO to LAT 40°10	' N.											
Commercial Troll	-	0.6	-	-	0.1	-	-	0.3	-	0.0	0.0	
Recreational	0.4	0.4	-	0.0	0.0	-	0.1	0.1	-	0.0	0.0 <sup>d/</sup>	
LAT 40°10' N. TO PT. ARENA												
Commercial Troll	3.5	2.1	-	0.7	0.4	-	1.9	1.2	-	0.0	0.0 <sup>d/</sup>	
Recreational	0.5	0.5	-	0.1	0.1	-	0.2	0.2	-	0.0	0.0 <sup>d/</sup>	
PT. ARENA TO PIGEON PT.												
Commercial Troll	2.6	8.2	-	0.5	1.6	-	1.4	4.5	-	0.0	0.0 <sup>d/</sup>	
Recreational	5.1	4.1	-	0.6	0.5	-	1.9	1.5	-	0.0	0.0 <sup>d/</sup>	
SOUTH OF PIGEON PT.												
Commercial Troll	3.3	8.0	-	0.7	1.6	-	1.8	4.4	-	0.0	0.0 <sup>d/</sup>	
Recreational	0.5	0.6	-	0.1	0.1	-	0.2	0.2	-	0.0	0.0 <sup>d/</sup>	
TOTAL OCEAN FISHERIES												
Commercial Troll	148.7	132.3	87.9	35.8	32.4	21.6	116.2	105.5	71.2	73.6	20.3	
Recreational	66.9	61.7	47.4	8.8	8.1	6.3	39.8	37.1	29.0	27.7	3.3	
INSIDE FISHERIES:												
Area 4B	-	-	-	-	-	-	-	-	-	-	-	
Buoy 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.1	4.3 <sup>d/</sup>	

TABLE 6. Preliminary projections of Chinook and coho harvest impacts for 2025 ocean salmon fishery management Alternatives - Council adopted. (Page 2 of 2).

				2025 B	ycatch Mo	rtalitv <sup>a/</sup>		Obs	erved in 2024		
	2025	Catch Proje	ection		Projection	,	2025 B	ycatch Pro	jection <sup>b/</sup>		
Area and Fishery	I	II	Ш	I	II	III	1	II	III	Catch	Bycatch Mortality
OCEAN FISHERIES:					СО	HO (thous	ands of fis	sh)			
NORTH OF CAPE FALCON											
Treaty Indian Ocean Troll <sup>e/</sup>	50.0	37.5	20.0	3.6	2.7	1.6	6.6	5.2	3.4	42.8	2.3
Non-Indian Commercial Troll	19.2	18.4	13.6	12.8	11.8	7.9	43.6	40.2	26.7	11.2	12.4
Recreational	100.8	96.6	71.4	23.9	22.5	16.3	110.0	102.6	74.1	77.3	17.9
SOUTH OF CAPE FALCON											
Commercial Troll	5.0	5.0	7.5	2.5	1.5	1.1	8.7	4.9	3.1	1.4	2.8
Recreational <sup>e/</sup>	74.0	69.5	65.0	19.7	18.7	17.5	92.7	87.7	82.2	52.6	11.1
TOTAL OCEAN FISHERIES											
Commercial Troll	74.2	60.9	41.1	18.8	16.0	10.6	59.0	50.4	33.2	55.3	17.6
Recreational	174.8	166.1	136.4	43.6	41.2	33.8	202.7	190.3	156.3	129.9	29.0
INSIDE FISHERIES:											
Area 4B	-	-	-	-	-	-	-	-	-	-	-
Buoy 10	20.0	25.0	30.0	4.7	5.9	6.8	21.5	26.8	30.7	35.2	5.9 <sup>d/</sup>

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 2025 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)

				Exploitation	Rate (Pe	rcent)				
		LCN Coho	)		OCN Coho	)	LCR Tule Chinool			
Fishery		II	III	-	II	III		II	III	
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	1.8%	1.9%	
BRITISH COLUMBIA	0.2%	0.2%	0.2%	0.5%	0.5%	0.5%	13.4%	13.6%	13.9%	
PUGET SOUND/STRAIT	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	
NORTH OF CAPE FALCON										
Treaty Indian Ocean Troll	2.4%	1.8%	1.0%	0.2%	0.4%	0.2%	2.4%	2.0%	1.6%	
Recreational	6.0%	5.7%	4.1%	0.8%	1.0%	0.8%	4.7%	4.4%	3.7%	
Non-Indian Troll	1.7%	1.6%	1.1%	0.3%	0.4%	0.3%	7.6%	6.9%	5.6%	
SOUTH OF CAPE FALCON										
Recreational:							0.1%	0.1%	0.1%	
Cape Falcon to Humbug Mt.	4.1%	3.8%	3.5%	9.3%	10.1%	9.3%	-	-	-	
Humbug Mt. to OR/CA border (KMZ)	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	-	-	-	
OR/CA border to Lat. 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:							1.4%	0.7%	0.6%	
Cape Falcon to Humbug Mt.	0.6%	0.6%	0.8%	1.2%	0.9%	1.2%	-	-	-	
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	
OR/CA border to Lat. 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%	-	-	-	
BUOY 10	1.5%	1.9%	2.2%	0.1%	0.1%	0.1%	10 20/	10.5%	10.00/	
ESTUARY/FRESHWATER	NA	NA	NA	10.9%	10.8%	10.9%	10.3%	10.5%	10.9%	
TOTAL <sup>a/</sup>	15.3%	14.0%	10.9%	23.5%	24.6%	23.5%	41.9%	40.4%	38.5%	

TABLE 7. Expected coastwide exploitation rates by fishery for 2025 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 2 of 2).

					Exploitat	ion Rate (I	Percent)					
	Tı	inity Natu	ral	Kla	math Natu	ıral	Rog	gue Nat	ural	Other SONCC		
Fishery	I				II	III		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	0.4%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	0.5%	0.5%
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	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	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.	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Humbug Mt. to OR/CA border (KMZ)	0.6%	0.5%	0.5%	0.6%	0.5%	0.5%	0.6%	0.5%	0.5%	0.6%	0.5%	0.5%
OR/CA border to Lat. 40°10' N. (KMZ)	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	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.	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%
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 Lat. 40°10' N. (KMZ)	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%
Fort Bragg	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	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%
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%	13.6%	13.6%	5.9%	5.9%	5.9%	4.9%	4.9%	4.9%	0.0%	0.0%	0.0%
TOTAL	15.6%	15.5%	15.2%	8.0%	7.8%	7.5%	7.0%	6.8%	6.5%	2.1%	1.9%	1.6%

a/ Totals do not include Buoy 10 and estuary/freshwater for LCN. For OCN, SONCC, and LCR Tule 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 2025 fisheries under base period fishing patterns (percent marked).

Area	Fishery	June	July	August	Sept
Canada					
Johnstone Strait	Recreational		17%	14%	
West Coast Vancouver Island	Recreational	38%	37%	37%	38%
North Georgia Strait	Recreational	35%	35%	34%	27%
South Georgia Strait	Recreational	40%	44%	37%	38%
Juan de Fuca Strait	Recreational	41%	45%	44%	42%
Johnstone Strait	Troll	42%	30%	23%	27%
NW Vancouver Island	Troll	45%	38%	39%	38%
SW Vancouver Island	Troll	53%	49%	50%	50%
Georgia Strait	Troll	46%	45%	45%	39%
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational	51%	50%	50%	50%
Strait of Juan de Fuca (Area 6)	Recreational	48%	50%	52%	49%
San Juan Island (Area 7)	Recreational	56%	51%	45%	33%
North Puget Sound (Areas 6 & 7A)	Net		42%	44%	35%
Council Area					
Neah Bay (Area 4/4B)	Recreational	51%	51%	52%	56%
LaPush (Area 3)	Recreational	50%	54%	58%	55%
Westport (Area 2)	Recreational	59%	58%	57%	57%
Columbia River (Area 1)	Recreational	60%	61%	57%	59%
Tillamook	Recreational	54%	50%	44%	29%
Newport	Recreational	48%	44%	41%	27%
Coos Bay	Recreational	36%	33%	23%	12%
Brookings	Recreational	30%	21%	19%	7%
Neah Bay (Area 4/4B)	Troll	54%	53%	52%	52%
LaPush (Area 3)	Troll	54%	55%	52%	53%
Westport (Area 2)	Troll	52%	56%	57%	60%
Columbia River (Area 1)	Troll	59%	59%	56%	52%
Tillamook	Troll	53%	50%	49%	48%
Newport	Troll	48%	46%	40%	39%
Coos Bay	Troll	36%	33%	28%	17%
Brookings	Troll	28%	29%	32%	52%
Columbia River					
Buoy 10	Recreational				60%

Preseason II Table 8

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

FMP Stock	Total Exploitation Rate Constraint <sup>a/</sup>	Categorical Status <sup>a/</sup>
Skagit	60%	Normal
Stillaguamish	50%	Normal
Snohomish	40%	Low
Hood Canal	20%	Critical
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 <sup>b/</sup>	Categorical Status <sup>c/</sup>
Skagit	60%	Abundant
Stillaguamish	50%	Abundant
Snohomish	40%	Moderate
Hood Canal	20%	Low
Strait of Juan de Fuca	40%	Moderate
Quillayute Fall <sup>c/</sup>	42%	Abundant
Hoh <sup>c/</sup>	63%	Abundant
Queets <sup>c/</sup>	36%	Moderate
Grays Harbor <sup>c/d/</sup>	50%	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 2025 non-Indian commercial troll salmon Alternatives compared to 2024 and the 2019-2023 average (in inflation-adjusted dollars).

			Exvesse	Value (thousands o	of dollars) <sup>a/</sup>	
Management Area	Alternative	2025 Projected <sup>b/</sup>	2024 Actual	Percent Change from 2024	2019-2023 Average	Percent Change From 2019-2023 Average
North of Cape Falcon	I	5,405	3,839	+41%	2,310	+134%
	II	4,907		+28%		+112%
	III	3,932		+2%		+70%
Cape Falcon to Humbug Mt.	I	2,678	2,297	+17%	1,896	+41%
	II	1,368		-40%	•	-28%
	III	1,005		-56%		-47%
Humbug Mt. to OR/CA Border	I	0	1	-100%	91	-100%
S .	II	101		+10,334%		+11%
	III	1		-26%		-99%
OR/CA Border to 40°10' N. Lat.	I	0	0	-	76	-100%
	II	66		-		-13%
	III	0		-		-100%
40º10' N. Lat. to Pt. Arena	ı	254	0	-	1,246	-80%
	II	154		-		-88%
	III	0		-		-100%
Pt. Arena to Pigeon Pt.	1	222	0	-	9,021	-98%
	II	706		-		-92%
	III	0		-		-100%
South of Pigeon Pt.	1	314	0	-	5,209	-94%
	II	761		-		-85%
	III	0		-		-100%
Total South of Cape Falcon	1	3,467	2,298	+51%	17,540	-80%
	II	3,156		+37%		-82%
	III	1,006		-56%		-94%
West Coast Total	1	8,872	6,137	+45%	19,850	-55%
	II	8,063		+31%		-59%
	III	4,938		-20%		-75%

a/ Values are inflation-adjusted to 2024 dollars. Exvessel values are not comparable with the income impacts shown in Table 11.

b/ Projections are based on expected catches in the Council management area and estimated 2024 (or 2022 in cases where there were no landings in 2024 or 2023) average weights and exvessel prices.

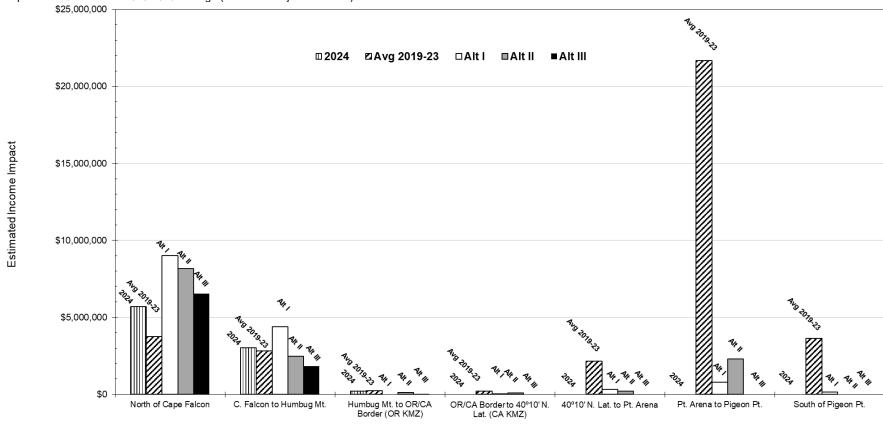
TABLE 11. Preliminary angler trips and community income impacts projected under Council-adopted 2025 recreational ocean salmon fishery Alternatives compared to 2024 and the 2019-2023 average (in inflation-adjusted dollars).

					Commun	nity Income Im	pacts		
		Angler	Trips (thousa	ınds)	(thous	ands of dollar	s) <sup>a/</sup>		
	,	Estimates			Estimates			Percent Cha	nge in Income
		Based on the	2024	2019-2023	Based on the	2024	2019-2023	Compared to	Compared to
Management Area	Alternative	Options	Actual	Avg.	Options	Actual	Avg.	2024	2019-2023 Avg.
North of Cape Falcon <sup>b/</sup>	1	85.1	74.4	68.6	13,104.5	11,456	10,976	+14%	+19%
·	II	81.2			12,500.9			+9%	+14%
	III	61.4			9,448.7			-18%	-14%
Cape Falcon to Humbug Mt.	I	74.1	61.0	67.7	6,874.1	5,664	5,840	+21%	+18%
	II	70.7			6,557.1			+16%	+12%
	III	58.2			5,405.3			-5%	-7%
Humbug Mt. to OR/CA Border	I	0.4	3.6	4.0	31.8	258	247	-88%	-87%
	II	0.0			0.0			-100%	-100%
	III	0.0			0.0			-100%	-100%
OR/CA Border to 40°10' N. Lat.	I	1.2	0.0	4.0	164.9	0	563	-	-71%
	II	1.2			164.9			-	-71%
	III	0.0			0.0			-	-100%
40°10' N. Lat. to Pt. Arena	I	1.4	0.0	5.6	251.3	0	1,028	-	-76%
	II	1.4			251.3			-	-76%
	III	0.0			0.0			-	-100%
Pt. Arena to Pigeon Pt.	I	10.7	0.0	42.4	2,851.6	0	11,741	-	-76%
	II	9.1			2,405.2			-	-80%
	III	0.0			0.0			-	-100%
South of Pigeon Pt.	I	2.1	0.0	18.2	340.0	0	2,949	-	-88%
· ·	II	2.2			356.6			-	-88%
	III	0.0			0.0			-	-100%
Total South of Cape Falcon	ı	90.0	64.7	142.0	10,514	5,922	22,368	+78%	-53%
- 1	II	84.5			9,735	-,-	,	+64%	-56%
	III	58.2			5,405			-9%	-76%
West Coast Total	1	175.1	139.1	210.5	23,618	17,378	33,344	+36%	-29%
2	İ	165.7			22,236	, 3	,	+28%	-33%
	III	119.6			14,854			-15%	-55%

a/ Income impacts are not comparable to the exvessel values shown in Table 9. All dollar values are expressed in inflation-adjusted 2024 dollars. Projections are based on expected effort (angler trips) in the Council management area and estimated 2024 (or 2022 in cases where there was no fishing in 2024 or 2023) income impacts per angler trip.

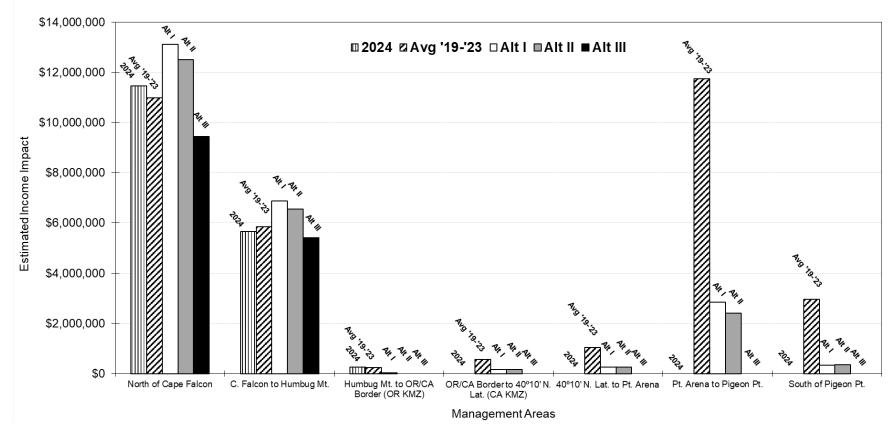
b/ Does not include Buoy 10 fishery.

FIGURE 1. Projected community income impacts associated with landings projected under the Council adopted 2025 Pacific Ocean commercial troll salmon fishery Alternatives compared to 2024 and the 2019-2023 average (in inflation-adjusted dollars).



Landing Areas

FIGURE 2. Projected coastal community personal income impacts associated with the 2025 Pacific Ocean recreational salmon fishery under Council-adopted Alternatives compared to estimated 2024 and the 2019-2023 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 run Chinook age-3 ocean impact rate south of Pt. Arena by fishery and Alternative. The age-3 SRWC impact rate was projected for each of the proposed 2025 fishing season Alternatives. The impacts are displayed as a percent for each Alternative by fishery, port area, and month. Max rate: 20%.

	Commercial												Red	reation	al					
Alterna	tive I									Alternati	ive I									
Port									Year	Port									T i	Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF	0.04								0.04	SF			0.21	0.41	0.22	0.04	0.07		Ī	0.95
MO	0.09								0.09	MO			0.22	0.50	0.30	0.03			i	1.05
Total	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	Total	0.00	0.00	0.43	0.91	0.53	0.07	0.07	0.00	0.00	2.00
Alterna	tive II									Alternati	ive II									
Port									Year	Port									- 1	Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF				0.38	0.21				0.59	SF			0.21	0.42	0.32				ij	0.94
MO				0.88	0.09				0.97	MO			0.22	0.50	0.43				ŀ	1.15
Total	0.00	0.00	0.00	1.26	0.30	0.00	0.00	0.00	1.56	Total	0.00	0.00	0.43	0.91	0.75	0.00	0.00	0.00	0.00	2.09
Alterna	tive III									Alternati	ive III									
Port									Year	Port									- 1	Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF									0.00	SF									ij	0.00
MO									0.00	MO									ŀ	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SF Pt. Arena to Pigeon Pt. (San Francisco)

MO Pigeon Pt. to the U.S./Mexico Border (Monterey)

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

Table A-	Z. Maili	alli Kivei iai	Cillioc	ik ocea	ii iiiipac	, to iii iiu	IIIDCIS	OI IISII	by lightery	ajiu Aite	mauve											
				(	Comme	ercial									Red	reatio	nal					
Alternat	ive I										Alterna	tive I										
18,687 na	atural area	a spawners, 10	0% spawn	er reduc	tion rate	, 4% age	4 ocean	harves	t rate													
Port	Fall	2024		9	Summer	2025			Summer	Year	Port		Fall 20	) <u>24</u>		9	Summe	r 2025		S	ummer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		5	3	60	229		297	297	NO	0	0		0	5	0	0	2	9	16	16
CO	7	0		28	9				37	44	CO	0	0		0	0	0	0	1	12	13	13
KO											KO						2	11	1	4	18	18
KC											KC							17	18	5	40	40
FB					355				355	355	FB							3	9	3	15	15
SF					55				55	55	SF							22	48	15	85	85
MO					48				48	48	MO							0	0	0	0	0
Total	7	0		33	470	60	229		792	799	Total	0	0		0	5	2	53	79	48	187	187
Alternat	ive II										Alterna	tive II										
19,341 na	atural area	a spawners, 6.	9% spawi	ner redu	ction rate	e, 3.2% a	ge-4 oce	an harv	est rate													
Port	Fall	2024		9	Summer	2025			Summer	Year	Port		Fall 20	)24		9	Summe	r 2025			ummer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		4	3	9	47		63	63	NO	0	0		0	5		0	2	9	16	16
CO	7	0		22	9	123	56		210	217	CO	0	0		0	0		0	1	12	13	13
KO				0	61				61	61	KO							4	1	4	9	9
KC								158	158	158	KC							17	18	5	40	40
FB								115	115	115	FB							3	10	3	16	16
SF								124	124	124	SF							22	48	21	91	91
MO								44	44	44	MO							0	0	0	0	0
Total	7	0		26	73	132	103	441	775	782	Total	0	0		0	5		46	80	54	185	185
Alternat	ive III										Alterna	tive III										
		a spawners, 0.	3% spaw	ner redu	ction rate	e, 0.1% a	ge-4 oce	an harv	est rate													
Port		2024		9	Summer	2025			Summer	Year	Port		Fall 20			9	Summe	r 2025			ummer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug		Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		3	3	33			39	39	NO	0	0		0			0	2	6	8	8
CO	7	0								7	CO	0	0		0			0	1	8	9	9
KO				0					0	0	KO							3	1	3	7	7
KC											KC											
FB											FB											
SF											SF											
MO											MO											
Total	7	0		3	3	33			39	46	Total	0	0		0			3	4	17	24	24

Table A-3. Klamath River fall Chinook age-4 ocean harvest by fishery and Alternative. In 2025, a harvest of 1104 age-4 KRFC results in a 7.7% ocean harvest rate.

							01 2 y						i i i o+ agc-+ i ti								
Commercial									Recreational												
Alternat											Alternative I										
Port	Fall 202	4	Summer 2025					Summer Year			Port Fall 2024			Summer 2025					Summer Year		
Area	Sep Oc	t-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		4	2	20	148		174	174	NO	0	0	0	1	0	0	0	0	1	1
CO	7	0		23	7				30	37	CO	0	0	0	0	0	0	0	0	0	0
KO											KO					0	1	0	0	1	1
KC											KC						4	4	2	10	10
FB					253				253	253	FB						1	2	1	4	4
SF					44				44	44	SF						5	10	3	18	18
MO					38				38	38	MO						0	0	0	0	0
Total	7	0		27	344	20	148		539	546	Total	0	0	0	1	0	11	16	6	34	34
Alternat	ive II										Alternative II										
Port	Fall 202	4			Summer	2025			Summer	Year	Port				3	Summe	r 2025			ummer	Year
Area	Sep Oc	t-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		3	2	3	30		38	38	NO	0	0	0	1		0	0	0	1	1
CO	7	0		18	7	91	34		150	157	CO	0	0	0	0		0	0	0	0	0
KO				0	44				44	44	KO							0	0 2		
KC								64	64	64	KC						4	4	2	10	10
FB								50	50	50	FB						1	2	1	4	4
SF								47	47	47	SF						5	10	4	19	19
MO								38	38	38	MO_						0	0	0	0	0
Total	7	0		21	53	94	64	199	431	438	Total	0	0	0	1		10	16	7	34	34
Alternat	ive III										Alterna	tive III									
Port							Year	Port	F	all 2024			Summe	r 2025		S	ummer	Year			
Area	Sep Oc		Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		3	2	11			16	16	NO	0	0	0			0	0	0	0	0
CO	7	0								7	co	0	0	0			0	0	0	0	0
KO				0					0	0	KO						0	0	0	0	0
KC											KC										
FB											FB										
SF											SF										
MO											MO										
Total	7	0		3	2	11			16	23	Total	0	0	0			0	0	0	0	0

Table A-4. Sacramento River fall Chinook ocean impacts in numbers of fish by fishery and Alternative.

		amonto rai			Comm										R	ecreati	onal					
Alternative I								Alternative I														
Port	Port Fall 2024 : Summer 2025 : Summer Year							Year	Port		Fall 20	24			Summe	r 2025			Summer	Year		
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		1,033	892	1,879	1,889		5,693	5,693	NO	126	0		2	0	5	9	22	11	49	175
CO	0	30		675	632				1,307	1,337	CO	0	0		0	5	2	4	13	5	29	29
KO											KO						8	15	13	5	41	41
KC		I									KC							43	67	60	170	170
FB					1,740				1,740	1,740	FB							21	149	95	265	265
SF					2,245				2,245	2,245	SF							592	1,225	859	2,676	2,676
MO					2,982				2,982	2,982	MO							153	221	66	440	440
Total	0	30		1,708	8,491	1,879	1,889		13,967	13,997	Total	126	0		2	5	15	837	1,710	1,101	3,670	3,796
	_																					
Alternat											Alternative II											
Port		2024			Summe				Summer	Year	Port	_	Fall 20	_ :			Summe				Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec		Apr	May	Jun	Jul	Aug		Total
NO	0	0		787	892	276	380		2,335	2,335	NO	126	0		2	0		6	22	11	41	167
CO	0	30		515	632	441	49		1,637	1,667	CO	0	0		0	5		3	13	5	26	26
KO				0	104			405	104	104	KO							5	13	5	23	23
KC								135	135	135	KC							43	67	60	170	170
FB SF								1,070 3,598	1,070	1,070	FB SF							21	149	95	265	265
MO								3,537	3,598	3,598	MO							592 153	1,225 221	1,227 94	3,044 468	3,044
Total	0	30		1,302	1,628	717	429	8,340	3,537 12,416	3,537 12,446	Total	126	0		2	5		822	1,710	1,497	4,036	468 4,162
Total	U	30		1,302	1,020	111	429	0,340	12,410	12,440	Total	120	U			3		022	1,710	1,497	4,030	4,102
Alternat	ive III										Alterna	ative III										
Port		2024			Summe				Summer	Year	Port		Fall 20				Summe				Summer	Year
Area	Sep	Oct-Dec		Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug		Total
NO	0	0		680	913	1,002			2,595	2,595	NO	126	0					4	22	7	33	159
CO	0	30							0	30	CO	0	0					2	13	3	18	18
KO				0					0	0	KO							3	13	3	19	19
KC											KC											
FB											FB											
SF											SF									i		
MO				205	0.45	1.000			0.505	0.00=	MO	100							15	- 15	7.0	400
Total	0	30		680	913	1,002			2,595	2,625	Total	126	0					9	48	13	70	196

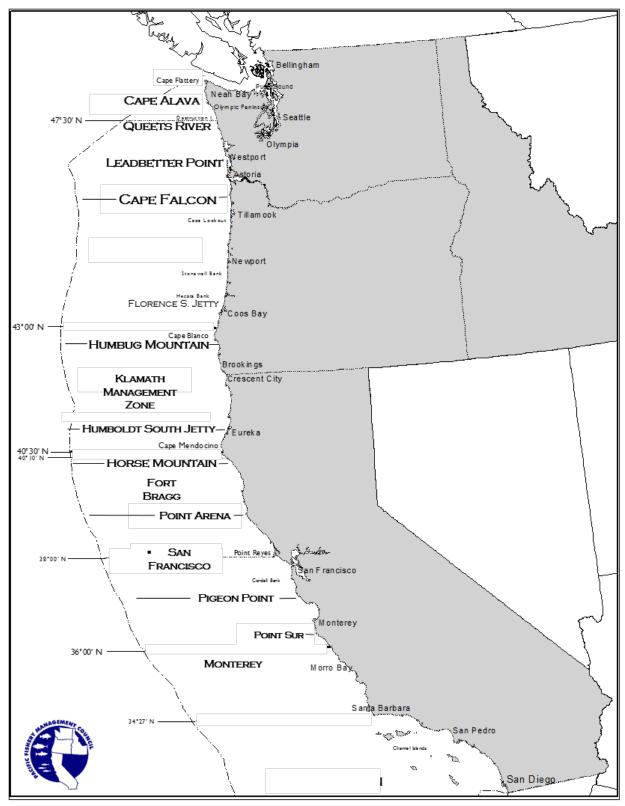


FIGURE 3. Map of Pacific West Coast with major salmon ports and management boundaries. This map is for reference only and is not intended for use in navigation or fishery regulation.

Preseason II Figure 3

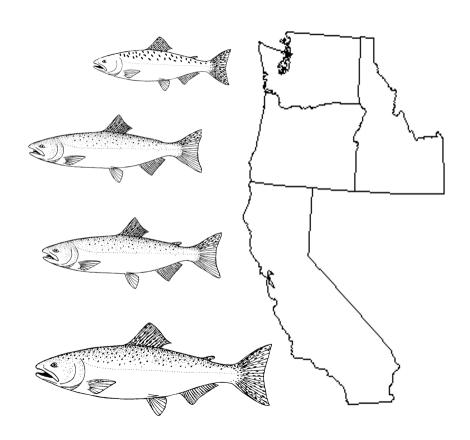
# PRESEASON REPORT III

# COUNCIL ADOPTED MANAGEMENT MEASURES AND

# ENVIRONMENTAL ASSESSMENT PART 3 FOR

# **2025 OCEAN SALMON FISHERY REGULATIONS**

**REGULATION IDENTIFIER NUMBER 0648-BN19** 



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

APRIL 2025

Preseason III April 2025

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The Salmon Technical Team and the Council staff express their thanks for the expert assistance provided by Ms. Stephanie Thurner (STT, Northwest Indian Fisheries Commission); Ms. Erica Weyland, Ms. Danielle Williams, and Mr. Kyle Van de Graaf (Washington Department of Fish and Wildlife); Ms. Justine Kenyon-Benson (Oregon Department of Fish and Wildlife); Mr. Ian Pritchard and Dr. Dylan Stompe (California Department of Fish and Wildlife); Dr. Ed Waters (economist on contract with Pacific Fishery Management Council); and to numerous other tribal and agency personnel in completing this report.

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A report of the Pacific Fishery Management Council pursuant to National Oceanic and Atmospheric Administration Award Number NA25NMFX441C0005-T1-01.



Preseason III April 2025

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#### LIST OF ACRONYMS AND ABBREVIATIONS

AABM Aggregate Abundance Based Management

ABC Acceptable Biological Catch
ACL Annual Catch Limit(s)
AI Abundance Index

CDFW California Department of Fish and Wildlife Council Pacific Fishery Management Council

CPUE catch per unit effort

CYER Calendar year exploitation rate
EA Environmental Assessment
EEZ Economic Exclusive Zone
EIS Environmental Impact Statement

ESA Endangered Species Act
ESU Evolutionarily Significant Unit
FMP fishery management plan

FONSI finding of no significant impact

FRAM Fishery Regulation Assessment Model

GSI genetic stock identification

IPHC International Pacific Halibut Commission ISBM Individual Stock Based Management

KMZ Klamath Management Zone (Humbug Mountain to Horse Mountain)

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)

LCR Lower River Hatchery (hatchery Col. River tule fall Chinook below Bonneville Dam)

LCR Lower River Wild (Columbia River bright fall wild Chinook below Bonneville Dam)

MSST minimum stock size threshold MSY maximum sustainable yield NBC Northern British Columbia

NEPA National Environmental Policy Act
NMFS National Marine Fisheries Service
ODFW Oregon Department of Fish and Wildlife

OCN Oregon coastal natural (coho)

OFL Overfishing Limit

OPI Oregon Production Index
PSC Pacific Salmon Commission
PST Pacific Salmon Treaty
SAS Salmon Advisory Subpanel

SCH Spring Creek Hatchery (Col. R. tule fall Chinook returning to Spring Creek Hatchery [above

Bonneville Dam])

SEAK Southeast Alaska

S<sub>MSY</sub> Spawning escapement associated with maximum sustainable yield

SONCC Southern Oregon/Northern California Coast (coho ESU)

SRFC Sacramento River fall Chinook 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)

TAC Total Allowable Catch WCVI West Coast Vancouver Island

WDFW Washington Department of Fish and Wildlife

#### 1.0 INTRODUCTION

This report, referred to as Preseason Report III, is the last 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 development of ocean salmon fishery management measures for fisheries off the coasts of Washington, Oregon, and California. This report describes the Council's 2025<sup>1</sup> ocean salmon management measures adopted for submission to the U.S. Secretary of Commerce and characterizes the expected impacts on ocean salmon fisheries and the stocks which support them.

This report also constitutes portions of an Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements for the 2025 ocean salmon regulations and includes a description and analysis of the Proposed Action. An EA is used to determine whether an action being considered by a Federal agency has significant impacts. The first part of this EA (Preseason Report I; PFMC 2025b), includes a statement of the purpose and need for the proposed action, a description of the affected human 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). The second part of the EA (Preseason Report II; PFMC 2025c), includes an additional description of the affected human environment relevant to the Council's proposed Alternatives, a description of the Alternatives, and an analysis of the consequences of the Alternatives, including short term and long-term impacts of the Alternatives. Along with the description and analysis of the Proposed Action in this report (Preseason Report III), these three parts of the EA will provide the necessary components to determine if a finding of no significant impact (FONSI) or Environmental Impact Statement (EIS) is warranted.

The Council's Proposed Action for the 2025 ocean salmon fishery regulations meet all objectives of the FMP (Section 3), including Annual Catch Limits (ACLs) set according to the FMP and described in Preseason Report I; the level of protection required by all consultation standards for salmon species listed under the Endangered Species Act (ESA) (Section 4); and the obligations under the Pacific Salmon Treaty (PST) (Section 5).

Under the Council's recommended management measures, salmon stocks originating from Washington, Oregon, and California meet all the applicable conservation objectives in the FMP where possible.

The STT evaluated salmon stock status based on spawning escapement data published in the *Review of 2024 Ocean Salmon Fisheries* (PFMC 2025a) and provided the following information on Chinook and coho stocks:

- Klamath River fall Chinook (KRFC) were found to meet the criteria for being classified as overfished in the PFMC *Review of 2017 Ocean Salmon Fisheries*, released in February 2018. The National Marine Fisheries Service (NMFS) subsequently published an overfished designation in June 2018, and a rebuilding plan was developed and adopted by the Council in 2019. This stock continues to meet the criteria for overfished status based on the most recent three-year geometric mean of spawning escapement (2022-2024).
- Queets River spring/summer Chinook were found to meet the criteria for being classified as overfished in the *PFMC Review of 2022 Ocean Salmon Fisheries*, released in February 2023. NMFS subsequently published an overfished designation in October 2023 and a rebuilding plan was developed and adopted by the Council in 2024. This stock now meets the criteria for 'not overfished-rebuilding' status based on the most recent three-year geometric mean of spawning escapement (2021-2023).

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<sup>&</sup>lt;sup>1</sup> The fishery management measures under consideration would cover the period May 16, 2025, through May 15, 2026 (86 FR 26426). For ease of reference, we refer to this time period as 2025.

#### 2.0 SELECTION OF FINAL MANAGEMENT MEASURES

The following figures and tables describe the Council-adopted management measures covering the period from May 16, 2025 through May 15, 2026 unless modified inseason:

- Table 1 Non-Indian commercial ocean salmon management measures;
- Figure 1 Geographic outline of commercial troll (non-Indian) ocean salmon seasons;
- Table 2 Recreational ocean salmon management measures;
- Figure 2 Geographic outline of recreational ocean salmon seasons;
- Table 3 Treaty Indian commercial ocean management measures; and
- Table 4 Allowable catch quotas for Chinook and coho.

In addition, Tables 5, 6, and 7 provide information on the biological impacts and landing estimates for the Council's management recommendations. Table 8 displays the expected mark (healed adipose fin-clip) rate for coho encountered in Council adopted mark-selective fisheries. Tables 9 and 10, and Figures 3 and 4 provide information on the economic impacts of the proposed fisheries. Table 11 summarizes effects of the Proposed Action and Alternatives. The assessment of stock status with regard to overfished, overfishing, and approaching an overfished condition is described in Table 12.

The 2025 seasons are constrained primarily by Fraser River (Canada) coho, Washington coastal coho, and lower Columbia River natural coho, lower Columbia River natural tule Chinook, and Puget Sound Chinook in the area north of Cape Falcon and Klamath River fall Chinook and Sacramento River fall Chinook in the area south of Cape Falcon.

Regulations and expected fishing patterns for the treaty Indian ocean fisheries were developed by the Hoh, S'Klallam, Makah, Quileute, and Quinault Tribes for their respective fisheries.

#### 2.1 Inseason Management

Inseason changes are made to meet the preseason intent of the management measures described in this document, but must also meet the Council's FMP goals, especially in regard to conservation and allocation goals, Federally-recognized Indian fishing rights, consultation standards for ESA-listed salmon stocks, and obligations under the PST. Inseason action authority is described at 50 CFR § 660.409.

Inseason actions that are anticipated for the 2025-2026 management season include, but are not limited to, the following possibilities:

- 1. Adjustments in landing limits and days open for non-Indian commercial fisheries.
- 2. Changing the days or number of days of fishing allowed per calendar week for recreational fisheries.
- 3. Transfer of coho quotas among recreational port areas north of Cape Falcon.
- 4. Trading portions of Chinook and coho quotas between recreational and non-Indian commercial sectors north of Cape Falcon.
- 5. Routine openings and closings, and other management measures associated with quota management, including modifying open areas, bag and size limits, species retention limits, and mark-selective retention restrictions.
- 6. Transferring unused or exceeded quota to subsequent fisheries on an impact neutral, fishery equivalent basis.

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- 7. Closing or postponing Oregon recreational and commercial fisheries scheduled to open March 15, 2026, if necessary to meet 2026 management objectives.
- 8. Closing or postponing California recreational fisheries scheduled to open April 4 or May 1, 2026, or commercial fisheries scheduled to open April 16 or May 1, 2026, if necessary to meet 2026 management objectives.
- 9. Implementing and/or modifying landing limits for the California commercial fishery scheduled to open April 16 or May 1, 2026.
- 10. Closing or postponing commercial fisheries north of Cape Falcon scheduled to open May 15, 2026, if necessary to meet 2026 management objectives.
- 11. Adjustments to incidental Pacific halibut catch regulations in commercial fisheries, including landing and possession ratios and landing and possession limits per trip.

Inseason action will generally be accomplished through NMFS sponsored conference calls attended by representatives of affected tribal and state management agencies, the Council, the Salmon Advisory Subpanel (SAS), and the STT. The Council may also make recommendations for inseason actions at any of its regularly scheduled meetings.

#### 2.2 State Waters Fisheries

In addition to the seasons shown in Tables 1 and 2, the Oregon Department of Fish and Wildlife (ODFW) may permit fall fisheries for salmon in certain areas within state marine waters. Potential seasons off the Oregon coast typically include commercial and recreational fisheries at the mouths of the Chetco, Elk, and other rivers. Washington may also establish limited recreational salmon fisheries in state marine waters if additional impacts on coho and/or Chinook stocks can be accommodated within management constraints. California will not establish any additional state marine water salmon fisheries in 2025.

#### 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. These objectives are intended to meet the requirements of the MSA and regulations implementing the statute, and "other applicable law" including the Endangered Species Act (ESA), international treaties, and tribal treaties and other tribal fishing rights.

The Salmon FMP requires the Council to abide by Court orders regarding tribal treaties and other tribal fishing rights 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. Annual negotiations and shaping of fisheries result in the Council being able to complete final management measure recommendations that are consistent with the exercise of these tribal fishing rights.

In addition to the allocation objectives associated with sharing between treaty Indian and non-Indian sectors, the Salmon FMP includes formulas for sharing Chinook and coho quotas. North of Cape Falcon, there are sharing formulas between and within non-tribal sectors for sharing of Chinook and coho quotas that adhered to FMP sharing formulas or other provisions of the FMP. The 2025 salmon management measures adopted by the Council meet all allocation requirements.

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#### 4.0 SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

Since 1989, NMFS has listed 17 Evolutionarily Significant Units (ESUs) of salmon under the ESA. As the listings have occurred, NMFS has issued biological opinions 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 over time as needed. Additional details for species listed under the ESA, including the ESUs listed under the ESA and a current list of Biological Opinions, are provided in Section 5 of the most recent Preseason II document.

The ESA consultation standards, exploitation rates, and other criteria in place for the 2025 management season are presented in Table 5.

#### 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 Pacific Salmon Commission (PSC) is the body formed by the governments of Canada and the United States to implement the PST. Details on the Chinook and coho management aspects and allowable exploitation rates for the current year are included in Section 6 of the most recent Preseason II report.

#### CHINOOK SALMON MANAGEMENT 6.0

#### 6.1 North of Cape Falcon

Abundance projections important to Chinook harvest management north of Cape Falcon in 2025 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 306,200, which is greater than the 2024 preseason expectation of 215,300. The LRH forecast is 121,500, which is greater than the forecast of 85,500 in 2024. The SCH forecast is 184,700, which is greater than the 2024 forecast of 129,800.

#### 6.1.1 Objectives

Key Chinook salmon management objectives shaping management measures north of Cape Falcon are:

- Consultation standards for ESA listed species as provided in Section 5.0 in Preseason Report II (PFMC 2025c). Relevant ESUs (may be referred to as stocks in this document) for the area north of Cape Falcon include LCR Chinook (natural tule component and referred to as LCR natural tule fall Chinook in this document), Lower Columbia River wild fall Chinook (natural component and referred to as LRW fall Chinook in this document), and SRW fall Chinook.
- Minimize impacts on Puget Sound Chinook and the LCR natural tule fall Chinook ESU.

#### 6.1.2 Achievement of Objectives

Fishery quotas under the adopted management measures are presented in Table 4. Stock-specific management criteria and their forecast values are provided in Table 5. Projected fishery landings, bycatch, and bycatch mortality estimates are summarized in Table 6. Table 7 provides a breakdown of impacts by fishery and area for LCR natural tule fall Chinook. Descriptions pertaining to the achievement of key objectives for Chinook salmon management north of Cape Falcon are as follows:

• LCR natural tule fall Chinook. The Council adopted management measures have a projected total exploitation rate of 41.0 percent, which is within the 41.0 percent maximum for 2025.

- *LRW fall Chinook*. The Council adopted management measures have a projected ocean escapement of 14,500, which exceeds the 6,900 minimum ocean escapement needed to attain the ESA consultation standard of 5,700 spawners to the North Fork Lewis River.
- *SRW fall Chinook*. The Council adopted management measures have an ocean exploitation rate that is 54.3 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.

The adopted management measures for Council-area Chinook fisheries north of Cape Falcon satisfy ESA consultation standards and NMFS annual guidance, FMP conservation objectives, and all other objectives for relevant Chinook stocks (Table 5).

### 6.2 South of Cape Falcon

Status of Chinook stocks important to 2025 Chinook harvest management south of Cape Falcon are:

- Sacramento River fall Chinook (SRFC). The Sacramento Index forecast is 165,655, which is lower than the 2024 forecast of 213,600.
- *KRFC*. The ocean abundance forecast for this stock is 82,672, including 14,333 age-4 fish. These compared to the 2024 forecasts of 180,700, including 39,531 age-4 fish.
- *SRWC*. The forecast of age-3 escapement absent fishing is 4,507, which is higher than the 2024 forecast of 1,081.

#### 6.2.1 Objectives

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

- A KRFC natural area spawner escapement of at least 19,417 adults, which is produced, in expectation, by a maximum exploitation rate of 10.0 percent (FMP control rule).
- A SRFC hatchery and natural area spawner escapement of at least 122,000 adults (FMP control rule).
- Consultation standards for ESA listed stocks as provided in Section 5.0 of Preseason Report II. Relevant ESA listed stocks for the area south of Cape Falcon include SRWC, California coastal Chinook, SRW fall Chinook, and LCR natural tule fall Chinook.

For 2025, the Klamath River fall Chinook (KRFC) harvest control rule specifies a *de minimis* maximum allowable exploitation rate of 10.0 percent. The FMP requires consideration of several factors when recommending *de minimis* exploitation rates. From the Salmon FMP:

"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 and the Council considered these circumstances, with the exception minimal needs for tribal fisheries.

#### Potential for low KRFC spawner abundance

The potential for critically low natural spawner abundance could be considered high. The 2025 minimum natural-area adult spawner escapement of 19,417 adults is lower than the minimum stock size threshold (MSST; 30,525) and  $S_{MSY}$  (40,700 natural-area adult spawners). A natural-area adult escapement of 19,417 adults would represent the seventh lowest value over the past 49 years of data.

#### **KRFC 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 19,417 adults in 2025. The 720 adult 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 0.53.

#### Recent KRFC spawner abundance

The natural-area adult spawner escapement has been lower than the MSST in eight of the last ten years and four of the last five years. The 2025 forecast of natural-area adult spawners in the absence of fishing is 21,574 adults, which is lower than  $S_{MSY}$  and the MSST. If fishing seasons are structured such that the maximum allowable exploitation rate of 10.0 percent is met, the natural-area adult spawner expectation is 19,417, which is lower than the MSST and  $S_{MSY}$ .

#### **Comingled stocks**

With regard to co-mingled stocks, Sacramento River fall Chinook have a low abundance forecast but will not constrain ocean fisheries in 2025.

#### Indicators of marine and freshwater environmental conditions

The 2024-2025 California Current Ecosystem Status Report (<u>CCIEA</u>, <u>2025</u>) provides indicator-based outlooks for KRFC for the 2025 and 2026 return years. The indicator-based outlook is "consistent with low returns in 2025". Appendix J of the CCIEA report provides more detailed information on the habitat indicators relevant to the 2025 return year.

#### Approaching an overfished condition

KRFC currently meets the criteria for being at risk of approaching an overfished condition.

#### Overfished status

KRFC was declared overfished following the 2017 escapement and continues to meet the criteria for overfished status in 2025.

#### 6.2.2 Achievement of Objectives

Fishery quotas under the adopted management measures are presented in Table 4. Stock-specific management criteria and their forecast values under the adopted management measures are provided in Table 5. Projected fishery landings, bycatch, and bycatch mortality estimates are summarized in Table 6. Table 7 provides a breakdown of impacts by fishery and area for LCR tule Chinook. Table 12 provides an assessment of stock status. Descriptions pertaining to the achievement of key objectives for Chinook salmon management south of Cape Falcon are found below.

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- *KRFC*. The projected natural-area adult escapement is 19,417, which is equivalent to the 2025 objective of 19,417, and which is produced, in expectation, by a maximum exploitation rate of 10.0 percent.
- *SRFC*. The adopted management measures result in a projected escapement of 147,733, which is higher than the 2025 objective of 122,000 hatchery and natural area adult spawners.
- SRWC. The adopted management measures result in a projected age-3 impact rate of 1.6 percent, which is consistent with the ESA consultation standard that (1) limits the age-3 impact rate in 2025 fisheries south of Point Arena to a maximum of 20.0 percent and (2) specifies time/area closures and minimum size limit constraints south of Point Arena.
- California coastal Chinook. The adopted management measures result in a projected KRFC age-4 ocean harvest rate of 1.6 percent, which is consistent with the application of the conservation objective and management measures for this stock to limit the forecast KRFC age-4 ocean harvest rate to a maximum of 7.7 percent.
- *SRW fall Chinook*. The adopted management measures have an ocean exploitation rate of 54.3 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.
- *LCR natural tule fall Chinook*. The projected exploitation rate in the adopted management measures is 41.0 percent and meets the 41.0 percent maximum for 2025.

The adopted management measures for Chinook fisheries south of Cape Falcon satisfy ESA consultation standards. However, KRFC does not meet its conservation objective of 40,700 natural area adult spawners (Table 5).

#### 7.0 COHO SALMON MANAGEMENT

Abundance projections important to coho harvest management in Council area fisheries in 2025 are:

- Oregon Production Index (OPI) Hatchery coho. The forecast for hatchery coho from the Columbia River and the coast south of the Columbia River of 493,600 is greater than the 2024 forecast of 403,100. The Columbia River early coho forecast is 338,100 compared to the 2024 forecast of 227,500, and the Columbia River late coho forecast is 141,600 compared to the 2024 forecast of 173,600.
- Oregon coastal natural (OCN) coho. The OCN forecast is 289,000 compared to the 2024 forecast of 233,200.
- Lower Columbia natural (LCN) coho. The LCN forecast is 72,000 compared to the 2024 forecast of 87,800.
- 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 increased for hatchery stocks compared to 2024. Among Washington coastal natural stocks, Quillayute fall, Hoh, and Grays Harbor coho are all in the abundant category, and Queets coho are in the moderate category under the PST Southern Coho Management Plan.

#### 7.1 Objectives

Key coho management objectives shaping management measures in 2025 Council area fisheries are:

• Consultation standards for ESA listed stocks as provided in Section 5.0 in Preseason Report II (PFMC 2025c). 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 2025 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 2025; these stocks contribute to fisheries off Washington. Forecasts for some Puget Sound and Interior Fraser coho stocks in 2025 are low; however, most of the exploitation on these stocks occurs in Puget Sound and has been addressed in development of fishing seasons for inside waters during the North of Falcon co-management process by the state and treaty tribes of Washington. Because of their abundance status (low), 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.
- Fisheries north of Cape Falcon were shaped to minimize impacts on Interior Fraser, Washington coastal natural, and LCN coho.

#### 7.2 Achievement of Objectives

Fishery quotas under the adopted management measures are presented in Table 4. Stock-specific management criteria and their forecast values are provided in Table 5. Projected fishery landings, bycatch, and bycatch mortality are summarized in Table 6. Table 7 provides a breakdown of impacts by fishery and area for LCN, OCN, and SONCC coho populations. Table 8 provides expected coho mark rates for west coast mark-selective coho fisheries by month. Table 12 provides an assessment of stock status, including expected spawning escapement and exploitation rates under the adopted management measures.

- SONCC coho. The adopted management measures satisfy the maximum 16 percent exploitation rate for the Trinity River component of the SONCC coho ESU and 15 percent for all other components when projected marine impacts are combined with projected freshwater impacts. The marine exploitation rate is 1.6 percent for all SONCC coho components. The freshwater exploitation rates are 13.6 percent, 5.9 percent, 4.9 percent, and 0.0 percent for Trinity, Klamath, Rogue, and other SONCC coho ESU components, respectively.
- *OCN coho*. The adopted management measures satisfy the maximum 30.0 percent exploitation rate for combined marine and freshwater fisheries, with a marine exploitation rate of 15.1 percent and a freshwater exploitation rate of 10.0 percent.
- *LCN coho*. The adopted management measures satisfy the maximum 23.0 percent exploitation rate for combined marine and mainstem Columbia River fisheries, with a marine exploitation rate of 14.1 percent and a mainstem (including Buoy 10) Columbia River exploitation rate of 7.4 percent.
- Washington coastal natural coho. The adopted management measures provide ocean escapement numbers of 10,309, 4,624, 7,614, and 64,368 for Quillayute fall, Hoh, Queets, and Grays Harbor natural coho, respectively. These ocean escapement levels, when combined with scheduled in-river fisheries, meet FMP management objectives or objectives agreed to by the treaty tribes and Washington Department of Fish and Wildlife (WDFW) for those coho stocks. Expected exploitation rates are 29.0 percent, 46.5 percent, 35.6 percent, and 48.7 percent for Quillayute, Hoh, Queets, and Grays Harbor natural coho, respectively, which comply with both the FMP and the PST Southern Coho Management Plan (Section 5.2 and Table 12).

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• *Interior Fraser coho*. The Southern U.S. exploitation rates in the adopted management measures total 9.9 percent, which complies with the 10.0 percent maximum required by the PST Southern Coho Management Plan.

The adopted management measures for coho fisheries satisfy ESA consultation standards and FMP objectives, and all other objectives for relevant coho stocks including those listed in Table 5.

#### 8.0 PINK SALMON MANAGEMENT

Pink salmon merit management consideration in 2025. 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.

#### 9.0 IMPORTANT FEATURES OF THE ADOPTED MANAGEMENT MEASURES

Significant changes from recent seasons are highlighted below, but this section is not intended to be a comprehensive description of the adopted management measures. For detailed information on the adopted ocean salmon seasons see Table 1 (non-Indian commercial), Table 2 (recreational), and Table 3 (treaty Indian).

Adopted management measures in the area north of Cape Falcon were shaped to meet consultation standards, comply with Council-adopted rebuilding plans, and take into consideration year-specific circumstances. The 2025 Chinook total allowable catch (TAC) is comparatively higher to the 2024 TAC due to higher forecasted abundances of Columbia River fall Chinook. The 2025 coho TAC is comparatively increased compared to last year's TAC mainly due to higher abundance forecasts for Columbia River hatchery coho stocks.

Fisheries south of Cape Falcon are heavily constrained by KRFC and SRFC. KRFC are being managed under the *de minimis* portion of its harvest control rule, which in 2025 specifies a maximum allowable exploitation rate of 10.0 percent and a minimum escapement of 19,417 natural area adult spawners.

#### 9.1 Commercial

North of Cape Falcon, the non-Indian troll Chinook quota is split between the spring (May - June) fishery and the summer fishery (July - September). A preseason trade of 9,000 marked coho from the commercial fishery allocation to the recreational fishery in exchange for 2,250 Chinook from the recreational allocation is in place. The non-Indian commercial Chinook quota of 61,250 is increased compared to the 41,000 Chinook quota in 2024. The non-Indian commercial coho quota of 8,280 is decreased compared to the 2024 quota of 15,200 coho. All landed coho must be marked with a healed adipose fin clip. North of Cape Falcon, the non-Indian commercial troll Chinook quota is split 62 percent in the spring (May-June) fishery and 38 percent in the summer fishery (July-September) prior to accounting for preseason trades.

The spring fishery in the area north of Cape Falcon will be open for all salmon except coho seven days per week May 16 through June 29. A catch limit of 8,000 Chinook is in effect from the U.S./Canada border to the Queets River, and a catch limit of 6,000 Chinook is in effect from Leadbetter Point to Cape Falcon. Chinook weekly (defined as Thursday through Wednesday) landing and possession limits in effect are: 100 Chinook in the U.S/Canada border to Queets subarea and 80 Chinook in the Leadbetter Point to Cape Falcon subarea. In the Queets River to Leadbetter Point subarea, there is no weekly landing and possession limit for Chinook. In 2026, the season is scheduled to open May 1 for all salmon except coho consistent with preseason regulations as described for this area and subareas for May 16 through June 29, 2025.

The summer fishery in the area north of Cape Falcon will be open for all salmon seven days per week for subareas north of Leadbetter Point, July 1 through September 15. The subarea south of Leadbetter Point will be open for all salmon, seven days per week, July 1 through September 30. July 1 through 9, landing and possession limit of 60 marked coho per vessel per landing period. Beginning July 10, 60 marked coho per vessel per landing week.

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In the area between Cape Falcon and Humbug Mountain the commercial fishery will be open for all salmon except coho from mid-May through the end of the month and in October. In the same area, September will be open for all salmon with a non-mark-selective coho quota of 7,500 and a limit of no more than 75 coho per vessel per landing week is in place. In the months of September and October, a limit of no more than 75 Chinook per vessel per landing week is in place. From Cape Falcon to Heceta Bank Line, an all-salmon except coho fishery will open for approximately three weeks in June and two weeks in July.

Commercial salmon fisheries will be closed from the Oregon/California border to the U.S./Mexico border in 2025.

#### 9.2 Recreational

North of Cape Falcon, the recreational Chinook quota of 53,750 is increased from the 2024 quota of 41,000 Chinook. The recreational coho quota of 99,720 is increased from the 2024 quota of 79,800 coho. All landed coho must be marked with a healed adipose fin clip. A preseason trade of 2,250 Chinook from the recreational fishery allocation to the commercial troll fishery in exchange for 9,000 marked coho from the commercial fishery allocation to the recreational fishery is in place.

The Neah Bay and La Push subareas will open seven days per week. June 21 through July 3, all salmon except coho, one salmon per day. Beginning July 4 through the earlier of September 15 or when Chinook subarea guideline or coho subarea quota is attained. Open for all salmon, except no chum beginning August 1, the daily bag limit in both subareas is two salmon.

The Westport subarea will open seven days per week. June 21-28, all salmon except coho, one salmon per day. Beginning June 29, Westport subarea will open for all salmon species through September 15 or when Chinook subarea guideline or coho subarea quota is attained. The daily bag limit is two salmon, of which only one may be a Chinook.

The Columbia River subarea will open seven days per week for all salmon species June 25 through the earlier of September 30 or when Chinook subarea guideline or coho subarea quota is attained. The daily bag limit is two salmon, of which only one may be a Chinook.

In Oregon, from Cape Falcon to Humbug Mountain, all salmon except coho is open until June 6. From Humbug Mountain to the Oregon/California border, all salmon except coho may be retained from mid-May through June 6. A mark-selective coho season with a quota of 44,000 marked coho will be open in Cape Falcon to the Oregon/California border from June 7 through late-August. During the mark-selective coho season, from Cape Falcon to Humbug Mountain, Chinook may also be retained from June 7 through July 15 and from Humbug Mountain to the Oregon/California border from June 30 through July 15. An all salmon season with a quota of 30,000 coho will open for the month of September from Cape Falcon to Humbug Mountain. Coho retention may end sooner if the quota is met prior to the scheduled end dates. From Cape Falcon to Humbug Mountain, the all salmon except coho season resumes in October but it is only open shoreward of the 40-fathom regulatory line.

The area from the Oregon/California border to the US/Mexico border (California KMZ, Fort Bragg, San Francisco, and Monterey management areas) will be open for two days in June and two days in July. The fishery will be open again from July 31 through August 3 and August 25 through 31. Inseason action to close these fisheries could occur if total harvest approaches a statewide guideline of 7,000 Chinook.

Fall fisheries are planned for the Pigeon Point to Point Sur subarea in September and in the Point Reyes to Pigeon Point subarea in September and October. These fisheries could be closed if the total harvest approaches a 7,500 Chinook statewide guideline.

Heavily constrained or closed ocean fisheries in California and Oregon result in low allowable ocean fishery exploitation rates in 2025. Low ocean exploitation rates lead to relatively more salmon projected to return to the river.

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The STT received guidance at the April PFMC meeting to "adjust the Klamath River recreational fishery share such that the projected natural area adult spawner escapement equals 19,417." This guidance resulted in 50:50 tribal:non-tribal harvest sharing and a non-tribal river recreational share of 978 adult KRFC.

The Klamath river recreational salmon fishery is managed by the California Fish and Game Commission. Tribal fisheries are managed by the Yurok Tribe and Hoopa Valley Tribe. The final Klamath Basin tribal and non-tribal salmon fishery management measures are not known at this time, and changes to river fishery management measures could result in changes to projected harvest and escapement in the Klamath Basin.

#### 9.3 Treaty Indian

The treaty Indian ocean troll Chinook quota is split evenly between the spring (May - June) fishery and the summer fishery (July - September). The Chinook-only spring fishery runs from May 1 through June 30 with a sub-quota of 22,500. The summer fishery opens on July 1 and runs through the earlier of a date in September, to be established in tribal regulations, or 22,500 Chinook quota or 37,500 coho quota are obtained. A non-retention experimental fishery for performing genetic stock identification (GSI) may also be conducted through the month of September to inform the treaty Indian ocean troll fishery in future years. The treaty Indian fishery management areas are located between the U.S./Canada border and Pt. Chehalis, Washington (Table 3, C.1).

#### 10.0 SOCIOECONOMIC IMPACTS OF THE ADOPTED MANAGEMENT MEASURES

#### 10.1 Economic Impacts

The short-term economic effects of the Council-adopted management measures for non-Indian fisheries are shown in Tables 9 and 10. Table 9 shows projected commercial troll impacts by management (catch) area expressed in terms of estimated potential exvessel value. Table 10 shows projected recreational fishery impacts by management area in terms of the number of projected angler-trips and community personal income impacts generated by those activities. Note that exvessel revenue values shown for the commercial troll fishery in Table 9 and income impact values shown for the recreational fishery in Table 10 are not directly comparable. More directly comparable measures of short-term economic impacts from commercial and recreational salmon fisheries appear in Figures 3 and 4, which show estimated community income impacts under the Council-adopted commercial troll and recreational fishery management measures, respectively, compared to historic levels in real (inflation-adjusted) dollars. Income impacts indicate the amount of income generated by the economic linkages associated with commercial and recreational fishing. 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 may vary from what is indicated by the short-term impact estimates from ocean fisheries activities reported in Tables 9 and 10 and Figures 3 and 4. Salmon that remain unharvested in the ocean do not necessarily represent an economic loss, as they may augment inside harvest or provide additional spawning escapement that contributes to ocean abundance in subsequent years. Restricting ocean harvests may increase opportunities for inside harvesters (e.g., higher commercial revenue or more angler trips) or contribute to higher inside CPUE representing lower costs for commercial harvesters and/or higher success rates for recreational fishers. Salmon that remain unharvested by both ocean fisheries and inside fisheries may impact future production, although the magnitude and direction of this effect varies depending on the biology of the affected stocks, habitat, and environmental factors.

Exvessel revenues in Table 9 are based on estimated harvest by catch area, while commercial income impacts in Figure 3 are based on projected deliveries by landing area. Historically there has been a divergence between catch and deliveries (landings) associated with a particular area. The difference is due

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to salmon caught in certain management areas being delivered to ports in neighboring management areas. In an attempt to account for this effect and assign income impacts to the "correct" landing area, adjustments are made based on historical patterns. The patterns are typically inferred from recent year's catch and landings data. In this case, since the area from the Oregon/California border to the U.S./Mexico border was closed to ocean commercial salmon fishing in 2023 and 2024, data patterns from the 2022 season were used. For example, 2022 data show 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) 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 occurring in the state-waters-only (SWO) fishery off southern Oregon. Projected total commercial harvest combined with a prior year's average Chinook and coho weights per fish caught and exvessel prices per pound were assumed to be the best indicators of expected revenues in the coming season. Since the area from the Oregon/California border to the U.S./Mexico border was closed to ocean commercial salmon fishing in 2023 and 2024, averages from the 2022 season were used. Coastwide average Chinook weight per fish in 2022 was approximately seven percent below the prior year and three percent below the five-year (2018-2022) average, while coastwide average Chinook exvessel prices in 2022 were 14 percent below the prior year and 10 percent below the 2018-2022 average in inflation-adjusted terms. Coastwide average coho weight per fish in 2022 was approximately five percent below the prior year but roughly equal to the 2018-2022 average, while coastwide average coho exvessel prices in 2022 were 30 percent below the prior year and 15 percent below the 2018-2022 average in inflation-adjusted terms. If this year's actual average weights per fish or exvessel prices diverge significantly from what was observed in recent 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 Chinook biological impacts. STT estimates for recreational Chinook fisheries 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 fisheries off central and southern Oregon. In order to account for an expected largely coho-driven recreational effort in the region from Cape Falcon to Humbug Mountain, additional parameters were calculated using the historical relationship between observed catch and effort in that region. Those parameters were then applied to projected salmon availability to estimate the distribution of recreational catch and effort under the adopted Alternative in that region.

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 adopted Alternative. Projections of recreational catch north of Cape Falcon were made by multiplying the proposed quotas for Chinook and coho by historic ratios of actual catch to actual quotas. Effort and economic impacts were then estimated by summing recent year weighted average coho and Chinook angler success rates multiplied by projected coho and Chinook recreational catch.

Unless otherwise noted, economic effects of the proposed commercial and recreational fisheries actions summarized below are compared in terms of estimated community income impacts.

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#### 10.2 Community Impacts

Two types of impacts are discussed in this section. "Income impacts" are the measures of economic activity as described in the previous section. "Impacts" of the action, from a NEPA perspective, are the change from a baseline. In this case, the baseline is the 2024 fishery, but information is also provided comparing projections to 2019-2023 five-year averages. When referencing impacts of the action from a NEPA perspective, either a comparison to the baseline is provided or the generic term "impacts" is used. An overall summary of impacts from the Proposed Action (adopted Alternative) is provided in the following section.

Projected income impacts under the Proposed Action in coastal communities adjacent to commercial and recreational salmon fishery management areas are shown in Figure 3 and Figure 4; and comparisons of income impacts under the Proposed Action with income impacts under Alternatives I, II and III are summarized in Table 11. For an assessment of the impact of the Proposed Action, comparisons to 2024 and 2019-2023 average income impacts are provided below.

Projected coastwide income impacts from **commercial** salmon landings and processing under the Proposed Action are within the range analyzed under the Alternatives and will result in an increase of approximately 41 percent in estimated total coastwide commercial fisheries income impacts compared to last year, but a reduction of approximately 63 percent compared with the recent five-year (2019-2023) average (Figure 3 and Table 11). Regionally the picture is mixed, with income impacts from commercial salmon fisheries under the Proposed Action projected to be above last year's level north of Cape Falcon and between Cape Falcon and Humbug Mountain, but essentially zero once again between Humbug Mountain and the Oregon/California border and in all areas south of the Oregon/California border due to closures of commercial salmon fisheries in those areas as was the case in 2023 and 2024. With respect to the 2019-2023 inflation-adjusted average, income impacts from commercial salmon fisheries under the Proposed Action are projected to be more than double the recent average level north of Cape Falcon, 48 percent above the recent average between Cape Falcon and Humbug Mountain, but essentially 100 percent below the average in all regions south of Humbug Mountain due to closures of commercial salmon fisheries in those areas (Figure 3 and Table 11).

Projected coastwide income impacts resulting from expenditures by **recreational** salmon anglers under the Proposed Action are within the range analyzed under the Alternatives and are projected to result in an increase of approximately 36 percent in total coastwide recreational fisheries income impacts compared to last year's activity, but also 29 percent below the recent five-year (2019-2023) average (Table 11 and Figure 4). Regionally the picture is mixed, with income impacts from recreational salmon fisheries under the Proposed Action projected to be 12 percent above last year's level north of Cape Falcon, 35 percent above last year's level between Cape Falcon and Humbug Mountain, 59 percent below last year's level between Humbug Mountain and the Oregon/California border, and, perhaps most notably, income impacts are projected to be non-zero in all four areas south of the Oregon/California border due to proposed recreational salmon openings in those areas for the first time since 2022. With respect to the 2019-2023 inflation-adjusted average, income impacts from recreational salmon fisheries under the Proposed Action are projected to be 17 percent above the recent average level north of Cape Falcon, 31 percent above the recent average between Cape Falcon and Humbug Mountain, but at least 57 percent below the recent average in all areas between Humbug Mountain and the U.S./Mexico border (Figure 4, and Tables 10 and 11).

#### 10.3 Social Impacts

The effect of the Proposed Action on other indicators of community social welfare (e.g., poverty, divorce rates, graduation/dropout rates, incidents of domestic violence, etc.) cannot be directly measured. Change in personal income in communities may be used as a rough proxy for other socioeconomic effects. However, changes in the broader regional economy ("reasonably foreseeable effects") and long-term trends

 in fishery-related employment are more likely to drive these indicators of social wellbeing than the short-term economic effects of the Proposed Action.

To the extent practicable, social impacts were considered when tribal and non-tribal commercial and recreational salmon seasons were shaped. To minimize regulatory complexity in recreational fisheries, season dates and regulations were kept as consistent as possible within major management areas. Bag limits allow a greater number of fishers to participate in the fishery. Minimum size limits generally remain consistent throughout the season in most areas, which, in addition to biological benefits, tends to increase regulatory compliance. Where size limits do change in-season, the size limits decrease, such that anglers complying with earlier size limits will still be in compliance with the smaller size limits. Efforts are made to accommodate important cultural events such as Memorial Day, Independence Day, and Labor Day holidays as well as traditional fishing derby events. Commercial fisheries often include vessel limits per trip or per open period to stretch quota attainment over a longer period of time. Doing so can provide greater access for smaller vessels, increase safety at sea by limiting the incentive to fish during inclement weather, improve marketing opportunities, and extend the period during which consumers have access to fresh, wild caught salmon. Notification mechanisms by phone, text, email or social media allow commercial vessels greater flexibility in choosing a port of landing to take advantage of markets or to access better infrastructure. That being said, closure of all commercial salmon fisheries in California for the third year in a row can be expected to contribute to significantly adverse social impacts on fishing communities and economically linked businesses in those areas. While the limited openings for California recreational salmon fisheries under the Proposed Action should provide limited economic relief to salmon fishing communities south of the Oregon/California border, there may be a slight negative impact on angler safety in the event of inclement weather during one or more of the few, brief scheduled opening periods compared to previous years.

Salmon are an important part of tribal culture and have been since time immemorial. Salmon provide economic, cultural, ceremonial, and subsistence benefits to west coast tribal communities. Under the Proposed Action, based on the adopted Chinook and coho quotas, Washington coastal treaty tribes are projected to have slightly more opportunity to harvest ocean Chinook and slightly less opportunity to harvest coho compared with last year. Tribal ocean fisheries north of Cape Falcon would be allocated 45,000 Chinook (compared to 42,500 in 2024) and 37,500 coho (compared to 42,500 in 2024) for ocean-area harvest (Table 3 and Table 6). The Klamath River tribal share under the Proposed Action is 1,385 adult KRFC, a 78 percent reduction from the 2024 allocation of 6,434 adult KRFC (Table 5). Note that as with the non-tribal commercial and recreational salmon fisheries described in Section 10.1, restricting ocean salmon harvests may allow increased opportunities for inside harvest and escapement (and vice versa).

#### 11.0 EFFECTS OF THE PROPOSED ACTION

The Proposed Action, adoption of the 2025 ocean salmon management measures, was assessed relative to the environmental components and criteria established in Preseason Report II (PFMC 2025c; Part 2 of this EA). The impacts of the Proposed Action on most target stocks and ESA-listed salmon fall within the range of impacts analyzed for the Alternatives in Preseason Report II. For stocks where the impacts of the Proposed Action may fall outside the range of impacts under the Alternatives in Preseason Report II, such impacts result from the shaping of fisheries that occur outside of the Council area, and are within the impact limitations of the FMP, ESA consultation standards, and PST (Table 11). Economic impacts of the Proposed Action fall within the range of impacts projected for the Alternatives in Preseason Report II as summarized in Table 11.

Under No Action, the seasons would be the same as in 2024. For the **commercial** fishery, the regional picture varies when comparing the Proposed Action to No Action (2024 values). Income impacts north of Cape Falcon and between Cape Falcon and Humbug Mountain are projected to be larger than last year. In

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contrast, the areas between Humbug Mountain and the Oregon/California border, as well as all regions south of the border, are expected to see little or no income impact again this year due to continued closures of commercial salmon fisheries south of the Oregon/California border, as was the case in 2023 and 2024, and the additional closure of the region between Humbug Mountain and the Oregon/California border in 2025 (Table 1, Table 11).

For the **recreational** fishery, regional impacts also vary. North of Cape Falcon, income impacts from the recreational salmon fishery are projected to be slightly higher than last year and are also expected to increase between Cape Falcon and Humbug Mountain. Between Humbug Mountain and the Oregon/California border, recreational fishery income impacts are projected to be smaller than last year. Notably, in all areas south of the Oregon/California border, income impacts from recreational salmon fishing are expected to return to non-zero levels for the first time since 2022, due to proposed reopening of the fisheries in those regions (Table 11).

As stated in Preseason Report II (<u>PFMC 2025c</u>), it was not possible to discern differences in the effects of the Alternatives on other components of the human environment (non-target fish species, marine mammals, other ESA-listed species, sea birds, biodiversity and ecosystem function, and public health and safety). The Proposed Action is within the range of Alternatives analyzed in Preseason Report II. The effects on the human environment were not expected to be significant under any of the Alternatives and therefore not expected to be significant under the Proposed Action.

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# 12.0 REFERENCES

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- 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. Available at <a href="https://www.pcouncil.org/actions/amendment-15-an-initiative-to-provide-de-minimis-ocean-fishing-opportunity-for-klamath-river-fall-chinook/">https://www.pcouncil.org/actions/amendment-15-an-initiative-to-provide-de-minimis-ocean-fishing-opportunity-for-klamath-river-fall-chinook/</a>
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TABLE 1. 2025 Commercial troll management measures for non-Indian ocean salmon fisheries - Council adopted. (Page 1 of 6)

### A. SEASON DESCRIPTIONS

### North of Cape Falcon

## **Supplemental Management Information**

- 1. Overall non-Indian TAC: 115,000 Chinook and 108,000 coho marked with a healed adipose fin clip (marked).
- 2. Trade: Commercial troll traded 9,000 marked coho to the recreational fishery for 2,250 Chinook.
- 3. Non-Indian commercial troll TAC: 61,250 Chinook and 8,280 marked coho: all retained coho must be marked with a healed adipose fin clip.
- 4. For fisheries scheduled prior to May 16, 2025: See 2024 management measures, which are subject to inseason action.

# U.S./Canada Border to Cape Falcon

- May 1-15. See 2024 management measures, which are subject to inseason action.
- May 16 through the earlier of June 29, or 36,800 Chinook.

Catch limits in place for the following areas (C.8):

U.S./Canada border to Queets River -

No more than 8,000 Chinook.

Leadbetter Pt. to Cape Falcon -

No more than 6,000 Chinook.

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.6, C.8).

U.S./Canada border to Queets River -

100 Chinook per vessel per landing week.

Queets River to Leadbetter Pt. -

No weekly Chinook landing and possession limit.

Leadbetter Pt. to Cape Falcon -

80 Chinook per vessel per landing week.

Open seven days per week (C.1). 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).

If the Chinook quota is exceeded, the excess will be deducted from the all-salmon season (C.8).

In 2026, the season will open May 1 consistent with all preseason regulations in place in this area and subareas during May 16-June 29, 2025, including subarea salmon guidelines and quotas and weekly vessel limits. This opening could be modified following Council review at its March and/or April 2026 meetings.

#### U.S./Canada Border to Cape Falcon

- U.S./Canada Border to Leadbetter Point: July 1 through the earlier of September 15, or the U.S./Canada Border to Cape Falcon quotas of 24,450 Chinook or 8,280 marked coho (C.8).
- Leadbetter Point to Cape Falcon: July 1 through the earlier of September 30, or the U.S./Canada Border to Cape Falcon quotas of 24,450 Chinook or 8,280 marked coho (C.8).

Open seven days per week. 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).

July 1-9: landing and possession limit of 60 marked coho per vessel for the open period (C.6).

Beginning July 10: landing and possession limit of 60 marked coho per vessel per landing week (Thurs.-Wed.) (C.6).

Landing limits will be evaluated weekly, inseason (C.1, C.8.f).

#### For all commercial troll fisheries north of Cape Falcon:

Mandatory closed areas include Cape Flattery Control Zone, Salmon Troll Yelloweye Rockfish Conservation Area, and Columbia Control Zone. (C.5.a, C.5.b, C.5.d).

Vessels must land and deliver their salmon within 24 hours of any closure of this fishery (C.6). Vessels may not land fish east of the Sekiu River or east of Tongue Point, Oregon.

## During any single trip, only one side of the Leadbetter Point line may be fished (C.11).

Vessels fishing for 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 WDFW 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 (C.11).

TABLE 1. 2025 Commercial troll management measures for non-Indian ocean salmon fisheries - Council adopted. (Page 2 of 6)

### A. SEASON DESCRIPTIONS North of Cape Falcon (continued)

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, Washington permitted vessels may also land all species of fish north of Leadbetter Point. For delivery to Washington ports north of Leadbetter Point, vessels must notify WDFW 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 (C.11). 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.).

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 (C.11). 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).

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).

Vessels fishing in a subarea north of Cape Falcon with a higher limit may transit through and land in a subarea with a lower limit. Prior to crossing the subarea line at Leadbetter Point or Queets River, vessels must notify WDFW at 360-249-1215 with area fished, total Chinook, coho, and halibut catch aboard, and destination with approximate time of delivery (C.11).

#### A. SEASON DESCRIPTIONS

# South of Cape Falcon

### **Supplemental Management Information**

- 1. Sacramento River fall Chinook spawning escapement of 147,733 hatchery and natural area adults.
- 2. Sacramento Index exploitation rate of 10.8%.
- 3. Klamath River recreational fishery allocation: 978 adult Klamath River fall Chinook.
- 4. Klamath tribal allocation: 1,385 adult Klamath River fall Chinook.
- 5. CA/OR share of Klamath River fall Chinook commercial ocean harvest: 0%/100%.
- 6. Overall commercial troll coho TAC: 7,500.

# Cape Falcon to Heceta Bank Line

- June 9-30;
- July 16-31.

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).

All fishers landing Chinook salmon south of the Heceta Bank Line are required 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 <a href="mailto:nfalcon.trollreport@odfw.oregon.gov">nfalcon.trollreport@odfw.oregon.gov</a> (C.11.). Notification shall include vessel name and number, number of Chinook salmon, port of landing and location of delivery, and estimated time of delivery.

### Cape Falcon to Humbug Mt.

- April 10-May 15. See 2024 management measures and 2025 inseason actions. Dates may be subject to further inseason action.
- May 16-31;
- September 1-October 31 (C.8, C.9.a).

Open seven days per week. All salmon except coho (C.4, C.7), except during the non-mark-selective coho fishery as described below (C.5). Chinook minimum size limit of 28 inches total length, coho minimum size limit of 16 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).

Beginning September 1, all salmon until the earlier of September 30 or a 7,500 non-mark-selective coho quota met. If the coho quota is met prior to September 30, then all salmon except coho season continues (C.4, C.7). No more than 75 coho per vessel per landing week when retention allowed and no more than 75 Chinook allowed per vessel per landing week (Thurs.-Wed.). Vessel limits may be modified inseason.

Oregon State regulations require all fishers landing coho salmon into Oregon from any fishery between Cape Falcon, OR and Humbug Mountain 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 <a href="mailto:nfalcon.trollreport@odfw.oregon.gov">nfalcon.trollreport@odfw.oregon.gov</a> (C.11.). Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery.

In 2026, the season will open March 15 for all salmon except coho. 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. Gear restrictions (C.2, C.3) same as in 2025. This opening could be modified following Council review at its March 2026 meeting (C.8).

TABLE 1. 2025 Commercial troll management measures for non-Indian ocean salmon fisheries - Council adopted. (Page 3 of 6)

# A. SEASON DESCRIPTIONS South of Cape Falcon

## Humbug Mt. to OR/CA Border.

- April 15-30. See 2024 management measures and 2025 inseason actions. Dates may be subject to further inseason action.
- Starting May 16, closed.

In 2026, 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 2026 meeting (C.8).

### **OR/CA Border to Humboldt South Jetty (California KMZ)**

Closed.

In 2026, 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 20 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). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). 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 and/or April 2026 meetings.

# Humboldt South Jetty to Latitude 40°10' N.

· Closed.

## Latitude 40°10' N. to Point Arena (Fort Bragg)

· Closed.

In 2026, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.

# Point Arena to Pigeon Pt. (San Francisco)

Closed.

In 2026, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.

# Pigeon Point to U.S./Mexico Border (Monterey)

Closed.

In 2026, the season opens 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 2022 (C.2, C.3). Harvest guidelines and vessel-based landing and possession limits will be considered inseason (C.8.f). Inseason action to close fisheries, modify season dates, or modify vessel-based landing and possession limits may be considered when total commercial harvest in this management area is approaching its harvest guideline (C.8). Electronic Fish Tickets must be submitted within 24 hours of landing (C.12). This opening could be modified following Council review at its March and/or April 2026 meeting.

When the fishery is closed from Humbug Mountain to the OR/CA Border 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).

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).

TABLE 1. 2025 Commercial troll management measures for non-tribal ocean salmon fisheries - Council adopted. (Page 4 of 6)

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

	Chir	nook	Co	ho	
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
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	-	-	-	-	-
Latitude 40°10' N. to Pt. Arena	-	-	-	-	-
Pt. Arena to Pigeon Pt.	-	-	-	-	-
Pigeon Pt. to U.S./Mexico Border	-	-	-	-	-

### C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. <u>Compliance with Minimum Size or Other Special Restrictions</u>: 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 fishing 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 prohibited 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.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. 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.).

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

- 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 Humbug Mt. (50 CFR 660.71) (o) (12)-(62), when in place.

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45°46.00' N. lat., 124°04.49' W. long.;
                                          44°44.96′ N. lat., 124°14.39′ W. long.;
                                                                                    43°40.49' N. lat., 124°15.74' W. long.;
                                                                                    43°38.77' N. lat., 124°15.64' W. long.;
45°44.34′ N. lat., 124°05.09′ W. long.;
                                          44°43.44′ N. lat., 124°14.78′ W. long.;
45°40.64' N. lat., 124°04.90' W. long.;
                                          44°42.26' N. lat., 124°13.81' W. long.;
                                                                                    43°34.52' N. lat., 124°16.73' W. long.;
45°33.00' N. lat., 124°04.46' W. long.;
                                          44°41.68' N. lat., 124°15.38' W. long.;
                                                                                    43°28.82' N. lat., 124°19.52' W. long.;
45°32.27′ N. lat., 124°04.74′ W. long.;
                                          44°34.87′ N. lat., 124°15.80′ W. long.;
                                                                                    43°23.91′ N. lat., 124°24.28′ W. long.;
45°29.26' N. lat., 124°04.22' W. long.;
                                          44°33.74′ N. lat., 124°14.44′ W. long.;
                                                                                    43°20.83' N. lat., 124°26.63' W. long.;
45°20.25' N. lat., 124°04.67' W. long.;
                                          44°27.66' N. lat., 124°16.99' W. long.;
                                                                                    43°17.96' N. lat., 124°28.81' W. long.;
                                                                                    43°16.75′ N. lat., 124°28.42′ W. long.;
45°19.99' N. lat., 124°04.62' W. long.;
                                          44°19.13′ N. lat., 124°19.22′ W. long.;
45°17.50′ N. lat., 124°04.91′ W. long.;
                                          44°15.35′ N. lat., 124°17.38′ W. long.;
                                                                                    43°13.97' N. lat., 124°31.99' W. long.;
45°11.29′ N. lat., 124°05.20′ W. long.;
                                          44°14.38' N. lat., 124°17.78' W. long.;
                                                                                    43°13.72′ N. lat., 124°33.25′ W. long.;
45°05.80′ N. lat., 124°05.40′ W. long.;
                                          44°12.80' N. lat., 124°17.18' W. long.;
                                                                                    43°12.26′ N. lat., 124°34.16′ W. long.;
45°05.08' N. lat., 124°05.93' W. long.;
                                          44°09.23' N. lat., 124°15.96' W. long.;
                                                                                    43°10.96′ N. lat., 124°32.33′ W. long.;
45°03.83′ N. lat., 124°06.47′ W. long.;
                                          44°08.38' N. lat., 124°16.79' W. long.;
                                                                                    43°05.65′ N. lat., 124°31.52′ W. long.;
45°01.70′ N. lat., 124°06.53′ W. long.;
                                          44°08.30' N. lat., 124°16.75' W. long.;
                                                                                    42°59.66' N. lat., 124°32.58' W. long
44°58.75′ N. lat., 124°07.14′ W. long.;
                                          44°01.18' N. lat., 124°15.42' W. long.;
                                                                                    42°54.97' N. lat., 124°36.99' W. long
44°51.28′ N. lat.. 124°10.21′ W. long.:
                                          43°51.61′ N. lat.. 124°14.68′ W. long.:
                                                                                    42°53.81′ N. lat.. 124°38.57′ W. long.:
44°49.49′ N. lat., 124°10.90′ W. long.;
                                         43°42.66′ N. lat., 124°15.46′ W. long.;
                                                                                    42°50.00′ N. lat., 124°39.68′ W. long.;
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C.6. <u>Notification When Unsafe Conditions Prevent Compliance with Regulations</u>: 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. <u>Incidental Pacific Halibut Harvest</u>: 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 (81.3 cm) in total length, measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on.
  - b. During the salmon troll season, incidental harvest is allowed if quota is available. 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-tribal 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: 1-800-662-9825 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 2025, prior to any 2025 inseason action, will be in effect when incidental Pacific halibut retention opens on April 1, 2026 unless otherwise modified by inseason action at the March 2026 Council meeting.
  - d. Beginning May 16, 2025, through the end of the 2025 salmon troll fishery, and beginning April 1, 2026, until modified through inseason action or superseded by the 2026 management measures license holders may land or possess no more than one Pacific halibut per two Chinook, except one Pacific halibut may be possessed or landed without meeting the ratio requirement, and no more than 35 halibut may be possessed or landed per trip.

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

a. "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::

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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.
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- C.8. <u>Inseason Management</u>: 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 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.
  - b. 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.
  - c. 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.
  - d. 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.
  - e. 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.
  - f. Landing limits may be modified inseason to sustain season length and keep harvest within overall guotas.
  - g. Deviations from the allocation of allowable ocean harvest of coho salmon in the area south of Cape Falcon may be allowed to meet consultation standards for ESA-listed stocks (FMP 5.3.2). Therefore, if fisheries are constrained to meet ESA-conservation objectives as described in the preamble to the rule, then any rollovers resulting in a deviation from the south of Cape Falcon coho allocation schedule would fall underneath this exemption.
- C.9. State Waters Fisheries: Consistent with Council management objectives:
  - a. The State of Oregon may establish additional late-season fisheries in state waters.
  - b. The State of California may establish limited fisheries in selected state waters.
  - c. 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. <u>Latitudes for geographical reference of major landmarks along the west coast</u>. Data source: 2024 West Coast federal salmon regulations, Chapter 5.

https://www.federalregister.gov/documents/2024/05/21/2024-11046/fisheries-off-west-coast-states-west-coast-salmon-fisheries-2024-specifications-and-management

U.S. / Canada border	49°00'00" N lat.	Humboldt South Jetty, CA	40°45′53″ N lat.
Cape Flattery, WA	48°23′00" N lat.	40°10′ line (near Cape Mendocino, CA)	40°10′00″ N lat.
Cape Alava, WA	48°10′00″ N lat.	Horse Mountain, CA	40°05′00″ N lat.
Queets River, WA	47°31′42″ N lat.	Point Arena, CA	38°57′30″ N lat.
Leadbetter Point, WA	46°38′10″ N lat.	Point Reyes, CA	37°59′44″ N lat.
Cape Falcon, OR	45°46′00″ N lat.	Point San Pedro, CA	37°35′40″ N lat.
South end Heceta Bank line, OR	43°58′00″ N lat.	Pigeon Point, CA	37°11′00″ N lat.
Humbug Mountain, OR	42°40′30" N lat.	Point Sur, CA	36°18′00″ N lat.
Oregon-California border	42°00'00" N lat.	Point Conception, CA	34°27′00" N lat.

C.12. <u>California 24-hour reporting requirements</u>: 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 <a href="https://etix.psmfc.org">https://etix.psmfc.org</a>.

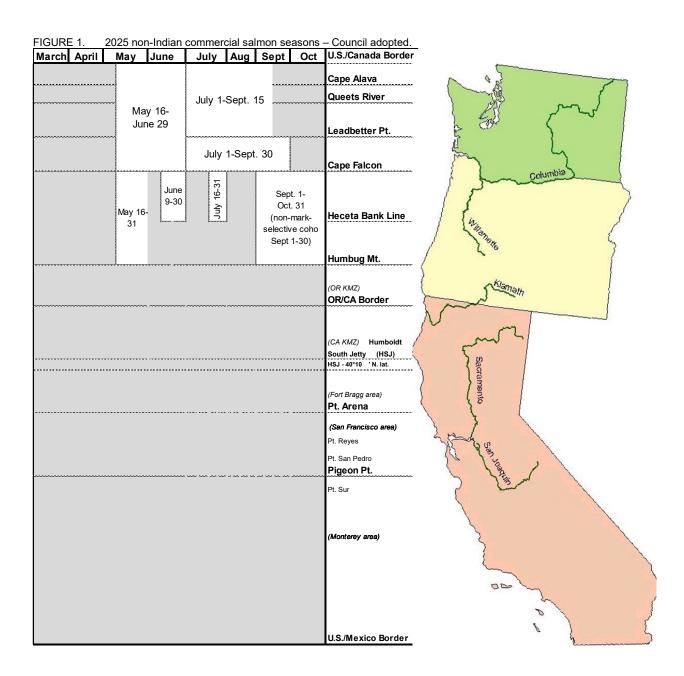


TABLE 2. 2025 Recreational management measures for non-Indian ocean salmon fisheries - Council adopted. (Page 1 of 6)

### A. SEASON DESCRIPTIONS

#### North of Cape Falcon

# **Supplemental Management Information**

- 1. Overall non-Indian TAC: 115,000 Chinook and 108,000 coho marked with a healed adipose fin clip (marked).
- 2. Trade: Commercial troll traded 9,000 marked coho to the recreational fishery for 2,250 Chinook.
- 3. Recreational TAC: 53,750 Chinook and 99,720 marked coho; all retained coho must be marked with a healed adipose fin clip.
- 4. Buoy 10 fishery opens August 1 with an expected landed catch of 30,000 marked coho in August and September.

### U.S./Canada Border to Cape Alava (Neah Bay Subarea)

• June 21 through the earlier of September 15, with a subarea guideline of 12,600 Chinook (C.5).

Open seven days per week, June 21-July 3, all salmon except coho, one salmon per day. Chinook minimum size limit of 24 inches total length (B).

Beginning July 4, open seven days per week, all salmon, with a 10,370 marked coho subarea quota, two salmon per day. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).

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).

Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line during Council managed ocean fishery (C.4.a).

## Cape Alava to Queets River (La Push Subarea)

• June 21 through the earlier of September 15, with a subarea guideline of 2,280 Chinook (C.5).

Open seven days per week, June 21-July 3, all salmon except coho, one salmon per day. Chinook minimum size limit of 24 inches total length (B).

Beginning July 4, open seven days per week, all salmon, with a 2,590 marked coho subarea quota, two salmon per day. No chum retention beginning August 1. All coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length (B).

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).

## Queets River to Leadbetter Point (Westport Subarea)

• June 21 through the earlier of September 15, with a subarea guideline of 22,270 Chinook (C.5).

Open seven days per week, June 21-28, all salmon except coho, one salmon per day. Chinook minimum size limit of 22 inches total length (B).

Beginning June 29, open seven days per week, all salmon, with a 36,900 marked coho subarea quota, 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).

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).

# Leadbetter Point to Cape Falcon (Columbia River Subarea)

• June 25 through the earlier of September 30, or 49,860 marked coho subarea quota, with a subarea guideline of 16,600 Chinook (C.5).

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. Chinook minimum size limit of 22 inches total length (B).

Prior to June 25, possession of salmon on board a vessel is prohibited on days when the subarea is closed to salmon retention.

Columbia Control Zone closed (C.4.b). 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).

TABLE 2. 2025 Recreational management measures for non-tribal ocean salmon fisheries - Council adopted. (Page 2 of 6)

### South of Cape Falcon

# **Supplemental Management Information**

- 1. Sacramento River fall Chinook spawning escapement of 147,733 hatchery and natural area adults.
- 2. Sacramento Index exploitation rate of 10.8%.
- 3. Sacramento River fall Chinook river recreational impacts: 8,000.
- 4. Klamath River recreational fishery allocation: 978 adult Klamath River fall Chinook.
- 5. Klamath tribal allocation: 1,385 adult Klamath River fall Chinook.
- 6. Overall recreational coho TAC: 44,000 coho marked with a healed adipose fin clip (marked), and 30,000 coho in the non-mark-selective coho fishery.

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.

### A. SEASON DESCRIPTIONS

#### South of Cape Falcon

# Cape Falcon to Humbug Mt.

- March 15-May 15. See 2024 management measures, and 2025 inseason actions. Dates may be subject to further inseason action.
- May 16-July 15;
- September 1-October 31 (C.6).

Open seven days per week. All salmon except coho, except during the mark-selective coho fishery and the non-mark-selective coho fishery as described below (C.5), two salmon per day (C.1). Starting June 7, two salmon limit, of which only one may be a Chinook (C.1). After September 30 or attainment of the non-mark-selective coho quota, all salmon except coho, one salmon per day. Chinook minimum size limit of 24 inches total length, coho minimum size limit of 16 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).

#### Non-mark-selective coho fishery:

 September 1 through the earlier of September 30, or a 30,000 non-mark-selective coho quota (C.6). Open days may be modified inseason (C.5).

Beginning October 1, the fishery is only open shoreward of the 40-fathom management line (C.4.e).

# Cape Falcon to OR/CA Border

# Mark-selective coho fishery:

• June 7 through the earlier of August 24, or 44,000 marked coho quota (C.6).

Open seven days per week, two salmon per day (C.1). When Chinook retention is allowed, only one may be a Chinook (C.1). All retained coho must be marked with a healed adipose fin clip (C.1). Chinook minimum size limit of 24 inches total length, coho minimum size limit of 16 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).

Any remainder of the mark-selective coho quota may be transferred inseason on an impact neutral basis to the September non-mark-selective coho fishery from Cape Falcon to Humbug Mountain (C.5).

In 2026, 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, C.1); and the same gear restrictions as in 2025 (C.2, C.3). This opening could be modified following Council review at its March 2026 meeting.

### Humbug Mt. to OR/CA Border

May 16-June 6;

June 30-July 15 (C.6).

Open seven days per week. All salmon except coho, except during the mark-selective coho fishery (C.5). From May 16-June 6, two salmon per day (C.1). From June 30-July 15, two salmon per day, of which only one may be Chinook (C.1). Chinook minimum size limit 24 inches total length (B, C.1). See gear restrictions and definitions (C.2, C.3).

For Recreational Fisheries from Cape Falcon to Humbug Mt.: 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.c).

TABLE 2. 2025 Recreational management measures for non-tribal ocean salmon fisheries - Council adopted. (Page 3 of 6)

#### A. SEASON DESCRIPTIONS

# OR/CA Border to latitude 40°10' N. (California KMZ)

- June 7-8;
- July 5-6;
- July 31-August 3;
- August 25-31 (C.6).

Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook

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).

Klamath Control Zone closed in August (C.4.d). See California State regulations for additional closures adjacent to the Smith, Eel, and Klamath Rivers.

In 2026, the 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March and/or April 2026 meeting.

## Latitude 40°10' N. to Point Arena (Fort Bragg)

- June 7-8;
- July 5-6;
- July 31-August 3;
- August 25-31 (C.6).

Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.

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).

In 2026, season opens April 4 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.

# Point Arena to Pigeon Point (San Francisco)

- June 7-8;
- July 5-6;
- July 31-August 3;
- August 25-31 (C.6).

Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.

Point Reves to Pigeon Point Subarea

- September 4-7, 29-30;
- October 1-5, 27-31 (C.6).

Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,500 Chinook, applicable to the September and October open dates between Point Reyes and Point Sur.

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).

In 2026, season opens April 4 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.

TABLE 2. 2025 Recreational management measures for non-tribal ocean salmon fisheries - Council adopted. (Page 4 of 6)

#### A. SEASON DESCRIPTIONS

# Pigeon Point to U.S./Mexico Border (Monterey)

- June 7-8;
- July 5-6;
- July 31-August 3;
- August 25-31 (C.6).

Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,000 Chinook.

Pigeon Point to Point Sur Subarea

• September 4-7, 29-30 (C.6).

Inseason action may be taken to close open days when total harvest is approaching a statewide harvest guideline of 7,500 Chinook, applicable to the September and October open dates between Point Reyes and Point Sur.

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).

In 2026, season opens April 4 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 2025 (C.2, C.3). Harvest guidelines and bag limits may be considered inseason (C.5). Inseason action to close fisheries, modify season dates, or modify the bag limit may be considered when sport harvest is approaching a harvest guideline. This opening could be modified following Council review at its March 2026 meeting.

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).

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

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon (Neah Bay and La Push)	24	16	none
North of Cape Falcon (Westport and Col R.)	22	16	none
Cape Falcon to Humbug Mt.	24	16	none
Humbug Mt. to OR/CA Border	24	16	none
OR/CA Border to Latitude 40°10' N.	20	-	20
Latitude 40°10' N. to Point Arena	20	-	20
Pt. Arena to Pigeon Pt.	20	-	20
Pigeon Pt. to U.S./Mexico Border	20	-	20

# C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. <u>Compliance with Minimum Size and Other Special Restrictions</u>: 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. <u>Gear Restrictions</u>: 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.
  - a. *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.
  - b. 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.

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Table 2

# C.3. Gear Definitions:

- a. 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.
- b. 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.
- c. 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:

- a. 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.
- b. 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.
- c. 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.
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- d. 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).
- e. Waypoints for the 40 fathom regulatory line from Cape Falcon to Humbug Mt. (50 CFR 660.71 (o) (12)-(62), when in place.

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

- C.5. <u>Inseason Management</u>: 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:
  - 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 Salmon Advisory Subpanel (SAS) recreational representatives north of Cape Falcon, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
- c. NMFS may transfer salmon between the recreational and commercial fisheries north of Cape Falcon if there is agreement among the areas' 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.
- f. Deviations from the allocation of allowable ocean harvest of coho salmon in the area south of Cape Falcon may be allowed to meet consultation standards for ESA-listed stocks (FMP 5.3.2). Therefore, any rollovers resulting in a deviation from the south of Cape Falcon coho allocation schedule would fall underneath this exemption.
- C.6. <u>Additional Seasons in State Territorial Waters</u>: Consistent with Council management objectives, the States of Washington, Oregon, and California may establish limited seasons in state waters. Check state regulations for details.
- C.7. Vessel Operation in Closed Areas with Salmon on Board:
  - a. Except as provided under C.7.b and C.7.c below, it is unlawful for a vessel to fish 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 prohibited salmon are in possession.
  - b. It is unlawful to possess a salmon species within the Oregon KMZ when the fishing for that salmon species is prohibited within the Oregon KMZ regardless of where taken.
  - c. It is unlawful to possess a salmon species within the California KMZ when the fishing for that salmon species is prohibited within the California KMZ regardless of where taken.

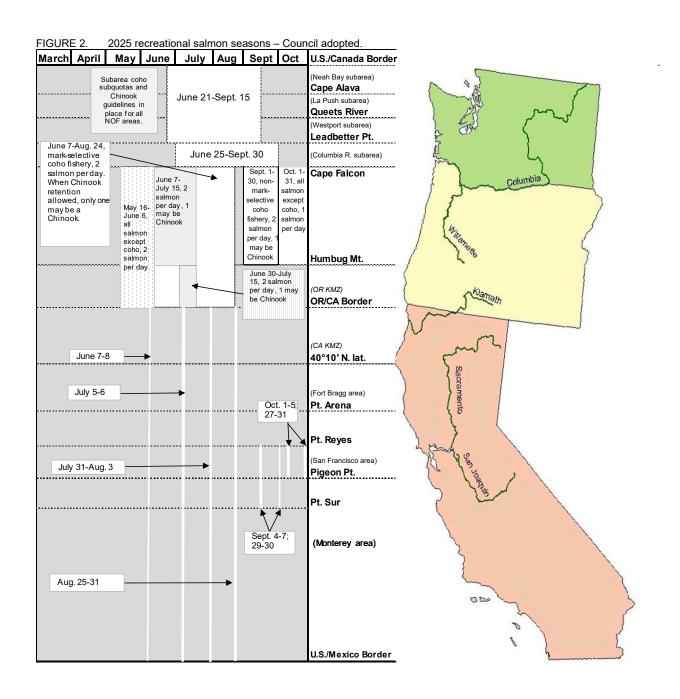


TABLE 3. 2025 Treaty Indian ocean troll management measures for ocean salmon fisheries - Council adopted. (Page 1 of 2)

# A. SEASON ALTERNATIVE DESCRIPTIONS

### **Supplemental Management Information**

- 1. Overall Treaty-Indian TAC: 45,000 Chinook and 37,500 coho.
- 2. In 2026, the season will open May 1, consistent with all preseason regulations in place for Treaty Indian Troll fisheries during May 16-June 30, 2025. All catch in May 2026 applies against the 2026 Treaty Indian Troll fisheries quota. This opening could be modified following Council review at its March and/or April 2026 meetings.
- May 1 through the earlier of June 30 or 22,500 Chinook quota.

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).

July 1 through the earlier of a date in September, to be established in tribal regulations, or 22,500 Chinook quota or 37,500 coho quota are obtained.

All salmon. See size limit (B) and other restrictions (C).

### **B. MINIMUM LENGTH (TOTAL INCHES)**

	Chi	nook	Co	ho	
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
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. <u>Tribe and Area Boundaries</u>. 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.

<u>S'KLALLAM</u> - 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.

<u>HOH</u> - 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 a date in September or when quotas are obtained.
- 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. The treaty troll tribes may conduct an experimental fishery through the month of September for gathering genetic stock identification (GSI) data to inform the treaty troll fishery in future years. Impacts from this non-retention fishery are accounted for in the modeling associated with the treaty troll fishery.

# TABLE 3. 2025 Treaty Indian troll management Alternatives for ocean salmon fisheries – Council adopted. (Page 2 of 2)

# 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. <u>Inseason Management</u>: 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. Chinook and coho harvest quotas and guidelines for 2025 ocean salmon fishery management measures - Council adopted.

Fishery or Quota Designation	Chinook	Coho
NORTH OF CAPE FALCON		
TREATY INDIAN OCEAN TROLL <sup>a/</sup>		
U.S./Canada Border to Cape Falcon (All Except Coho)	22,500	-
U.S./Canada Border to Cape Falcon (All Species)	22,500	37,500
Subtotal Treaty Indian Ocean Troll	45,000	37,500
, N		
NON-INDIAN COMMERCIAL TROLL <sup>b/</sup>		
U.S./Canada Border to Cape Falcon (All Species Except Coho)	36,800	-
U.S./Canada Border to Cape Falcon (All Species)	24,450	8,280
Subtotal Non-Indian Commercial Troll	61,250	8,280
RECREATIONAL		
U.S./Canada Border to Cape Alava <sup>b/</sup>	12,600	10,370
Cape Alava to Queets River <sup>b/</sup>	2,280	2,590
Queets River to Leadbetter Pt. b/	22,270	36,900
Leadbetter Pt. to Cape Falcon <sup>b/c/</sup>	16,600	49,860
Subtotal Recreational	53,750	99,720
TOTAL NORTH OF CAPE FALCON	160,000	145,500
SOUTH OF CAPE FALCON		
COMMERCIAL TROLL <sup>a/</sup>		
Cape Falcon to Humbug Mt.	-	7,500
Humbug Mt. to OR/CA Border	-	-
OR/CA Border to Humboldt South Jetty	-	-
Horse Mt. to Pt. Arena	-	-
Pt. Arena to Pigeon pt.	-	-
Pigeon Point to U.S./Mexico Border	<u> </u>	·····
Subtotal Troll	0	7,500
RECREATIONAL		
Cape Falcon to OR/CA Border <sup>d/e/</sup>	-	74,000 <sup>d/</sup>
OR/CA Border to U.S./Mexico Border	14,500	-
TOTAL SOUTH OF CAPE FALCON	14,500	81,500
TO THE GOOD TO TO THE THEODY	17,000	01,000

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 of 35,000 Chinook and 30,000 marked coho.

d/ The quota consists of both mark-selective and non-mark-selective coho quotas: 44,000 and 30,000 respectively.

e/ The non-mark-selective fishery is only open from Cape Falcon to Humbug Mt.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2025 ocean salmon fishery management measures - Council adopted. a/ (Page 1 of 5)

	PROJECTED	2025
Key Stock/Criteria		Criteria Spawner Objective or Other Comparative Standard as Noted <sup>b/</sup>
CHINOOK	CHINOOK	CHINOOK
SRKW PREY ABUNDANCE:		
North of Falcon	917.0	≥ 623.0 Oct 1 starting abundance of age 3+ Chinook from U.S./Canada Border to Cape Falcon.
Oregon Coast	427.5	NA Oct 1 starting abundance of age 3+ Chinook from Cape Falcon to Horse Mt.
California Coast	240.5	NA Oct 1 starting abundance of age 3+ Chinook south of Horse Mt.
Southwest WCVI	759.7	NA Oct 1 starting abundance of age 3+ Chinook off Southwest Vancouver Island.
Salish Sea	1,167.7	NA Oct 1 starting abundance of age 3+ Chinook in the Salish Sea.
PUGET SOUND:		
Elwha Summer/Fall	3.7%	≤ 10.0% Southern U.S. exploitation rate (NMFS ESA consultation standard).
Dungeness Spring	3.4%	≤ 10.0% Southern U.S. exploitation rate (NMFS ESA consultation standard).
Mid-Hood Canal Summer/Fall	15.8%	≤ 15.8% Preterminal Southern U.S. exploitation rate consistent with NMFS guidance.
Skokomish Summer/Fall	49.7%	≤ 50.0% Total exploitation rate (NMFS ESA consultation standard).
Nooksack Spring	10.9%	≤ 10.9% Southern U.S. exploitation rate (NMFS ESA consultation standard).
	0.96	≤ 1.00 ISBM obligation applicable, as this stock lacks a CTC agreed escapement goal. Compliance assessed postseason by the PSC.
Skagit Summer/Fall	17.0%	≤ 17.0% Southern U.S. exploitation rate (NMFS ESA consultation standard).
Oleveri Overi		≤ 0.95 ISBM obligation applicable, escapement goal not expected to be met. Compliance assessed postseason by the PSC.
Skagit Spring	28.7%	≤ 36.0% Total exploitation rate (NMFS ESA consultation standard). ≤ 0.95 ISBM obligation not applicable, escapement goal expected to be met. Compliance assessed postseason by the PSC.
	_	≤ 0.95 ISBM obligation not applicable, escapement goal expected to be met. Compilance assessed postseason by the PSC.
Stillaguamish Summer/Fall	9.0%	≤ 9.0% Southern U.S. exploitation rate (NMFS ESA consultation standard).
	0.65	≤ 1.00 ISBM obligation applicable, as this stock lacks a CTC agreed escapement goal. Compliance assessed postseason by the PSC.
Snohomish Summer/Fall	8.0%	≤ 8.3% Southern U.S. exploitation rate limit (NMFS ESA consultation standard).
	0.83	≤ 1.00 ISBM obligation applicable, as this stock lacks a CTC agreed escapement goal. Compliance assessed postseason by the PSC.
Lake Washington Summer/Fall	0.796	≥ 0.500 Natural spawning escapement in the Cedar River (NMFS ESA consultation standard).
Green River Summer/Fall	3.388	≥ 2.744 Natural spawning escapement in the Green River (NMFS ESA consultation standard).
White River Spring	17.4%	≤ 22.0% Southern U.S. exploitation rate (NMFS ESA consultation standard).
Puyallup Summer/Fall	3.251	> 1.170 Natural spawning escapement in the Puyallup River (NMFS ESA consutation standard).
Nisqually River Summer/Fall	46.1%	≤ 47.0% Total exploitation rate (NMFS ESA consultation standard).
Puget Sound Spring	2.0%	≤ 3.0% Exploitation rate in PFMC fisheries (NMFS ESA consultation standard).
Puget Sound Summer/Fall	5.9%	≤ 6.0% Exploitation rate in PFMC fisheries (NMFS ESA consultation standard).

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2025 ocean fishery management measures - Council adopted. a/ (Page 2 of 5)

	PROJECTED	2025
Key Stock/Criteria		Criteria Spawner Objective or Other Comparative Standard as Noted <sup>b/</sup>
CHINOOK	CHINOOK	CHINOOK
WASHINGTON COAST:	4.044	O OF FMD MOV
Hoko Fall	1.614	0.85 FMP MSY spawning escapement objective.
	2.1%	≤ 10.0% Calendar year exploitation rate ISBM obligation. Compliance assessed postseason by the PSC.
Quillayute Fall	>3.0	3.0 FMP MSY spawning escapement objective.
Hoh Fall	- >1.2	≤ 0.85 ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC. 1.2 FMP MSY spawning escapement objective.
Queets Fall	- >2.5	0.85 ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC. 2.5 FMP MSY spawning escapement objective.
Grays Harbor Fall	- >13.3	0.85 ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC. 13.3 FMP MSY spawning escapement objective.
	_	≤ 0.85 ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC.
COLUMBIA RIVER:		
Columbia Upriver Brights	328.2	74.0 Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	87.2	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	121.8	25.0 Minimum ocean escapement to attain 11.1 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules (threatened)	41.0%	≤ 41.0% Total adult equivalent fishery exploitation rate (2025 NMFS ESA guidance).
Columbia Lower River Wildel (threatened)	14.5	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	183.5	8.2 Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upper Columbia River Summer	38.0	29.0 Aggregate escapement to mouth of Columbia River.
Snake River Fall (threatened) SRFI	54.3%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2025 ocean fishery management measures - Council adopted.al (Page 3 of 5)

TABLE 5. Projected key stock escapement	PROJECTED		ment criteria for 2025 ocean fishery management measures - Council adopted." (Page 3 of 5)
Key Stock/Criteria	FROJECIED	2025 Criteria	Spawner Objective or Other Comparative Standard as Noted b/
CHINOOK	CHINOOK	Cillella	CHINOOK
OREGON COAST:	Offinoon		GIIII GOK
Nehalem Fall	-	≤ 0.85	ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC.
Siletz Fall	_	≤ 0.85	ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC.
Siuslaw Fall		≤ 0.85	ISBM obligation applicable when escapement goal is not met. Compliance assessed postseason by the PSC.
South Umpqua		≤ 0.85	ISBM obligation applicable, as this stock lacks a CTC agreed escapement goal. Compliance assessed postseason by the PSC.
Coquille	-	≤ 0.85	ISBM obligation applicable, as this stock lacks a CTC agreed escapement goal. Compliance assessed postseason by the PSC.
CALIFORNIA:			
Klamath River Fall	19.417	≥ 19.417	2025 minimum natural area adult escapement (FMP control rule).
Federally recognized tribal harvest	50.0%	50.0%	Equals 1,385 adult fish for Yurok and Hoopa Valley tribal fisheries.
Exploitation (spawner reduction) rate	10.0%	≤ 10.0%	FMP control rule.
Adult river mouth return	28.6		Total adults.
Age-4 ocean harvest rate	1.6%	≤ 7.7%	NMFS guidance for implementing regulations addressing CCC.
KMZ sport fishery share	8.8%		
River recreational fishery share <sup>g/</sup>	70.6%		Equals 978 adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	1.6%	≤ 20%	Age-3 ocean impact rate in fisheries south of Pt. Arena. In addition, the following season restrictions apply: Recreational- 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. Commercial- 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 2025 ESA Guidance).
Sacramento River Fall	147.733	≥ 122	2025 minimum hatchery and natural area adult escapement (FMP).
Sacramento Index Exploitation Rate	10.8%	≤ 26.4%	FMP control rule.
Ocean commercial impacts	6.529		Includes fall (Sept-Dec) 2024 impacts (30 SRFC).
Ocean recreational impacts	3.393		Includes fall (Sept-Dec) 2024 impacts (126 SRFC).
River recreational impacts <sup>g/</sup>	8		Council guidance
·			

Table 5

Preseason III

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2025 ocean fishery management measures - Council adopted. a/ (Page 4 of 5)

	PROJECTED	2025
Key Stock/Criteria		Criteria Spawner Objective or Other Comparative Standard as Noted <sup>b/</sup>
соно	соно	СОНО
Interior Fraser (Thompson River)	9.9%(3.9%)	≤ 10.0% 2025 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	44.1%(3.4%)	≤ 60.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Stillaguamish	25.7%(2.4%)	≤ 50.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Snohomish	31.6%(2.4%)	≤ 40.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Hood Canal	35.7%(3.8%)	≤ 45.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Strait of Juan de Fuca	10.4%(3.5%)	≤ 40.0% 2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
Quillayute Fall	10.3	6.3 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
,	29.0%	≤ 42% PST total exploitation rate constraint for 2025. d/f/
Hoh	4.6	2.0 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
	46.5%	≤ 63% PST total exploitation rate constraint for 2025. dlf/
Queets Wild	7.6	5.8 FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Queets Wild	35.6%	≤ 36% PST total exploitation rate constraint for 2025. dlf/
Grays Harbor	64.4	35.4 FMP MSP natural area adult spawner estimate. Value depicted is ocean escapement.
Glays Halbol	48.7%	≤ 50% PST total exploitation rate constraint for 2025. d/f/
14/11	_	17.2 FMP MSY natural area adult spawner estimate. Value depicted is ocean escapement.
Willapa Bay	34.1	17.2 Finir inio i natural area adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	21.5%	≤23.0% Total marine and mainstem Columbia R. fishery exploitation rate (2025 NMFS ESA guidance).
Upper Columbia	59%	≥ 50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	224.3	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	83.5	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 <sup>c/</sup>	25.1%	≤ 30.0% Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)		
Trinity Natural	15.2%	≤ 16.0% Total exploitation rate ceiling (NMFS ESA consultation standard).
Klamath Natural	7.5%	≤ 15.0% Total exploitation rate ceiling (NMFS ESA consultation standard).
Rogue Natural	6.5%	≤ 15.0% Total exploitation rate ceiling (NMFS ESA consultation standard).
Other Natural	1.6%	≤ 15.0% Total exploitation rate ceiling (NMFS ESA consultation standard).

- a/ Reflects 2025 fisheries and abundance estimates.
- b/ ISBM obligation is assessed as a proportion of the 2009-2015 average calendar year exploitation rate. 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. Exploitation rates for LCN coho, OCN coho, SONCC coho, and LCR natural tule fall Chinook represent marine and freshwater impacts. Values reported for Klamath River fall Chinook, Grays Harbor coho, and Willapa Bay coho 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.
- g/ Projected impacts of inriver fisheries that have not yet been shaped. California's inland fishery regulations are developed by the California Fish and Game Commission.

TABLE 6. Preliminary projections of Chinook and coho harvest impacts for 2025 ocean salmon fishery management measures - Council adopted. (Page 1 of 2)

				Observed	l in 2024
		Bycatch			
	Catch	Mortality <sup>a/</sup>	Bycatch		Bycatch
Area and Fishery	Projection	Projection	Projection <sup>b/</sup>	Catch	Mortality
OCEAN FISHERIES:		CHINOOI	K (thousands of fi	sh)	
NORTH OF CAPE FALCON					
Treaty Indian Ocean Troll	45.0	4.6	11.5	18.8	1.9
Non-Indian Commercial Troll	61.3	22.5	79.2	38.8	15.2
Recreational	53.7	6.5	30.0	24.5	3.0
CAPE FALCON TO HUMBUG MT.c/					
Commercial Troll	19.1	3.8	10.6	15.9	3.2
Recreational	1.6	1.0	5.1	3.0	0.3
HUMBUG MT. TO OR/CA BORDER					
Commercial Troll	0.0	0.0	0.0	0.0	0.0
Recreational	0.3	0.1	0.7	0.2	0.0 <sup>d/</sup>
OR/CA BORDER TO 40°10' N. LAT.					
Commercial Troll	-	-	-	0.0	0.0
Recreational	0.2	0.0	0.1	0.0	$0.0^{d/}$
40°10' N. LAT. TO PT. ARENA					
Commercial Troll	_	-	_	0.0	0.0 d/
Recreational	0.4	0.1	0.2	0.0	0.0 d/
PT. ARENA TO PIGEON PT.					
Commercial Troll	_	-	-	0.0	0.0 d/
Recreational	4.1	0.5	1.5	0.0	0.0 d/
SOUTH OF PIGEON PT.					
Commercial Troll	_	-	-	0.0	0.0 d/
Recreational	0.4	0.0	0.1	0.0	$0.0^{d/}$
TOTAL OCEAN FISHERIES					
Commercial Troll	125.3	30.9	101.3	73.6	20.3
Recreational	60.7	8.3	37.8	27.7	3.3
INSIDE FISHERIES:					
Area 4B	-	-	-	-	-
Buoy 10	35.0	5.7	23.7	18.1	4.3 <sup>d/</sup>

TABLE 6. Preliminary projections of Chinook and coho harvest impacts for 2025 ocean salmon fishery management measures - Council adopted. (Page 2 of 2)

		Bycatch		Observe	d in 2024
Area and Fishery	Catch Projection	Mortality <sup>a/</sup> Projection	Bycatch Projection <sup>b/</sup>	Catch	Bycatch Mortality
OCEAN FISHERIES:		СОНО	(thousands of fish	1)	
NORTH OF CAPE FALCON					
Treaty Indian Ocean Troll <sup>e/</sup>	37.5	3.1	6.7	42.8	2.3
Non-Indian Commercial Troll	8.3	8.0	28.6	11.2	12.4
Recreational	99.7	23.5	107.7	77.3	17.9
SOUTH OF CAPE FALCON					
Commercial Troll	7.5	2.0	6.6	1.4	2.8
Recreational <sup>e/</sup>	74.0	19.6	91.9	52.6	11.1
TOTAL OCEAN FISHERIES					
Commercial Troll	53.3	13.2	41.9	55.3	17.6
Recreational	173.7	43.1	199.7	129.9	29.0
INSIDE FISHERIES:					
Area 4B	-	-	-	-	-
Buoy 10	30.0	7.1	32.5	35.2	5.9 <sup>d/</sup>

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 2025 ocean fisheries management measures 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)

		Exploitation Rate (Percent)				
Fishery	LCN Coho	OCN Coho	LCR Tule Chinook			
SOUTHEAST ALASKA	0.0%	0.0%	1.3%			
BRITISH COLUMBIA	0.2%	0.7%	12.9%			
PUGET SOUND/STRAIT	0.2%	0.0%	0.3%			
NORTH OF CAPE FALCON						
Treaty Indian Ocean Troll	1.8%	0.4%	2.0%			
Recreational	5.9%	1.1%	4.3%			
Non-Indian Troll	1.0%	0.3%	7.6%			
SOUTH OF CAPE FALCON						
Recreational:			0.2%			
Cape Falcon to Humbug Mt.	4.1%	10.8%	-			
Humbug Mt. to OR/CA border (KMZ)	0.1%	0.3%	-			
OR/CA border to Lat.40°10' N. (KMZ)	0.0%	0.0%	-			
Fort Bragg	0.0%	0.0%	-			
South of Pt. Arena	0.0%	0.0%	-			
Troll:			1.2%			
Cape Falcon to Humbug Mt.	0.9%	1.3%	-			
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	-			
OR/CA border to Lat. 40°10' N. (KMZ)	0.0%	0.0%	-			
Fort Bragg	0.0%	0.0%	-			
South of Pt. Arena	0.0%	0.0%	-			
BUOY 10	2.3%	0.1%	44.00/			
ESTUARY/FRESHWATER	5.1%	10.0%	11.2%			
TOTAL <sup>a/</sup>	21.5%	25.1%	41.0%			

TABLE 7. Expected coastwide exploitation rates by fishery for 2025 ocean fisheries management measures for lower Columbia Natural (LCN) coho, Oregon coastal natural (OCN) coho, Lower Columbia River (LCR) tule Chinook, and Southern Oregon Northern California Coastal (SONCC) coho salmon by natural-origin subcomponent - Council adopted (Page 2 of 2).

		Exploitation	on Rate (Percent)			
Fishery	Trinity Natural	Klamath Natural	Rogue Natural	Other SONCC		
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	0.0%		
BRITISH COLUMBIA	0.1%	0.1%	0.1%	0.1%		
PUGET SOUND/STRAIT	0.0%	0.0%	0.0%	0.0%		
NORTH OF CAPE FALCON						
Treaty Indian Ocean Troll	0.0%	0.0%	0.0%	0.0%		
Recreational	0.1%	0.1%	0.1%	0.1%		
Non-Indian Troll	0.0%	0.0%	0.0%	0.0%		
SOUTH OF CAPE FALCON						
Recreational:						
Cape Falcon to Humbug Mt.	0.5%	0.5%	0.5%	0.5%		
Humbug Mt. to OR/CA border (KMZ)	0.6%	0.6%	0.6%	0.6%		
OR/CA border to Lat.40°10' N. (KMZ)	0.1%	0.1%	0.1%	0.1%		
Fort Bragg	0.0%	0.0%	0.0%	0.0%		
South of Pt. Arena	0.0%	0.0%	0.0%	0.0%		
Troll:						
Cape Falcon to Humbug Mt.	0.2%	0.2%	0.2%	0.2%		
Humbug Mt. to OR/CA border (KMZ)	0.0%	0.0%	0.0%	0.0%		
OR/CA border to Lat. 40°10' N. (KMZ)	0.0%	0.0%	0.0%	0.0%		
Fort Bragg	0.0%	0.0%	0.0%	0.0%		
South of Pt. Arena	0.0%	0.0%	0.0%	0.0%		
BUOY 10	0.0%	0.0%	0.0%	0.0%		
ESTUARY/FRESHWATER	13.6%	5.9%	4.9%	0.0%		
TOTAL <sup>a/</sup>	15.2%	7.5%	6.5%	1.6%		

a/ Estuary/freshwater catch is included in the total for LCN coho, OCN coho , SONCC coho, and LCR natural tule fall Chinook populations. Bolded values identify ocean exploitation rates that would exceed the total allowable exploitation rate.

TABLE 8. Projected coho mark rates for mark-selective fisheries under 2025 Council adopted management measures (percent marked).

Area	Fishery	June	July	August	Sept
Canada					
Johnstone Strait	Recreational	29%	25%	20%	
West Coast Vancouver Island	Recreational	47%	44%	44%	42%
North Georgia Strait	Recreational	45%	44%	41%	33%
South Georgia Strait	Recreational	49%	49%	40%	41%
Juan de Fuca Strait	Recreational	46%	47%	44%	41%
Johnstone Strait	Troll				
NW Vancouver Island	Troll		44%	43%	41%
SW Vancouver Island	Troll	57%	51%	-	
Georgia Strait	Troll		-		
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational		51%	49%	48%
Strait of Juan de Fuca (Area 6)	Recreational		50%	51%	45%
San Juan Island (Area 7)	Recreational		55%	46%	31%
North Puget Sound (Areas 6 & 7/	A) Net		-	47%	35%
Council Area					
Neah Bay (Area 4/4B)	Recreational		52%	50%	53%
LaPush (Area 3)	Recreational		54%	56%	49%
Westport (Area 2)	Recreational	59%	57%	53%	51%
Columbia River (Area 1)	Recreational	60%	59%	52%	50%
Tillamook	Recreational	54%	47%	38%	
Newport	Recreational	48%	42%	35%	
Coos Bay	Recreational	36%	31%	19%	
Brookings	Recreational	30%	19%	16%	
Neah Bay (Area 4/4B)	Troll		53%	50%	46%
LaPush (Area 3)	Troll		54%	49%	49%
Westport (Area 2)	Troll		55%	53%	54%
Columbia River (Area 1)	Troll		57%	51%	45%
Tillamook	Troll				
Newport	Troll				
Coos Bay	Troll			-	-
Brookings	Troll				-
Columbia River					
Buoy 10	Recreational				53%

TABLE 9. Preliminary projected salmon exvessel value by catch area under Council-adopted 2025 non-Indian commercial troll salmon management measures compared with 2024 and the 2019-2023 average (in inflation-adjusted dollars).

		Exvessel	Value (thousands	of dollars) <sup>a/</sup>	
				Perce	nt Change
	.,		2019-2023	From 2024	From 2019-2023
Management Area	2025 Projected <sup>b/</sup>	2024	Average	(Modeled)	Average
North of Cape Falcon	5,082	3,839	2,310	+32%	+120%
Cape Falcon to Humbug Mt.	2,526	2,297	1,896	+10%	+33%
Humbug Mt. to OR/CA Border (OR KMZ)	0.7	1	91	-26%	-99%
OR/CA Border to 40°10' N. Lat. (CA KMZ)	0	0	76	c/	-100%
40°10' N. Lat. to Pt. Arena (Fort Bragg)	0	0	1,246	c/	-100%
Pt. Arena to Pigeon Pt. (SF)	0	0	9,021	c/	-100%
South of Pigeon Pt. (MO)	0	0	5,209	c/	-100%
Total South of Cape Falcon	2,527	2,298	17,540	+10%	-86%
West Coast Total	7,609	6,137	19,850	+24%	-62%

a/ All dollar amounts are inflation-adjusted 2024 values. Exvessel value estimates are not comparable to the community income impacts shown in Table 10.

b/ Projections are based on expected catches in the Council management area and estimated 2024 (or 2022 in cases where there were no landings in 2024 or 2023) average weights and exvessel prices.

c/ Denominator equals zero (There were no recorded commercial landings in 2024).

TABLE 10. Preliminary projected angler trips and associated state-level personal income impacts under Council-adopted 2025 recreational ocean salmon fishery management measures compared with estimated 2024 and the 2019-2023 average (in inflation-adjusted dollars).

				Coastal Community Income Impacts a/								
	Angler	Trips (th	nousands)	(thous	ands of d	ollars) <sup>b/</sup>	Percent Change in Income Impacts					
Management Area	2025 Projected	2024	2019-2023 Avg.	2025 Projected	2024	2019-2023 Avg.	Compared to 2024	Compared to 2019-2023 Avg.				
North of Cape Falcon	83.1	74.4	68.6	12,792	11,456	10,976	+12%	+17%				
Cape Falcon to Humbug Mt.	82.1	61.0	67.7	7,624	5,664	5,840	+35%	+31%				
Humbug Mt. to OR/CA Border (OR KMZ)	1.5	3.6	4.0	106	258	247	-59%	-57%				
OR/CA Border to 40°10' N. Lat. (CA KMZ)	1	0	4.0	120	0	563	c/	-79%				
40º10' N. Lat. to Pt. Arena (Fort Bragg)	1	0	5.6	224	0	1,028	c/	-78%				
Pt. Arena to Pigeon Pt. (SF)	9	0	42.4	2,464	0	11,741	c/	-79%				
South of Pigeon Pt. (MO)	2	0	18.2	243	340	2,949	-29%	-92%				
Total South of Cape Falcon	96.5	64.7	142.0	10,780	6,262	22,368	+72%	-52%				
West Coast Total	179.6	139.1	210.5	23,572	17,718	33,344	+33%	-29%				

a/ Income impacts are not comparable to exvessel values shown in Table 9.

b/ Dollar amounts are in inflation-adjusted 2024 values.

c/ Denominator equals zero (There were no recorded angler trips in 2024).

TABLE 11. Environmental effects of the Proposed Action relative to criteria and Alternatives analyzed in Preseason Reports I and II.al (Page 1 of 2)

	No-Action		Alternative		Proposed	2025	
	Alternative <sup>b/g/</sup>	I	II	III	Action	Criteria	Objective or Other Comparative Standard as Noted
Spawning Escapement	24,032	18,687	19,341	20,694	19,417	≥ 19,417	2025 minimum natural area adult escapement
	42.09/	10.09/	6.09/	0.39/	10.09/	< 10 00/	(FMP control rule). FMP control rule.
Exploitation (spawner reduction) rate	42.0%	10.0%	0.976	0.3%	10.0%	≥ 10.070	FIME CONTROL Fulle.
Spawning Escapement	133,281	141,300	127,400	156,300	147,733	≥ 122,000	2025 minimum hatchery and natural area adult escapement (FMP).
Exploitation Rate	20.0%	14.7%	23.1%	5.7%	10.8%	≤ 26.4%	FMP control rule
·							
	9.8%(4.3%)	10.6%(5.1%)	9.6%(4.0%)	8.0%(2.4%)	9.9%(3.9%)	≤ 10.0%	2025 Southern U.S. exploitation rate ceiling; PSC coho
							agreement.
ound Coho					•		
git	` ,	45.4%(4.4%)	44.8%(3.5%)	43.9%(2.1%)	44.1%(3.4%)	≤ 60.0%	2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
aguamish	, ,	30.3%(3.2%)	29.7%(2.6%)	28.9%(1.6%)	25.7%(2.4%)	≤ 50.0%	2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
	. ,	31.5%(3.2%)	30.9%(2.6%)	30.0%(1.6%)	31.6%(2.4%)	≤ 40.0%	2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
d Canal	48.9%(4.0%)	49.5%(4.8%)	48.9%(3.9%)	47.8%(2.4%)	35.7%(3.8%)	≤ 45.0%	2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
it of Juan de Fuca	12.1%(3.7%)	12.8%(4.5%)	12.0%(3.7%)	10.7%(2.4%)	10.4%(3.5%)	≤ 40.0%	2025 total exploitation rate ceiling; FMP matrix <sup>d/</sup>
gton Coastal Coho (in thousands of fish)							
layute Fall Coho	10.2	10.1	10.2	10.3	10.3	6.3	FMP MSY adult spawner estimate.
	OF 70/	20 50/	25.00/	24.00/	20.00/	- 400/	Value depicted is ocean escapement.
							PST total exploitation rate constraint for 2025. d/f/
Coho	4.6	4.5	4.6	4.7	4.6	2.0	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
	52.3%	53.7%	52.7%	50.8%	46.5%	≤ 63%	PST total exploitation rate constraint for 2025. d/f/
ets Wild Coho	7.6	7.3	7.5	7.8	7.6	5.8	FMP MSY adult spawner estimate.
							Value depicted is ocean escapement.
	32.6%	34.8%	33.5%	30.8%	35.6%	≤ 36%	PST total exploitation rate constraint for 2025. d/f/
ys Harbor Coho	64.4	63.2	63.9	65.4	64.4	35.4	FMP MSP natural area adult spawner estimate.
							Value depicted is ocean escapement.
	54.0%	54.8%	54.3%	53.2%	48.7%	≤ 50%	PST total exploitation rate constraint for 2025. d/f/
apa Bay Natural Coho	34.1	33.3	33.7	34.9	34.1	17.2	Prince Pr
							Value depicted is ocean escapement.
	0.40/	4.00/	2.00/	0.40/	4.00/	- 7 70/	NIMEC middle (and A according to the Control of KDEO)
							NMFS guidance (age-4 ocean harvest rate on KRFC)
VC	0.0%	2.1%	3.7%	0.0%	1.6%	≤ 20%	SRWC age-3 ocean impact rate in fisheries south of Pt. Arena.
R Natural Tule Chinooke/	NA	41.9%	40.4%	38.5%	41.0%	≤ 41.0%	Total adult equivalent fishery exploitation rate
Tractarar rais Simissic							(NMFS ESA guidance).
I Coho <sup>e/f/</sup>	19.5%	15.3%	14.0%	10.9%	21.5%	≤23.0%	Total marine and mainstem Columbia R. fishery
							exploitation rate (NMFS ESA consultation standard).
N coho <sup>e/</sup>	20.1%	25.8%	24.6%	23.5%	25.1%	≤ 30.0%	Marine and freshwater exploitation rate (NMFS ESA
							consultation standard).
NCC coho							
Trinity Natural <sup>f/</sup>	15.2%	15.6%	15.5%	15.2%	15.2%	≤ 16.0%	Total exploitation rate ceiling (NMFS ESA consultation standard).
Klamath Natural <sup>f/</sup>	7.5%	8.0%	7.8%	7.5%	7.5%	≤ 15.0%	Total exploitation rate ceiling (NMFS ESA consultation standard).
Rogue Natural <sup>f/</sup>	6.5%	7.0%	6.8%	6.5%	6.5%	< 15.0%	Total exploitation rate ceiling
Nogue Matural	0.570	1.070	0.070	0.570	0.570	_ 10.070	(NMFS ESA consultation standard).
Other Natural <sup>f/</sup>	1.6%	2.1%	1.9%	1.6%	1.6%	≤ 15.0%	Total exploitation rate ceiling
	Exploitation Rate an Stocks rior Fraser Coho  Sound Coho agit laguamish bod Canal ait of Juan de Fuca gton Coastal Coho (in thousands of fish) llayute Fall Coho a Coho aets Wild Coho apply Harbor Coho lapa Bay Natural Coho sted Salmon ffornia Coastal Chinook WC R Natural Tule Chinook WC N Coho Trinity Natural Klamath Natural Klamath Natural	Maternative   Maternative	Name	I   II   II   II   II   II   II   II	National Component   Alternative	Action   A	National Component   Nation

TABLE 11. Environmental effects of the Proposed Action relative to criteria and Alternatives analyzed in Preseason Reports I and II.<sup>al</sup> (Page 2 of 2)

	No-Action	•	Alternative		Proposed
Environmental Component	Alternative <sup>b/</sup>		II	III	Action
Socioeconomics					
Commercial Community Personal Income Impac	cts (thousands of dollar	rs)			
North of Cape Falcon	5,716	9,012	8,184	6,555	8,462
Cape Falcon to Humbug Mt.	3,029	4,393	2,469	1,852	4,158
Humbug to OR/CA border (OR KMZ)	212	-	119	1	1
OR/CA border to 40°10' N. Lat. (CA KMZ	-	40	111	-	-
40°10' N. Lat. to Pt. Arena (Fort Bragg)	-	333	202	-	-
Pt. Arena to Pigeon Pt. (San Francisco)	-	794	2,303	-	-
South of Pigeon Pt. (Monterey)	-	158	-	-	-
West Coast Total	8,956	14,731	13,388	8,408	12,621
Recreational Community Personal Income Impa	cts (thousands of dolla	rs)			
North of Cape Falcon	11,456	13,104	12,501	9,449	12,792
Cape Falcon to Humbug Mt.	5,664	7,714	7,332	6,538	7,624
Humbug to OR/CA border (OR KMZ)	258	32	-	-	106
OR/CA border to 40°10' N. Lat. (CA KMZ	-	165	165	-	120
40°10' N. Lat. to Pt. Arena (Fort Bragg)	-	251	251	-	224
Pt. Arena to Pigeon Pt. (San Francisco)	-	2,852	2,405	-	2,464
South of Pigeon Pt. (Monterey)	-	340	357	-	243
West Coast Total	17,378	24,459	23,011	15,987	23,572

a/ Impacts assumed when Alternatives were adopted in March may have changed due to updated information from the PSC, North of Falcon process, or other sources or data corrections.

b/ Socioeconomic impacts under the No-Action Alternative are assumed equal to 2024 estimates.

c/ 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. Values in parentheses indicate impacts in Council-area fisheries.

d/ Value depicted is ocean escapement.

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

f/ Values depicted for Alternatives I, II, and III are ocean exploitation rates only.

g/ Coho modeling results for the No-Action Alternative were updated to incorporate the revised OPIH forecast adopted by the Council at the March 2025 meeting.

TABLE 12. Stock status relative to overfished and overfishing criteria. A stock is approaching an overfished condition if the 3-year geometric mean of the most recent two years and the forecasted spawning escapement is less than the minimum stock size threshold (MSST); a stock would experience overfishing if the total annual exploitation rate exceeds the maximum fishing mortality threshold (MFMT). Occurrences of stocks approaching an overfished condition, or experiencing overfishing, are indicated in bold. 2024 spawning escapement and exploitation rate estimates are based on 2025 preseason abundance forecasts and 2025 adopted Council regulations.

			Estimated A	Adult Spawn	ing Escapen	nent										
						Forecast	3-yr Geo					Est	imated Ex	ploitation R	ate	
	2020	2021	2022	2023	2024 <sup>a/</sup>	2025 <sup>b/</sup>	Mean	MSST	S <sub>MSY</sub>	2020	2021	2022	2023	2024 <sup>a/</sup>	2025 <sup>b/</sup>	MFMT
Chinook																
Sacramento Fall	138,091	105,584	61,862	133,783	99,274	147,733	125,190	91,500	122,000	0.61	0.67	0.76	0.04	0.04	0.11	0.58 <sup>g</sup>
Klamath River Fall	26,185	29,942	21,956	41,370	24,032	19,417	26,826	30,525	40,700	0.30	0.38	0.46	0.04	0.23	0.10	0.71
Southern Oregon <sup>c/</sup>	29,387	48,979	17,609	29,555	53,342	NA	30,279	20,500	34,992	NA	NA	NA	NA	NA	NA	0.54
Central and Northern ORd/	137	85	105	118	123	NA	115	30 fish/mile	150k-200k	0.38	0.44	0.49	NA	NA	NA	0.78
Upper River Bright - Fall <sup>d/</sup>	98,401	86,644	53,961	64,450	57,580	NA	58,505	19,812	39,625	0.37	0.46	0.44	NA	NA	NA	0.86
Upper River - Summer <sup>d/</sup>	70,654	52,076	64,497	49,410	41,142	NA	50,802	6,071	12,143	0.31	0.42	0.52	NA	NA	NA	0.75
Willapa Bay - Fall <sup>e/</sup>	3,585	2,966	2,351	2,095	NA	NA	2,445	1,697	3,393	0.57	0.70	0.63	NA	NA	NA	0.78
Grays Harbor Fall <sup>d/e/</sup>	20,879	13,207	14,259	10,943	NA	NA	12,726	6,663	13,326	0.59	0.68	0.61	NA	NA	NA	0.63
Grays Harbor Spring	2,828	2,573	1,348	2,175	NA	NA	1,961	700	1,400	NA	NA	NA	NA	NA	NA	0.78
Queets - Fall <sup>d/</sup>	3,622	3.364	1.784	2.246	NA	NA	2.380	1.250	2,500	0.74	0.76	0.86	NA	NA	NA	0.87
Queets - Sp/Su	342	280	434	540	NA	NA	403	350	700	NA	NA	NA	NA	NA	NA	0.78
Hoh - Fall <sup>d/e/</sup>	2,273	2,622	1,866	2,323	NA	NA	2,248	600	1,200	0.70	0.74	0.65	NA	NA	NA	0.90
Hoh Sp/Su	1,248	817	1,055	980	NA	NA	945	450	900	NA	NA	NA	NA	NA	NA	0.78
Quillayute - Fall <sup>d/e/</sup>	8,672	5,568	8,369	6,682	5,378	NA	6,700	1,500	3,000	0.61	0.68	0.63	NA	NA	NA	0.87
Quillayute - Sp/Su	942	1,082	1,574	2,087	1,275	NA	1,612	600	1,200	NA	NA	NA	NA	NA	NA	0.78
Hoko -Su/Fa <sup>d/</sup>	2,102	1,165	1,386	4,393	NA	1,614	2,142	425	850	0.34	0.14	0.21	NA	NA	NA	0.78
Coho																
Willapa Bay <sup>f/</sup>	16,476	31,369	24,197	18,693	NA	16,101	19,383	8,600	17,200	0.33	0.24	0.31	0.27	NA	0.60	0.74
Grays Harbor <sup>f/</sup>	23,814	62,789	61,057	49,877	NA	36,284	47,986	18,320	24,426	0.29	0.23	0.29	0.26	NA	0.49	0.65
Queets	4,181	5,752	12,083	4,375	NA	5,870	6,770	4,350	5,800	0.22	0.10	0.32	0.41	NA	0.36	0.65
Hoh	2,840	6,396	8,224	3,879	NA	2,892	4,519	1,890	2,520	0.49	0.18	0.30	0.41	NA	0.46	0.65
Quillayute Fall	7,695	9,938	16,643	7,734	NA	7,744	9,989	4,725	6,300	0.16	0.04	0.22	0.29	NA	0.29	0.59
Juan de Fuca	8,548	20,837	16,977	13,887	NA	12,607	14,378	7,000	11,000	0.07	0.07	0.08	0.07	NA	0.10	0.60
Hood Canal	16,832	34,388	9,192	32,934	NA	12,836	15,722	10,750	14,350	0.29	0.25	0.54	0.34	NA	0.36	0.65
Skagit	23,808	75,532	92,306	54,443	NA	37,232	57,196	14,857	25,000	0.43	0.33	0.26	0.27	NA	0.44	0.60
Stillaguamish	21,555	38,176	53,828	37,962	NA	20,415	34,682	6,100	10,000	0.13	0.11	0.10	0.18	NA	0.26	0.50
Snohomish	42,675	97,523	85,692	63,042	NA	40,414	60,214	31,000	50,000	0.11	0.11	0.08	0.21	NA	0.32	0.60

a/ Preliminary

b/ Estimates based on preseason forecasts and Council adopted management measures.

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

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

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

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

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

FIGURE 3. Projected community income impacts associated with projected landings in the non-Indian commercial troll ocean salmon fishery under Council adopted 2025 management measures compared to 2022, 2024 and the 2019-2023 average (in inflation-adjusted dollars).

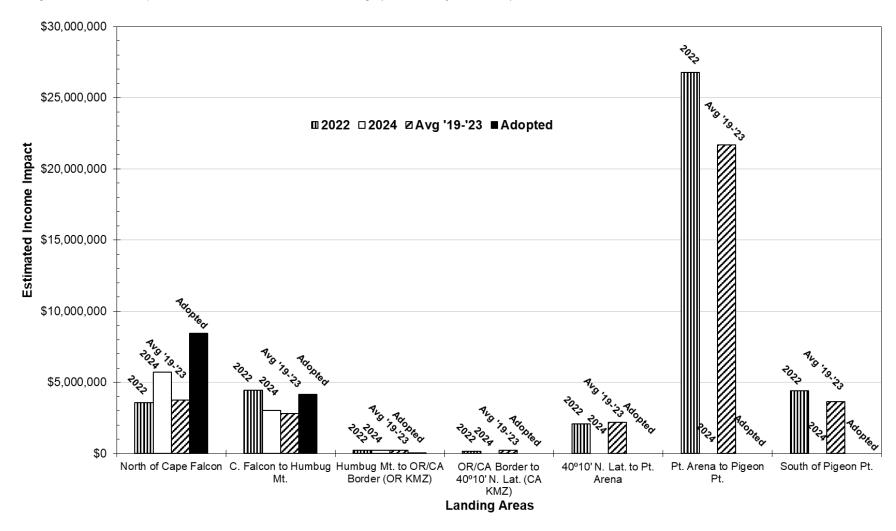
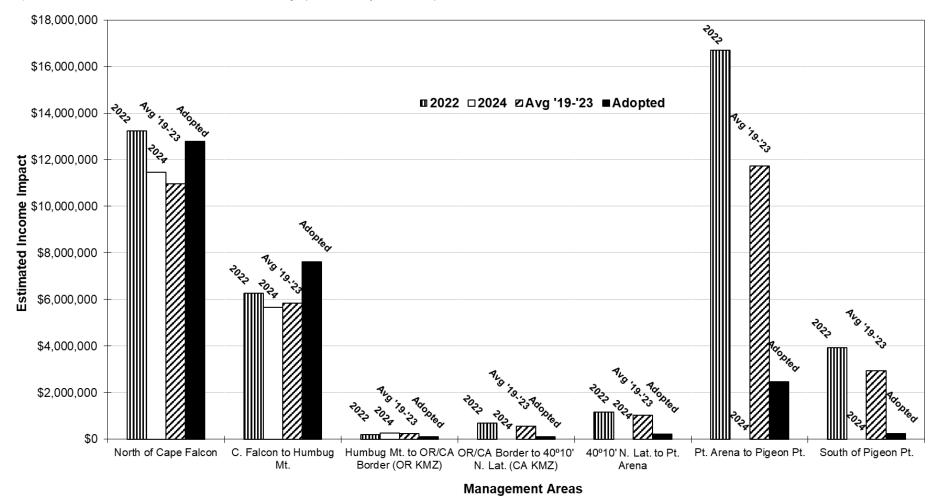


FIGURE 4. Projected coastal community personal income impacts associated with the recreational ocean salmon fishery under 2025 Council-adopted management measures compared to estimated 2022, 2024 and the 2019-2023 average (in inflation-adjusted dollars).



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

Table A-1. Sacramento River winter Chinook age-3 ocean impact rate south of Pt. Arena by month, area, and fishery. Max rate: 20.0%.

		1	otal	ommer	cial									Red	creation	al				
Port									Year	Port									- 1	Year
Area	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Area	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF									0.00	SF			0.10	0.25	0.32	0.02	0.07		- 1	0.77
MO									0.00	MO			0.11	0.30	0.43	0.02			İ	0.86
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Total	0.00	0.00	0.22	0.55	0.76	0.04	0.07	0.00	0.00	1.63

<sup>1.6%</sup> total impact rate

SF Pt. Arena to Pigeon Pt. (San Francisco)

MO Pigeon Pt. to the U.S./Mexico Border (Monterey)

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

	Commercial										Recreational											
Port	Fall	2024			Summer 2025			Summer Yea			Port		Fall 20	124			Summe	r 2025		S	Summer	Year
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug!	Total	Total
NO	0	0		5	3	45	234		287	287	NO	0	0	0	0	5	0	0	6	9	20	20
CO	7	0		28	9				37	44	CO	0	0	0	0	0	0	2	2	12	16	16
KO				0					0	0	KO			1			2	15	2	4	23	23
KC											KC							9	11	5	25	25
FB											FB			i				1	6	5	12	12
SF											SF							11	29	21	61	61
MO											MO							0	0	0	0	0
Total	7	0		33	12	45	234		324	331	Total	0	0	0	0	5	2	38	56	57	158	158

#### 19,417 natural area spawners, 10.0% spawner reduction rate, 1.6% age-4 ocean harvest rate

NO Cape Falcon to S. End of Heceta Bank FB Southern KMZ Boundary to Pt. Arena (Fort Bragg)

CO S. End of Heceta Bank to Humbug Mt. SF Pt. Arena to Pigeon Pt. (San Francisco)

KO Humbug Mt. to OR/CA Border (Oregon KMZ) MO Pigeon Pt. to U.S./Mexico Border (Monterey)

KC OR/CA Border to latitude 40°10' N. (California KMZ)

Table A-3. Klamath River fall Chinook age-4 ocean harvest by month, area, and fishery.

					Comme	rcial									Re	ecreat	ional					
Port	Port Fall 2024 Summer 2025				Summer Year			Port		Fall 2024	4			Summe	er 2025			Summer	Year			
Area	Sep O	ct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct N	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		4	2	15	153		174	174	NO	0	0	0	0	1	0	0	1		2	2
CO	0	0		23	7				30	30	CO	0	0	0	0	0	0	0	0	1	0	0
KO		1		0					0	0	KO			i			0	2	0	1	2	2
KC											KC			1				2	2	2	6	6
FB		1						i			FB			i				0	1	1	2	2
SF											SF							2	6	4	12	12
MO											MO							0	0	0	0	0
Total	0	0		27	9	15	153		204	204	Total		0	0	0	1	0	6	10	7	24	24

#### 19,417 natural area spawners, 10.0% spawner reduction rate, 1.6% age-4 ocean harvest rate

NO Cape Falcon to S. End of Heceta Bank FB Southern KMZ Boundary to Pt. Arena (Fort Bragg)

CO S. End of Heceta Bank to Humbug Mt. SF Pt. Arena to Pigeon Pt. (San Francisco)
KO Humbug Mt. to OR/CA Border (Oregon KN MO Pigeon Pt. to U.S./Mexico Border (Monterey)

KC OR/CA Border to latitude 40°10' N. (California KMZ)

Table A-4. Sacramento River fall Chinook ocean impacts in numbers of fish by fishery and Alternative.

	Commercial													R	ecreati	ional						
Port Fall 2024 Summer 2025				Summer	Year	Port		Fall 20	124			Summe	r 2025			Summer	Year					
Area	Sep	Oct-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total	Area	Sep	Oct	Nov-Dec	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO	0	0		1,033	892	1,378	1,889		5,192	5,192	NO	126	0	0	2	0	5	65	86	11	169	295
co	0	30		675	632				1,307	1,337	co	0	0	0	0	5	2	32	50	5	94	94
ко				0							ко						8	21	53	5	87	87
KC								1			KC							21	40	60	121	121
FB											FB							10	90	136	236	236
SF											SF							296	735	1,227	2,258	2,258
MO											МО							76	133	94	303	303
Total	0	30		1,708	1,524	1,378	1,889		6,499	6,529	Total	126	0	0	2	5	15	521	1,187	1,538	3,268	3,394

NO Cape Falcon to S. End of Heceta Bank FB Southern KMZ Boundary to Pt. Arena (Fort Bragg)

CO S. End of Heceta Bank to Humbug Mt. SF Pt. Arena to Pigeon Pt. (San Francisco)
KO Humbug Mt. to OR/CA Border (Oregon KMZ) MO Pigeon Pt. to U.S./Mexico Border (Monterey)

KC OR/CA Border to latitude 40°10′ N. (California KMZ)

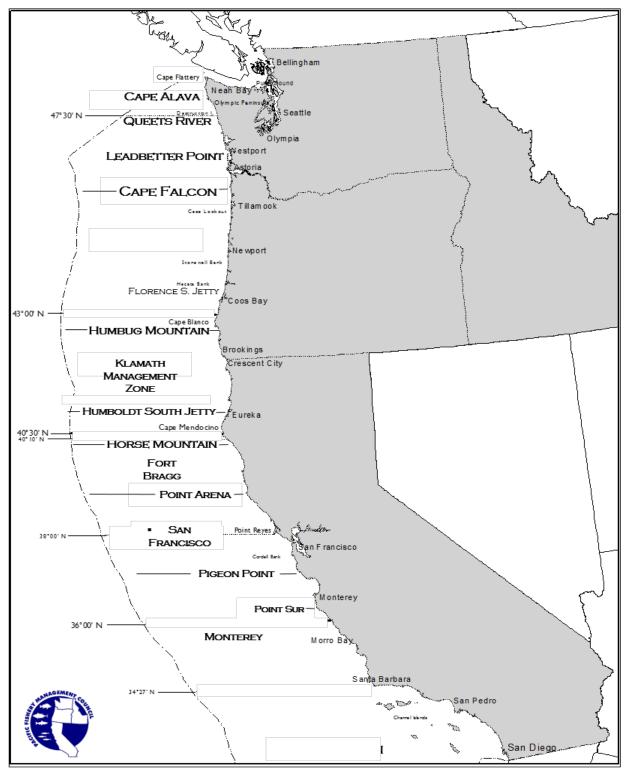


FIGURE 5. Map of Pacific West Coast with major salmon ports and management boundaries. This map is for reference only and is not intended for use in navigation or fishery regulation.

#### **+ADDENDUM: CONSISTENCY WITH OTHER APPLICABLE LAW**

## Magnuson-Stevens Conservation and Management Act (MSA)

The MSA provides parameters and guidance for Federal fisheries management. Overarching principles for fisheries management are found in the MSA's National Standards, which articulate a broad set of policies governing fisheries management. In crafting fisheries management regimes, the Fishery Management Councils and National Marine Fisheries Service (NMFS) must balance their recommendations to meet these different national standards.

The purpose of this action, development, and implementation of ocean salmon fishery management measures for 2025, is to allow fisheries to harvest surplus production of healthy natural and hatchery salmon stocks within the constraints specified under the Pacific Coast Salmon Fishery Management Plan (FMP), the Pacific Salmon Treaty (PST), and consistent with measures needed to avoid jeopardizing species listed under the Endangered Species Act (ESA) (referred to in the FMP as "consultation standards"). National Standard 1 (NS1) requires that "Conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery for the United States fishing industry." The action alternatives for the management measures are designed to ensure that conservation objectives in the FMP and annual catch limits (ACLs) are met. These reference points are, in turn, designed to prevent overfishing while achieving optimum yield on a continuing basis. In 2025, salmon stocks will be managed to meet harvest control rules, constraints for ESA-listed species, sharing objectives, and other limits and objectives in the FMP and under the Pacific Salmon Treaty (PST). There are several stocks of primary concern due to constraints on the fishery to meet their conservation and management objectives in 2025. These are: Klamath River fall-run Chinook (KRFC) salmon, Sacramento River fall-run Chinook (SRFC) salmon, and ESA-listed Southern Oregon/Northern California Coast coho salmon, California Coastal Chinook (CCC) salmon, Lower Columbia River natural (LCN) coho salmon, and Lower Columbia River tule Chinook salmon.

The alternatives were developed to limit impacts to the stocks referenced above while allowing fisheries that are determined to be unlikely to affect the future productivity and sustainability of those stocks (e.g., limiting fishery impacts to the *de minimis* level defined in the harvest control rule for KRFC).

There is currently one overfished salmon stock managed under a rebuilding plan approved by NMFS in 2020: KRFC salmon. SRFC salmon were determined to be rebuilt in 2021. In 2023, the Snohomish coho salmon stock was determined to be rebuilt, and in 2024, Queets and the Strait of Juan de Fuca were determined to be rebuilt. Queets River spring/summer Chinook salmon meet the criteria for being classified as 'not overfished, rebuilding' based on the most recent three-year geometric mean of spawning escapement from 2021-2023. A rebuilding plan has been adopted and will remain in place until the stock is determined to be rebuilt. The alternatives in this EA were designed to be risk averse with respect to these stocks, and the recommended fishing would

<sup>&</sup>lt;sup>1</sup> The rebuilding plan is currently under public review and pending public comments. It is anticipated to be final in mid-summer 2025.

not constitute overfishing and would achieve spawning escapements consistent with the FMP's conservation objectives, rebuilding plans, ESA consultation standards, and the current PST agreement. The result is that the proposed action and preferred alternative is in compliance with provisions of the FMP, ESA and the PST. The three salmon stocks with specified ACLs (KRFC, SRFC, and Willapa Bay natural coho salmon) are each projected to meet the stock-specific ACL set preseason under any of the alternatives considered. Therefore, except for the No-action alternative, the alternatives are consistent with NS1. The No-action alternative is the same as the previous year's action, and does not reflect consideration of changes in the status of salmon stocks from the previous year; therefore, over- or under-harvest of some salmon stocks would occur if this alternative were implemented (PFMC 2025). As reported in PFMC 2025, under the No-action alternative, lower coho abundance forecasts in 2025 relative to 2024 could not support the fishery regulations of 2024, likely resulting in some coho stocks that would exceed their exploitation rate limits or not achieve their spawning escapement objectives. The projected exploitation rate for KRFC under the No Action Alternative is greater than the maximum allowable exploitation rate for 2025. Consequently, the projected natural-area adult escapement is lower than the minimum level of 18,687 natural-area adult spawners resulting from application of the KRFC harvest control rule that is part of the rebuilding plan.

National Standard 2 requires the use of the best scientific information available. The Pacific Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) reviews and recommends the methods used to develop alternatives for salmon management measures. The Noaction Alternative (see PRE I, Chapter V) would not meet this standard, as it does not take into account current abundance projections for salmon stocks. However, the other alternatives are based on up-to-date scientific information regarding abundance and the methods approved by the SSC.

National Standard 3 requires individual stocks of fish to be managed as a unit throughout their ranges, and interrelated stocks of fish to be managed as a unit. The conservation objectives and ACLs are established for individual stocks in the FMP and are based on either escapement or on total fishery exploitation rate, both of which account for impacts to stocks from fisheries throughout their range. All salmon stocks are managed as units in Council-area fisheries to ensure all conservation objectives are met. The alternatives were developed to be consistent with the conservation objectives and ACLs in the FMP.

National Standard 4 requires that "Conservation and management measures shall not discriminate between residents of different States." And that "allocation shall be: (A) fair and equitable...; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no...entity acquires an excessive share." The alternatives were developed to be consistent with the allocation guidelines in the FMP with input from the states and tribes, and Council advisory bodies, including the Salmon Advisory Subpanel (SAS), such that the alternatives were developed to meet National Standard 4. The SAS is comprised of stakeholders and tribal representatives representing various gear sectors and fishing communities from Washington, Oregon, California, and Idaho.

National Standard 5 requires efficiency, where practicable, in the utilization of fishery resources. All alternatives in this EA meet this standard. This is accomplished with gear restrictions and season controls to maximize harvest efficiency, quota and harvest guidelines to ensure sustainable harvest while reducing excess effort, adaptive management based on real-time data and stock assessments where possible and appropriate, avoiding solely economic allocation, and gathering input from the stakeholders, Tribes, conservationists, and scientists to ensure the management measures consider a range of efficiencies for long-term viability.

National Standard 6 requires conservation objectives and management measures to take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. The proposed action takes into account annual variation in salmon stock abundance, builds in precaution to address uncertainty, and is built on input from the affected fishing communities that reflects changes in the economics of the fishery and the interests of participants. All alternatives allow for inseason management of Council-area salmon fisheries to meet conservation objectives and preseason management objectives in light of the most recent information about the progress of the fisheries.

National Standard 7 requires that conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication. All alternatives in this EA meet this standard.

National Standard 8 requires that conservation and management measures shall, consistent with the conservation requirements of the MSA, take into account the importance of fishery resources to fishing communities in order to "(A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities." The alternatives represent a range of management measures with various economic impacts. The Proposed Action and Preferred Alternative (see PRE III) were developed to provide the optimum balance between the short-term needs of the communities and the long-term needs of the communities, both of which rely on long-term health of the salmon stocks.

National Standard 9 requires the reduction, to the extent practicable, of bycatch or bycatch mortality. All alternatives in this EA are expected to have no significant effects due to bycatch mortality on non-target species.

National Standard 10 requires, to the extent practicable, conservation and management measures to promote the safety of human life at sea. The Alternatives in this EA are not expected to increase the impact risks to salmon fishermen and include provisions to reduce risk in the event of bad weather or unanticipated unsafe conditions.

## Paperwork Reduction Act (PRA)

The purposes of the PRA are to minimize the burden of information collection by the Federal Government on the public; maximize the utility of any information thus collected; improve the quality of information used in Federal decision making; minimize the cost of collection, use, and dissemination of such information; and improve accountability. The PRA requires Federal agencies to obtain clearance from the Office of Management and Budget before collecting information. This clearance requirement is triggered if certain conditions are met. "Collection of information" is defined broadly. In summary, it means obtaining information from third parties or the public by or for an agency through a standardized method imposed on 10 or more persons. Collection of information need not be mandatory to meet the trigger definition. Even information collected by a third party, if at the behest of a Federal agency, may trigger the clearance requirement. Within NMFS, the Office of the Chief Information Officer is responsible for PRA compliance. Obtaining clearance can take up to 9 months and is one aspect of NMFS review and approval of Council decisions.

The reporting requirements used in the salmon fisheries are covered by an existing approved collection-of-information requirement. A specific requirement on when and where to land fish is imposed when necessary to ensure timely and accurate assessment of catches in specific regulatory areas. If fishermen are unable to comply with this landing requirement because of unsafe weather or mechanical problems, they must notify the U.S. Coast Guard of their problem, and advise of the name of the vessel, the port where delivery will be made, the approximate amount of salmon on board, and the estimated time of arrival. This emergency provision is rarely used but is important to be retained for safety purposes. In addition, the regulations for the fishery include measures to keep fishery impacts within conservation objectives for the California Coastal (CC) Chinook salmon. This information collection assists in the management of the landing and possession limits for the California commercial salmon troll fishery. This requires Chinook salmon landings to be entered into the California Department of Fish and Wildlife electronic landing database within 24 hours, with the number of Chinook salmon landed. Authorization under the PRA for this information collection (OMB Control No. 0648-0433) was extended on November 28, 2023, and will expire on November 30, 2026.

#### Marine Mammal Protection Act (MMPA)

The MMPA of 1972 is the principal Federal legislation that guides marine mammal species protection and conservation policy in the United States. Under the MMPA, NMFS is responsible for the management and conservation of over 150 stocks of whales, dolphins, and porpoises, as well as seals, sea lions, and fur seals; while the US Fish and Wildlife Service is responsible for walrus, sea otters, and the West Indian manatee.

Off the west coast, the Southern Resident Puget Sound killer whale stock (SRKW) is listed as endangered under the ESA; the Guadalupe fur seal and Southern sea otter California stock are listed as threatened under the ESA. The sperm whale (WA, OR, CA stock), humpback whale (WA, OR, CA, Central American stock), blue whale eastern north Pacific stock, and Fin whale (WA, OR, CA stock) are listed as endangered under the ESA. Any species listed as endangered or threatened under the ESA is automatically considered depleted under the MMPA.

The commercial salmon troll fisheries off the West Coast are classified as Category III fisheries, indicating a remote or no likelihood of causing incidental mortality or serious injury to marine mammals (89 FR 12257, February 16, 2024). Recreational salmon fisheries are assumed to have similar impacts as they use similar gear and techniques.

## National Environmental Policy Act (NEPA)

This environmental assessment (EA) is intended to meet the NEPA requirements that apply to the proposed action and preferred alternative.

This EA applies the NOAA NEPA procedures at NOAA Administrative Order 216-6A: compliance with the NEPA Act.

### Endangered Species Act (ESA)

Ocean salmon fisheries conducted under the FMP do affect ESA-listed salmon species. The alternatives analyzed in this EA were developed to be consistent with biological opinions issued by NMFS. The proposed action and preferred alternative is consistent with those biological opinions.

Of the ESA-listed marine mammals described above (see MMPA section), Council-managed salmon fisheries only impact the endangered Southern Resident Killer Whale (SRKW) distinct population segment (DPS). The Salmon FMP includes measures to limit fishery impacts to SRKW when Chinook salmon abundance falls below a threshold. The effects of the fisheries managed under the FMP and implementing regulations, including this framework, were analyzed by NMFS in a 2021 biological opinion and determined to be not likely to jeopardize SRKW or destroy or adversely modify its designated or proposed critical habitat. Biological Opinion on the Authorization of the West Coast Ocean Salmon Fisheries Through Approval of the Pacific Salmon Fishery Management Plan Including Amendment 21 and Promulgation of Regulations Implementing the Plan for Southern Resident Killer Whales and their Current and Proposed Critical Habitat (WCRO-2019-04074, April 21, 2021). The Council and NMFS considered the Chinook salmon abundance threshold consistent with the FMP when developing the alternatives for 2025 annual management measures and found that the abundance of Chinook salmon in 2025 exceeds the threshold; thus, no additional management measures are required. The proposed action and the alternatives considered in this EA are consistent with the FMP and the 2021 biological opinion.

Effects on listed Puget Sound yelloweye rockfish and bocaccio, and Pacific eulachon were addressed in a 2010 biological opinion (NMFS 2010b). The effects to ESA-listed North American green sturgeon were considered in a 2007 biological opinion (NMFS 2007b). These biological opinions concluded that the fisheries, as managed under the FMP, are not likely to jeopardize these listed species.

The following biological opinions and Section 4(d) determinations have been prepared for the Council-area fisheries by NMFS.

Table 1. NMFS ESA Biological Opinions regarding Evolutionarily Significant Units (ESUs) and Distinct Population Segments (DPSs) affected by PFMC Fisheries.

Date	Duration	Species Considered								
Salmonid Species										

March 8, 1996	Until Reinitiated	Snake River spring/summer and fall Chinook Snake River sockeye
A mail 20, 2022	I Intil Dainitiated	·
April 28, 2022	Until Reinitiated	S. Oregon/N. California Coast coho
April 28, 1999	Until Reinitiated	Central California Coast coho
		Oregon Coast coho
April 28, 2000	Until Reinitiated	Central Valley Spring-run Chinook
September 14, 2001	Until Reinitiated	Hood Canal summer-run chum
April 30, 2001	Until Reinitiated	Upper Willamette River Chinook
		Columbia River chum
		Ozette Lake sockeye
		Upper Columbia River spring-run Chinook
		Ten listed steelhead DPSs
February 29, 2024	Until Reinitiated	California Coastal Chinook
April 9, 2015	Until Reinitiated	Lower Columbia River coho
March 30, 2018	Until Reinitiated	Sacramento River winter-run Chinook
May 12, 2023	Until Reinitiated	Puget Sound Chinook
April 26, 2012	Until Reinitiated	Lower Columbia River Chinook
	Non-Sa	lmonid Species
April 30, 2007	Until Reinitiated	North American Green Sturgeon
April 21, 2021	Until Reinitiated	Southern Resident Killer Whales
April 30, 2011	Until Reinitiated	Puget Sound/Georgia Basin Rockfish
April 30, 2011	Until Reinitiated	Pacific Eulachon

### Coastal Zone Management Act (CZMA)

Section 307(c)(1) of the CZMA of 1972 requires all Federal activities that directly affect the coastal zone to be consistent with approved state coastal zone management programs to the maximum extent practicable. The proposed management measures were developed under the Pacific Coast Salmon Fishery Management Plan (Salmon FMP) and its amendments, which were previously found to be consistent to the maximum extent practicable with the approved coastal zone management programs of the affected states (i.e., Washington, Oregon, and California). This determination was sent to the responsible state agencies on February 13, 2025, for review under section 307(c)(1) of the CZMA. We did not receive responses from the agencies, so consistency with the state policies is inferred.

## Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 was designed to end the commercial trade of migratory birds and their feathers that, by the early years of the 20th century, had diminished populations of many native bird species. The act states it is unlawful to take, kill, or possess migratory birds and their parts (including eggs, nests, and feathers), and is a shared agreement between the United States, Canada, Japan, Mexico, and Russia to protect a common migratory bird resource. The

Migratory Bird Treaty Act prohibits the directed take of seabirds, but the incidental take of seabirds does occur. None of the alternatives directly affect any seabirds protected by the Migratory Bird Treaty Act.

## Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (EO 13175)

Executive Order 13175 is intended to ensure regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with American Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

The Secretary recognizes the sovereign status and co-manager role of Indian tribes over shared Federal and tribal fishery resources. At Section 302(b)(5), the MSA reserves a seat on the Council for a representative of an Indian tribe with federally recognized fishing rights from California, Oregon, Washington, or Idaho.

The U.S. government formally recognizes that the four Washington Coastal Tribes (Makah, Quileute, Hoh, and Quinault) have treaty rights to fish for salmon within the Council fishery area. Each of the treaty tribes has the discretion to administer their fisheries and to establish their own policies to achieve program objectives. In addition, other tribes with Federally-recognized fishing rights may be impacted by Council-area fisheries, including tribes from Puget Sound, the Columbia River, and the Klamath River. Accordingly, the proposed action (preferred alternative) and other alternatives have been developed through the Council process. Through the tribal representative on the Council and tribal comments submitted to NMFS and the Council, the Tribes have had a role in developing the proposed action, particularly the tribal fishery provisions, and analyzing the effects of the alternatives; therefore, the proposed action and preferred alternative is consistent with EO 13175.

#### Executive Order 13132: Federalism

Executive Order 13132 enumerates eight "fundamental federalism principles." The first of these principles states, "Federalism is rooted in the belief that issues that are not national in scope or significance are most appropriately addressed by the level of government closest to the people." In this spirit, the Executive Order directs agencies to consider the implications of policies that may limit the scope of or preempt states' legal authority. Preemptive action having such "federalism implications" is subject to a consultation process with the states; such actions should not create unfunded mandates for the states, and any final rule published must be accompanied by a "federalism summary impact statement."

The Council process offers many opportunities for states and Indian tribes (through their agencies, Council appointees, consultations, and meetings) to participate in the formulation of management frameworks and management measures implementing the framework. This process encourages states and tribes to institute complementary measures to manage fisheries under their jurisdiction that may affect federally managed stocks.

The proposed action and preferred alternative would not have federalism implications subject to Executive Order 13132.

## REGULATORY FLEXIBILITY ACT (RFA)

This action is exempt from the procedures of the RFA because NMFS is waiving notice and comment for the reasons described below under the Administrative Procedures Act determination section.

## ADMINISTRATIVE PROCEDURE ACT (APA)

NOAA's Assistant Administrator for Fisheries (AA) finds it is impracticable and contrary to public interest to provide for prior notice and comment on the rule implementing the salmon management measures and waives this requirement under 5 U.S.C. 553(b)(B) for the reasons explained below.

Under Amendment 20 to the FMP, the annual salmon management cycle begins May 16 each year and continues through May 15 of the following year. May 16 was chosen by the Council because the pre-May 16 harvests constitute a relatively small portion of the annual catch, but allows Council and NMFS additional time to complete the necessary environmental and economic analyses and regulatory documentation following the April Council meeting in time for the Secretary of Commerce to approve and implement the Council's annual recommendation. The ability to complete that work was increasingly infeasible under the traditional management cycle, which began on May 1 for many years, due to the compressed time frame in which the essential data become available, the growing complexity of the management process, and the documentation required. The timeframe for determining the annual modifications to ocean salmon fisheries management measures depends on when the pertinent biological data are available. Salmon stocks are managed to meet annual conservation objectives for spawning escapement and/or specific exploitation rates. Achieving either of these objectives requires designing management measures that are appropriate for the ocean abundance predicted for that year. These pre-season abundance forecasts, which are derived from the previous year's observed spawning escapement, vary substantially from year to year and are not available until January and February because spawning escapement continues through fall and early winter

The preseason planning and public review process associated with developing Council recommendations is initiated in February as soon as the forecast information becomes available. The public planning process requires coordination of management actions of four states, numerous Indian tribes, and the Federal Government, all of which have management authority over the stocks. This complex process also includes the affected user groups, as well as the general public. The process is compressed into a two-month period, which culminates at the April Council meeting in mid-April at which the Council adopts a recommendation that is forwarded to NMFS for review, approval, and implementation of fishing regulations that are effective on May 16.

As described in the Federal Register Notice for this action under the "Schedule Used to Establish 2025 Management Measures" section, the Council solicited public comment on its proposed management options and notified the public of the measures it recommended to NMFS for implementation. In addition to opportunities for public input at the March and April Council meetings, the Council held public hearings on the alternatives via in-person and webinar for each coastal state between the March and April Council meetings. In addition to the Council process, notice and opportunity for public comment are provided through meetings and caucuses of state, tribal, and local governments, and the various user groups. This parallel process occurs throughout the February to April time frame when Council recommendations are developed. The major meetings that concern salmon fisheries on the West Coast include the North of Cape Falcon Forum, sponsored by the state of Washington and Northwest Indian tribes with treaty fishing rights; *U.S.* v. *Oregon* meetings related to ocean and Columbia River fisheries; and meetings held by the Oregon Fish and Wildlife Commission and the California Fish and Game Commission. Recommendations and information from these forums are incorporated into the Council process when representatives from these entities provide comments and information at Council-sponsored functions.

Providing the opportunity for prior notice and public comments on the Council's recommended measures through a proposed and final rulemaking process would require 30 to 60 days in addition to the two-month period required for the development of the regulations. Delaying implementation of annual fishing regulations, which are based on the current stock abundance projections, for an additional 60 days would require that fishing regulations for May and June be set in the previous year, without knowledge of the current stock status. For the 2025 fishing regulations, the current stock abundance was not available to the Council until February. In addition, information related to northern fisheries and stock status in Alaska and Canada, which is important to assessing the amount of available salmon in the southern U.S. ocean fisheries, is not available until mid- to late-Because a substantial amount of fishing normally occurs mid-May through June, managing the fishery with measures developed using the prior year's data could have significant adverse effects on the managed stocks, including ESA-listed stocks. Although salmon fisheries that open prior to May 16 are managed under measures developed the previous year, as modified by the Council at its March and April meetings, relatively little harvest occurs during that period (e.g., on average, less than 10 percent of commercial and recreational harvest occurred prior to May 16 during the years 2011 through 2018). Allowing the much more substantial harvest levels normally associated with the May and June seasons to be promulgated under the prior year's regulations would impair NMFS' ability to protect weak stocks and ESA-listed stocks, and provide harvest opportunity where appropriate (see the assessment of the No-action alternative in Pre-I). The choice of May 16 as the beginning of the regulatory season balances the need to gather and analyze the data needed to meet the management objectives of the FMP and the requirements to provide adequate public notice and comment on the regulations implemented by NMFS. Providing for notice and public comment on the Council's recommendations, in addition to that provided for through the Council process, is therefore impracticable and contrary to the public interest.

In summary, if the 2025 measures are not in place on May 16 when the first salmon fisheries under the 2025 regulations are scheduled to begin, ocean salmon fisheries will not open as scheduled or would open or continue based on the prior year's management measures which do not account for current year abundance projections without inseason action by NMFS. For 2025 this would result in lost fishing opportunity, negative economic impacts, potential harm to stocks at low abundance

and ESA-listed stocks, and confusion for the public as the state fisheries adopt concurrent regulations that conform to the Federal management measures.

Overall, the annual population dynamics of the various salmon stocks require managers to vary the season structure of the various West Coast area fisheries to both protect weaker stocks and give fishers access to stronger salmon stocks, particularly hatchery produced fish. Failure to implement these measures immediately could compromise the status of certain stocks or result in foregone opportunity to harvest stocks whose abundance has increased relative to the previous year, thereby undermining the purposes of this Agency action. Based upon the above-described need to have these measures effective on May 16 and the fact that there is limited time available to implement these new measures after the final Council meeting in April and before the commencement of the ocean salmon fishing year on May 16 and the substantial public comment opportunities built into the salmon season setting process described above and in the FMP, NMFS has concluded it is impracticable to provide an opportunity for prior notice and public comment under 5 U.S.C. 553(b)(B). Therefore, the Assistant Administrator for Fisheries also finds that good cause exists under 5 U.S.C. 553(d)(3), to waive the 30-day delay in effectiveness of this action.

To enhance notification to the fishing industry of this action, NMFS will announce the new measures over the telephone hotline used for inseason management actions and also post the regulations on its West Coast Region website (<a href="www.fisheries.noaa.gov/region/west-coast">www.fisheries.noaa.gov/region/west-coast</a>). Additionally, NMFS will advise the states of Washington, Oregon, and California on the new management measures. These states announce the seasons for applicable state and Federal fisheries through their own public notification systems.



## Finding of No Significant Impact for the Environmental Assessment for 2025 Ocean Salmon Fisheries Management

#### 0648-BN19

**I. Purpose of Finding of No Significant Impact (FONSI)**: The National Environmental Policy Act (NEPA) requires the preparation of an Environmental Impact Statement (EIS) for any proposal for a major federal action significantly affecting the quality of the human environment. 42 U.S.C. § 4332(C). Agencies may issue a Finding of No Significant Impact (FONSI) if they determine that a proposed agency action will not have a significant effect on the human environment and therefore does not require the issuance of an EIS.

In preparing this FONSI, we reviewed the **Final Environmental Assessment for 2025 Ocean Salmon Fisheries Management** (EA), which evaluates the affected environment and the environmental effects of the proposed action and alternatives (including the duration of impact, and whether the impacts were adverse and/or beneficial and their magnitude).

#### II. Approach to Analysis:

The proposed action and preferred alternative are not considered to meaningfully contribute to a significant impact based on scale of impact, as the action is temporary (i.e., these annual specifications and management measures will be in place for one year, until superseded by the next year's specifications and management measures), and the salmon fishery is small in terms of economic (Preseason Report III Chapter 10 Table 9, April 2025) and environmental impacts.

The proposed action will not meaningfully contribute to significant impacts on specific resources. The ocean salmon fisheries have limited impacts on non-target species and negligible impacts on marine habitats.

The proposed action is not connected to other actions that have caused or may cause effects to the resources in the affected area that have not already been considered and accounted for, and there is no potential for the effects of the proposed action to add to the effects of other projects that have not already been considered, such that the effects taken together could be significant.

The EA includes four alternatives for three fisheries: commercial, recreational, and treaty Indian. (1) A No Action alternative is the same as the previous year's action, therefore, it is expected to have no significant impacts in the absence of large changes to the affected environments. Alternatives (1), (2), and (3) are developed to meet conservation objectives for stocks expected to achieve optimum yields while limiting impacts on depressed stocks (Preseason Report II Tables 1-3). These alternatives were developed at the Council's March meeting; and were available for public comment online and at Council meetings and public hearings between the Council's March and April meetings. Fisheries were further shaped in April to meet conservation objectives for Puget Sound and Coastal Washington stocks based on additional information and further discussion in the North of Falcon management forum. The preferred alternative that was adopted by the Council and that NMFS is promulgating in regulation combines

aspects of each of the three alternatives, and the combination depends on the sector and the area. The preferred alternative was developed taking into account the summary of public testimony at the public hearings, summarized in the Federal Register notice. The preferred alternative was also informed by public testimony, industry advice, and management entity discussions at the April Council meeting.

#### **III. Context:**

The proposed action establishes annual specifications and management measures for ocean salmon fisheries in the exclusive economic zone (EEZ), 3-200 nautical miles off the coasts of the states of Washington, Oregon, and California for the 2025 fishing season, and is, therefore, regional in its geographical extent. The EA describes the management areas within the region where specific fisheries are authorized, and the environmental effects analyzed in the EA occur at a relatively small scale.

#### **IV. Intensity:**

The following resources were assessed for effects on:

- *Unique characteristics of the geographic area:* 
  - o Federal threatened or endangered species or their critical habitat: This proposed action would not significantly affect any endangered or threatened species or its critical habitat. Several salmonid and non-salmonid species that are potentially impacted by the fisheries are listed as threatened or endangered under the Endangered Species Act (ESA). NMFS has issued biological opinions addressing the effects of the salmon fisheries on all of these species. Stock abundance forecasts are developed each year, for ESA-listed and non-listed salmon species, and annual management measures are crafted to ensure impacts on ESA-listed species are within the range analyzed under the appropriate biological opinions to minimize or avoid adverse effects on each species. The alternatives for the 2025 fisheries were developed consistent with the actions analyzed in biological opinions for these species and any applicable reasonable and prudent measures or reasonable and prudent alternatives. As applicable, the analysis of the proposed action takes into account impacts in Alaska, Washington, Oregon, and California state and Canadian waters fisheries, where applicable to the opinion, to ensure consistency with the analysis in the biological opinions. Applicable biological opinions are listed in the EA. Therefore, while the proposed action may affect ESA-listed species, it is not expected to be significant under NEPA because the proposed action is designed to minimize or avoid adverse effects on ESA-listed species. The fisheries are developed each year to be responsive to the abundance and conservation needs of each salmon species on an annual basis, and the proposed action is consistent with existing ESA biological opinions.
  - O National Register of Historic Places: No significant impacts are expected to occur. The proposed action would not affect historic properties and archeological resources because the proposed action does not use any substrate-contacting gear, as it only includes hookand-line troll fisheries. Therefore, no ground disturbing impacts are expected to result from the proposed action. Additionally, no properties listed or eligible for listing on the National Register of Historic Places, or archeological resources, are known to occur in

the area where the proposed action will occur. The proposed action will not significantly affect cultural resources or resources important to traditional cultural and religious tribal practice, as the proposed action includes treaty Indian fisheries, and West Coast Indian tribes are part of the Council's decision-making process on salmon management issues.

- Stocks of marine mammals as defined in the Marine Mammal Protection Act: Ocean salmon fisheries are classified under the MMPA as Category III (89 FR 12257, February 16, 2024), indicating there is "a remote likelihood of or no known incidental mortality or serious injury of marine mammals" (MMPA 118(c) I). Fisheries are designed to be consistent with the Pacific Coast Salmon Fishery Management Plan (FMP), which as amended (Amendment 21) includes a framework that NMFS has determined in its biological opinion ensures the fisheries are not likely to adversely affect Southern Resident killer whales (SRKW) for whom Chinook salmon are a primary prey species. The impacts from the 2025 salmon regulation Alternatives to non-ESA and 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.
- Essential fish habitat identified under the Magnuson-Stevens Fishery Conservation and Management Act: The area affected by the proposed action has been identified as essential fish habitat (EFH) under the Salmon FMP, Coastal Pelagic Species FMP, and Pacific Coast Groundfish FMP. The proposed action has no adverse impact on EFH identified in these FMPs. Council Area salmon fisheries do not employ bottom contact gear, and there is no evidence of direct gear effects on fish habitat from Councilmanaged salmon fisheries on EFH for salmon or other managed species. 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. Because the potential adverse impact on EFH is not significant, NMFS conducted an abbreviated EFH consultation pursuant to 50 CFR 600.920(h), and prepared an EFH Assessment that incorporates all of the information required in 50 CFR 920(g)(2). The abbreviated EFH consultation was incorporated into the NMFS biological opinion on the effects of the salmon FMP on ESA-listed salmonids dated April 30, 2001. The consultation concluded that there are appropriate conservation measures governing fishing actions that occur under the Salmon FMP to minimize potential adverse impacts to EFH for species managed under the FMPs listed above. NMFS has continued to confirm this conclusion from the 2001 EFH consultation through subsequent EFH consultations, including one completed most recently in 2024 for California Coastal Chinook salmon (WCRO-2023-00367).
- National marine sanctuaries or monuments: National marine sanctuaries and monuments have regulations governing activities within their boundaries. The proposed action does not conflict with those regulations. Ocean salmon fisheries prosecuted under the proposed action do not use any substrate-contacting gear, as they are hook-and-line troll fisheries, so no ground-disturbing impacts are expected to result from the proposed action. Therefore, no significant impacts are expected on national marine sanctuaries or monuments from the Alternatives analyzed in this EA, and there is no discernible difference between the effects of the Alternatives on these resources.

- Public health and safety: The action would not significantly or negatively impact public health and safety, historic or cultural resources, or the possibility of contributing to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of the species. The National Standards are principles that must be followed in any FMP and implementing regulations to ensure sustainable and responsible fishery management. National Standard 10 requires that conservation and management measures shall, to the extent practicable, promote the safety of human life at sea. The proposed action includes provisions to address safety by considering potential weather and safety conflicts. In particular, avoid establishing extremely short open periods for non-quota fisheries, which may be lost to severe weather.
- Tribal laws and policies: The action would not have a significant direct or indirect effect on any Indian tribes, Tribal sacred sites, or on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. The action was developed to be consistent with tribal treaty and other fishing rights. The action includes measures applicable to tribal fisheries, these were developed in consultation with West Coast Indian tribes who are part of the Council's decision-making process on salmon management issues, and the tribal representative on the Council proposed these measures and voted for them.
- Local Laws and Policies: This proposed action will not threaten a violation of any Federal, state, or local law, or requirement imposed for the protection of the environment. The proposed action is designed to be consistent with Federal law (see EA Addendum: Other Applicable Law); states adopt conforming regulations to manage ocean salmon fisheries in state waters.

#### **V. Other Actions Including Connected Actions:**

The proposed action was developed with consideration of the collective impact of salmon fishery impacts within and beyond Council-area fisheries (e.g., northern salmon fisheries in Alaska and British Columbia, and southern salmon fisheries in state waters) to meet conservation and management criteria in the FMP, under the Pacific Salmon Treaty, the exercise of tribal fishing rights, and consistent with the ESA. Overall, we anticipate the cumulative impacts of the proposed action alongside other actions (including connected actions) to be positive, and any negative effects of the action alternative to be insignificant.

#### VI. Mitigation and Monitoring:

The proposed action and preferred alternative were developed to be consistent with the conservation and management objectives of the FMP, the terms of the Pacific Salmon Treaty, the requirements of the ESA, the Magnuson-Stevens Fishery Conservation and Management Act, and other applicable law (Addendum E). Council-managed salmon fisheries use "weak-stock management" to limit fishery impacts on low abundance or protected stocks; weak-stock management results in constraints on abundant stocks beyond what would necessarily be allowed under the FMP. Data regarding the performance of the fisheries is obtained through catch and landing reporting requirements included in the proposed action and in state laws. As described in the EA, the Council produces several reports each year that assess the status of the salmon stocks, the performance of the fishery, and the biological and socio-economic effects of the fisheries. The Council considers this information as it develops the proposed action.

#### **DETERMINATION**

Based on the Final Environmental Assessment for 2025 Ocean Salmon Fisheries Management, the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) has determined in this Finding of No Significant Impact (FONSI) that preparation of an EIS for 2025 Ocean Salmon Fisheries Management is not required because the proposed action will not have significant effects. All adverse impacts of the proposed action as well as mitigation measures, have been evaluated to reach this conclusion of no significant impacts.

4/29/2025
Date

Jennifer Quan Regional Administrator West Coast Region National Marine Fisheries Service