

**PRESEASON REPORT III**  
**COUNCIL ADOPTED MANAGEMENT MEASURES**  
**AND**  
**ENVIRONMENTAL ASSESSMENT PART 3**  
**FOR 2015**  
**OCEAN SALMON FISHERY**  
**REGULATIONS**

REGULATION IDENTIFIER NUMBER 0648-XD843



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## LIST OF ACRONYMS AND ABBREVIATIONS

AABM	Aggregate Abundance Based Management
AEQ	adult equivalent
BO	biological opinion
CDFW	California Department of Fish and Wildlife
Council	Pacific Fishery Management Council
CPUE	catch per unit effort
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
KRFC	Klamath River fall Chinook
LCN	lower Columbia River natural (coho)
LCR	lower Columbia River (natural tule Chinook)
LRH	lower river hatchery (tule fall Chinook returning to hatcheries below Bonneville Dam)
LRW	lower river wild (Columbia River fall Chinook, primarily from the North Lewis River)
MSY	maximum sustainable yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
ODFW	Oregon Department of Fish and Wildlife
OCN	Oregon coastal natural (coho)
OPI	Oregon Production Index
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RER	rebuilding exploitation rate
RMP	Resource Management Plan
RK	Rogue/Klamath (hatchery coho)
SAS	Salmon Advisory Subpanel
SCH	Spring Creek Hatchery (tule fall Chinook returning to Spring Creek Hatchery)
SI	Sacramento index
SONCC	Southern Oregon/Northern California Coast (coho)
SRFC	Sacramento River fall Chinook
SRFI	Snake River fall (Chinook) index
SRW	Snake River wild fall Chinook
SRWC	Sacramento River winter Chinook
STT	Salmon Technical Team
WCVI	West Coast Vancouver Island
WDFW	Washington Department of Fish and Wildlife

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## **1.0 INTRODUCTION**

This is the last in a series of three preseason reports prepared by the Pacific Fishery Management Council's (Council) Salmon Technical Team (STT) and staff. The reports document and help guide salmon fishery management in the exclusive economic zone (EEZ) from 3 to 200 nautical miles off the coasts of Washington, Oregon, and California, and within state territorial waters. This report summarizes the STT analysis of the 2015 ocean salmon fishery management measures adopted by the Council for submission to the U.S. Secretary of Commerce and characterizes their expected impacts on ocean salmon fisheries and the stocks which support them.

This report also constitutes the third and final part of an Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements for the 2015 ocean salmon regulations and includes a description and analysis of a Proposed Action. An EA is used to determine whether an action being considered by a Federal agency has significant environmental impacts. The second part of the EA (Preseason Report II; PFMC 2015c) presented a statement of the purpose and need, a description of the affected environment, a description of 2015 ocean salmon regulation Alternatives being considered, and an analysis of the effects of those Alternatives on the affected environment. The first part of the EA (Preseason Report I; PFMC 2015b) included a description of the No-Action Alternative and an analysis of the effects of the No-Action Alternative on salmon stocks managed under the Pacific Coast Salmon Fishery Management Plan (FMP), which is one component of the affected environment. Along with the description and analysis of the Proposed Action in this report, 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 recommendations for the 2015 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).

## **2.0 SELECTION OF FINAL MANAGEMENT MEASURES**

The following figures and tables describe the Council-adopted management measures covering the period from May 1, 2015, to April 30, 2016:

- 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 environmental effects of the Proposed Action and Alternatives.

The 2015 seasons are constrained primarily by: (1) threatened California coastal Chinook south of Cape Falcon, (2) endangered Sacramento River winter Chinook (SRWC) south of Point Arena, (3) threatened Oregon coastal natural (OCN) coho and Queets River coho north of the OR/CA border, and (4) Puget Sound Chinook and Interior Fraser (Thompson River) coho north 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 actions that are anticipated for the 2015-2016 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 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.
7. Closing Oregon recreational and commercial fisheries scheduled to open March 15, 2016 if necessary to meet 2016 management objectives.
8. Closing California recreational fisheries scheduled to open April 2, 2016, or commercial fisheries scheduled to open April 16, 2016, if necessary to meet 2016 management objectives.

Inseason action will generally be accomplished through NMFS sponsored conference calls attended by representatives of affected state and tribal 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 include commercial and recreational fisheries at the mouths of the Tillamook, Chetco, and Elk rivers. Washington may also establish limited recreational salmon fisheries in state marine waters if additional impacts on critical coho and/or Chinook stocks can be accommodated within management constraints. California will not establish any additional state marine water salmon fisheries in 2015.

## **3.0 SALMON FISHERY MANAGEMENT PLAN REQUIREMENTS**

The Council's 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 FMP. The objectives generally consist of meeting spawning escapement numbers associated with maximum sustainable yield ( $S_{MSY}$ ), overfishing limits (OFL), acceptable biological catch (ABC), and annual catch limits (ACL), or exploitation rate limits designed to

support recovery of depressed stocks or to rebuild overfished stocks, while encompassing a long-term average harvest approximating MSY.

Administrative objectives are requirements for meeting other applicable law outside of the FMP. These requirements include ESA consultation standards, international treaties, and tribal trust responsibilities. The FMP defers to NMFS consultation standards for salmon stocks listed under the ESA in regards to biological conservation objectives. Section 4.0 of this document provides greater detail on ESA-listed stocks, while impacts of the Council-adopted salmon management measures on ESA-listed stocks are included in Table 5.

The FMP requires compliance with relevant terms of the PST. Section 5.0 of this document provides greater detail on PST provisions and stocks, while impacts of the Council-adopted salmon management measures on those stocks are included in Table 5.

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

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

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

In addition to the allocation objectives associated with sharing between treaty Indian and non-Indian sectors, the FMP includes formulas for sharing Chinook and coho quotas north of Cape Falcon between commercial and recreational sectors, and among recreational port subareas, and for coho south of Cape Falcon between commercial and recreational sectors. The 2015 salmon management measures adopted by the Council meet the allocation requirements for fisheries north of Cape Falcon in the FMP. There were insufficient coho available for a directed commercial harvest south of Cape Falcon; therefore, the FMP allocation schedule guidance was to determine allocation of allowable impacts during the preseason process.

## 4.0 SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

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

ESU	Status	Federal Register Notice			
		Most Recent		Original Listing	
<b>Chinook</b>					
Sacramento River Winter	Endangered	76 FR 50447	8/15/2011	54 FR 32085	8/1/1989
Snake River Fall	Threatened	76 FR 50448	8/15/2011	57 FR 14653	4/22/1992
Snake River Spring/Summer	Threatened	76 FR 50448	8/15/2011	57 FR 14653	4/22/1992
Puget Sound	Threatened	76 FR 50448	8/15/2011	64 FR 14308	3/24/1999
Lower Columbia River	Threatened	76 FR 50448	8/15/2011	64 FR 14308	3/24/1999
Upper Willamette River	Threatened	76 FR 50448	8/15/2011	64 FR 14308	3/24/1999
Upper Columbia River Spring	Endangered	76 FR 50448	8/15/2011	64 FR 14308	3/24/1999
Central Valley Spring	Threatened	76 FR 50447	8/15/2011	64 FR 50394	9/16/1999
California Coastal	Threatened	76 FR 50447	8/15/2011	64 FR 50394	9/16/1999
<b>Chum</b>					
Hood Canal Summer-Run	Threatened	76 FR 50448	8/15/2011	64 FR 14508	3/25/1999
Columbia River	Threatened	76 FR 50448	8/15/2011	64 FR 14508	3/25/1999
<b>Coho</b>					
Central California Coastal	Endangered	76 FR 50447	8/15/2011	61 FR 56138	10/31/1996
S. Oregon/ N. California Coastal	Threatened	76 FR 50447	8/15/2011	62 FR 24588	5/6/1997
Oregon Coastal	Threatened	76 FR 50448	8/15/2011	63 FR 42587	8/10/1998
Lower Columbia River	Threatened	76 FR 50448	8/15/2011		
<b>Sockeye</b>					
Snake River	Endangered	76 FR 50448	8/15/2011	56 FR 58619	11/20/1991
Ozette Lake	Threatened	76 FR 50448	8/15/2011	64 FR 14528	3/25/1999

As the listings have occurred, NMFS has initiated formal consultations and issued biological opinions (BOs) that consider the impacts resulting from implementation of the FMP, or from annual management measures, to listed salmonid species. NMFS has also reinitiated consultation on certain ESUs when new information has become available on the status of the stocks or on the impacts of the FMP on the stocks. The consultation standards referred to in this document include (1) reasonable and prudent alternatives, (2) conservation objectives for which NMFS conducted Section 7 consultations and arrived at a no-jeopardy conclusion, and (3) NMFS requirements under Section 4(d) determinations. A list of current BOs in effect, the species they apply to, and their duration follows:

Date	Evolutionarily Significant Unit covered and effective period
8-Mar-96	Snake River spring/summer and fall Chinook and sockeye (until reinitiated)
28-Apr-99	Oregon Coastal natural coho, Southern Oregon/ Northern California coastal coho, Central California coastal coho (until reinitiated)
28-Apr-00	Central Valley spring Chinook (until reinitiated)
27-Apr-01	Hood Canal summer chum 4(d) limit (until reinitiated)
30-Apr-01	Upper Willamette Chinook, Upper Columbia spring Chinook, Lake Ozette sockeye, Columbia River chum, and 10 steelhead ESUs (until reinitiated)
30-Apr-10	Sacramento River winter Chinook (until reinitiated)
30-Apr-04	Puget Sound Chinook (until reinitiated)
13-Jun-05	California coastal Chinook (until reinitiated)
9-Apr-15	Lower Columbia River natural coho (until reinitiated)
30-Apr-10	Lower Columbia River Chinook (April 30, 2012)

Amendment 12 to the 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 standards or recovery plans to meet immediate conservation needs and long-term recovery of the species.” Amendment 14 specified those listed ESUs and clarified which stocks in the FMP management unit were representative of the ESUs.

In a letter received by the Council on March 3, 2015, NMFS provided guidance on protective measures for species listed under the ESA during the 2015 fishing season. The letter summarized the requirements of NMFS' BOs on the effects of potential actions under the FMP on listed salmon and provided the anticipated consultation standards of the BOs in preparation for the 2015 management season, as well as further guidance and recommendations for the 2015 management season.

The ESA consultation standards, exploitation rates, and other criteria in place for the 2015 management season are presented in Table 5. Some listed stocks are either rarely caught in Council fisheries (e.g., spring Chinook from the upper Columbia River) or already receive sufficient protection from other FMP and ESA standards (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 SRWC, Central Valley spring Chinook, California coastal Chinook, Snake River wild (SRW) fall Chinook, LCR fall Chinook, and all of the coho stocks. Additional listed salmonid ESUs found within the Council area, but not substantively impacted by Council-managed fisheries, include:

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

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## 5.0 OBLIGATIONS UNDER THE PACIFIC SALMON TREATY

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

### 5.1 Chinook Salmon Management

The current Chinook agreement under the PST was negotiated in 2008 and formally accepted by both the U.S. and Canada in December of 2008. This agreement took effect on January 1, 2009, and included a 30 percent reduction in the catch ceilings for aggregate abundance based management (AABM) fisheries off the West Coast Vancouver Island (WCVI) and a 15 percent reduction in the catch ceilings for AABM fisheries in Southeast Alaska Chinook relative to the catch ceilings in effect for these fisheries since 1999. Under the terms of the 2009 PST Agreement, Council fisheries for Chinook salmon continue to be subject to the individual stock based management (ISBM) provisions of Annex 4, Chapter 3, adopted in 1999. These provisions require the adult equivalent (AEQ) exploitation rate by all U.S. fisheries south of the U.S./Canada border be reduced by 40 percent from the 1979-1982 base period for Chinook indicator stocks identified in Attachment V of the Pacific Salmon Treaty that fail to achieve their management objectives.

Many Chinook stocks of concern to the Council are affected by fisheries off Canada and Alaska. Maximum allowable catches by AABM fishery complexes off the WCVI, Northern British Columbia, and Southeast Alaska are determined through the annual calibration of the PSC Chinook Model. Canadian fisheries that are not included in AABM complexes are managed under ISBM constraints, which require a 36.5 percent reduction in AEQ exploitation rates relative to the 1979-1982 base period on Chinook indicator stocks identified in Attachment IV of the Pacific Salmon Treaty that fail to achieve their management objectives. Expectations for Canadian and Alaskan fisheries harvest and stock abundance forecasts are incorporated into the Chinook Fishery Regulation Assessment Model (FRAM) to estimate total exploitation rate impacts from all marine fisheries (Table 5).

Key considerations for Canadian domestic fishery management for Chinook in 2015 include, (1) meeting domestic conservation obligations for Strait of Georgia and Fraser River stream-type stocks; (2) Chinook harvests by native fisheries; and (3) incidental impacts during commercial and native fisheries directed at sockeye, pink, and chum salmon. The fishery regulatory package off WCVI was driven by levels of allowable impact on WCVI and Lower Strait of Georgia Chinook and Interior Fraser (Thompson River) coho.

## *5.2 Coho Salmon Management*

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

The categorical status of U.S. coho management units is reported to comply with obligations pursuant to the 2002 PST Southern Coho Management Plan. Categorical status is employed by the PSC under the 2002 PST Southern Coho Management Plan to indicate general ranges of allowable total exploitation rates for U.S. and Canadian coho management units. Three categories are employed: low (total exploitation rate less than 20 percent), moderate (total exploitation rate 20 percent to 40 percent), and abundant (total exploitation rate greater than 40 percent). For the Puget Sound management units, the 2002 PST Southern Coho Management Plan uses the thresholds and stepped exploitation rate goals from the Comprehensive Coho Agreement, developed by Washington and the Puget Sound tribes, and adopted by the Council as FMP conservation objectives in November 2009. Actual exploitation rate constraints for Canadian fisheries on U.S. coho management units are determined by formulas that specify sharing of allowable exploitation rates and a “composite rule.” The composite rule adjusts constraints for Canadian fishery exploitation rates based on the number of U.S. management units which fall in a given category. For example, if only one Washington coastal 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 Washington coastal coho management units, a range is reported for the allowable exploitation rates based on the relationship between the preseason abundance forecast and the upper and lower values of the spawning escapement goal ranges. Maximum exploitation rates are computed using the lower end of the escapement range and minimum exploitation rates are computed using the upper end of the escapement range. For purposes of reporting the categorical status, an allowable exploitation rate is computed using the mid-point of the escapement goal range. However, the maximum allowable exploitation rate allowed under the PST is 65 percent.

For 2015, Puget Sound and Washington coast coho constraints are as follows:

<b>FMP</b>			
FMP Stock	Total Exploitation Rate Constraint <sup>a/</sup>	Categorical Status <sup>a/</sup>	
Skagit	60%	Normal	
Stillaguamish	50%	Normal	
Snohomish	60%	Normal	
Hood Canal	65%	Normal	
Strait of Juan de Fuca	20%	Critical	
Quillayute Fall	59%		
Hoh	65%		
Queets	65%		
Grays Harbor	65%		
<b>PST Southern Coho Management Plan</b>			
U.S. Management Unit	Total Exploitation Rate Constraint <sup>b/</sup>	Categorical Status <sup>c/</sup>	
Skagit	60%	Abundant	
Stillaguamish	50%	Abundant	
Snohomish	60%	Abundant	
Hood Canal	65%	Abundant	
Strait of Juan de Fuca	20%	Low	
Quillayute Fall <sup>c/</sup>		Low	
Hoh <sup>c/</sup>		Moderate	
Queets <sup>c/</sup>		Low	
Grays Harbor		Abundant	
<p>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 <i>U.S. v. Washington</i> and <i>Hoh v. Baldrige</i> 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.</p> <p>b/ Preliminary. For Puget Sound and Washington Coast management units, the exploitation rate constraints reflect application of the 2002 PST Southern Coho Management Plan.</p> <p>c/ Categories (Abundant, Moderate, Low) correspond to the general exploitation rate ranges depicted in paragraph 3(a) of the 2002 PST Southern Coho Management Plan. For Washington Coast stocks, categorical status is determined by taking the midpoint of the range of exploitation rates associated with achieving the escapement goal ranges. The exploitation rate ranges are based on pre-season abundance forecasts and the upper and lower ends of the escapement goal ranges. Maximum exploitation rates are computed using the lower end of the escapement range; minimum exploitation rates are computed using the upper end of the escapement range.</p>			

Key considerations for Canadian fishery management for coho in 2015 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, sockeye, pink and chum salmon; and (4) the desire to provide increased opportunity for sport fisheries through mark-selective retention regulations. The Canadian fishery regimes affecting coho will be driven by Canadian domestic allowable impacts on the Thompson River component of the Interior Fraser management unit (in years prior to 2014, Canadian fisheries were managed so as not to exceed a three percent maximum exploitation rate).

The projected status of Canadian coho management units in 2015 indicates continuing concerns for the condition of Interior Fraser coho. The Interior Fraser coho management remains in low status, constraining the total mortality fishery exploitation rate for 2015 Southern U.S. fisheries to a maximum of 10.0 percent.

## 6.0 CHINOOK SALMON MANAGEMENT

### 6.1 North of Cape Falcon

Abundance projections important to Chinook harvest management north of Cape Falcon in 2015 are:

- *Columbia River hatchery tules.* Combined production of Lower River Hatchery (LRH) and Spring Creek Hatchery (SCH) stocks returning to the Columbia River is predicted to be 255,400, which is higher than the 2014 preseason expectation of 225,100. The 2015 LRH forecast abundance is 94,900, lower than the forecast of 110,000 in 2014. The 2015 SCH forecast abundance is 160,500, which is higher than last year's forecast of 115,100.

#### 6.1.1 Objectives

Key Chinook salmon management objectives shaping management measures north of Cape Falcon are:

- NMFS consultation standards and annual guidance for ESA-listed stocks as provided in Section 4.0 above. Relevant stocks for the area north of Cape Falcon include LCR natural tule Chinook, Columbia Lower River Wild (LRW) fall Chinook, SRW fall Chinook, and Puget Sound Chinook.

#### 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 tule Chinook.

- *LCR natural tule fall Chinook.* The projected exploitation rate in the adopted management measures is 40.0 percent, below the 41.0 percent maximum for 2015. LCR natural tule fall Chinook will not constrain ocean fisheries north of Cape Falcon in 2015.
- *LRW fall Chinook:* The adopted management measures have a projected ocean escapement of 19,400 adults, which is more than enough to meet the ESA consultation standard of an adult spawning escapement of at least 5,700 in the North Fork Lewis River. LRW Chinook will not constrain ocean fisheries north of Cape Falcon in 2015.
- *SRW fall Chinook.* The adopted management measures have an ocean exploitation rate of 45.9 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 2015.
- *Puget Sound Chinook:* Incorporating the impacts from the State and Tribal co-managers list of agreed to fisheries for inside Puget Sound and the Tribal and Washington Technical Group's analysis of reduction in impacts in Area 3 and 4 non-Treaty commercial fisheries, all constraints for Puget Sound stocks are met. Puget Sound Chinook, specifically Lake Washington and Nisqually Chinook, are the constraining stocks for Chinook fisheries north of Cape Falcon in 2015.

The adopted management measures for Chinook fisheries north of Cape Falcon satisfy NMFS ESA consultation standards and 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 2015 Chinook harvest management south of Cape Falcon are:

- *Sacramento River Fall Chinook (SRFC)*. The 2015 Sacramento Index (SI) forecast is 652,000 SRFC adults, which is slightly larger than the 2014 preseason forecast of 634,700.
- *KRFC*. The age-3 forecast is 342,200 KRFC. The age-4 forecast is 71,100 fish, and the age-5 forecast is 10,400. Last year's preseason forecast was 219,800 age-3, 67,400 age-4, and 12,100 age-5 fish.
- *SRWC*. No abundance forecast is made for this stock. The geometric mean of the most recent three years of escapement is 3,659 fish which represents an increase in this metric relative to last year.

### 6.2.1 Objectives

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

- NMFS consultation standards and annual guidance for ESA-listed stocks as provided in Section 4.0 above. Relevant stocks for the area south of Cape Falcon include SRWC, California coastal Chinook, SRW fall Chinook, and LCR natural tule Chinook.

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

- *California coastal Chinook*. The ESA consultation standard that limits the forecast KRFC age-4 ocean harvest rate to a maximum of 16.0 percent is met by the adopted management measures.
- *SRWC*. The ESA consultation standard that (1) limits the age-3 impact rate in 2015 fisheries south of Point Arena to a maximum of 19.0 percent and (2) specifies time/area closures and minimum size limit constraints south of Point Arena, is met by the adopted management measures. Council guidance provided by the California Department of Fish and Wildlife (CDFW) to limit the age-3 impact rate to a maximum of 17.9 percent in 2015 fisheries is also met by the adopted management measures.
- *KRFC*. The control rule-defined minimum of 40,700 natural area adult spawners is met by the adopted management measures.
- *SRFC*. The control rule-defined minimum of 195,596 hatchery and natural area adult spawners is met by the adopted management measures.
- *LCR natural tule fall Chinook*. The 2015 maximum exploitation rate of 41.0 percent is met by the adopted management measures.
- *SRW fall Chinook*. SRW Chinook will not constrain ocean fisheries south of Cape Falcon in 2015.

The adopted management measures for Chinook fisheries south of Cape Falcon satisfy NMFS ESA consultation standards and guidance, FMP conservation objectives, and all other objectives for relevant Chinook stocks (Table 5).

## 7.0 COHO SALMON MANAGEMENT

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

- *OPI Hatchery coho.* The 2015 forecast for hatchery coho from the Columbia River and the coast south of Cape Falcon of 808,400 is lower than the 2014 forecast of 983,100. The Columbia River early coho forecast is 515,200 compared to the 2014 forecast of 526,600 and the Columbia River late coho forecast is 261,900, compared to the 2014 forecast of 437,500.
- *OCN coho.* The 2015 OCN forecast is 206,600 compared to the 2014 forecast of 230,600.
- *LCN coho.* The 2015 LCN forecast is 35,100 compared to the 2014 forecast of 33,100.
- *Queets wild coho.* The 2015 Queets wild coho forecast is 7,500 compared to the 2014 forecast of 10,300.
- *Puget Sound coho.* Among Puget Sound natural stocks, Skagit, Snohomish, Stillaguamish and Hood Canal are in the normal category in 2015, and Strait of Juan de Fuca is in the critical category.
- *Interior Fraser (Thompson River) coho.* This Canadian stock continues to be depressed, and will constrain 2015 ocean coho fisheries north of Cape Falcon.

### 7.1 Objectives

Key coho management objectives shaping management measures in 2015 Council area fisheries are:

- NMFS consultation standards and annual guidance for ESA-listed stocks are provided in Section 4.0. Relevant stocks include Central California Coast coho (south of the Oregon/California border), Southern Oregon/Northern California Coastal (SONCC) coho, OCN coho, and LCN coho. Based on this guidance, the maximum allowable exploitation rates for 2015 are: a combined marine/freshwater exploitation rate not to exceed 15.0 percent for OCN coho, a combined exploitation rate in marine-area and mainstem Columbia River fisheries not to exceed 23.0 percent for LCN coho, and a marine exploitation rate not to exceed 13.0 percent for Rogue/Klamath (RK) hatchery coho, used as a surrogate for the SONCC coho ESU. Furthermore, coho retention is prohibited in all California ocean fisheries.
- 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 5.2. In 2015, Interior Fraser and Queets wild coho are the key management stocks for ocean fisheries north of Cape Falcon. Based on 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.

### 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 RK coho. Table 8 provides expected coho mark rates for west coast fisheries by month.

- *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 13.6 percent and a mainstem Columbia River exploitation rate of 9.4 percent.
- *OCN coho.* The adopted management measures satisfy the maximum 15.0 percent exploitation rate for combined marine and freshwater fisheries, with a marine exploitation rate of 11.4 percent and a freshwater exploitation rate of 3.5 percent.
- *Queets wild coho.* The adopted management measures provide an ocean escapement number of 6,200 which meets management objectives agreed to by WDFW and the treaty tribes.
- *Interior Fraser coho.* The Southern U.S. exploitation rates in the adopted management measures comply with the 10.0 percent maximum required by the PST Southern Coho Management Plan.

The adopted management measures for coho fisheries satisfy NMFS ESA consultation standards and guidance, FMP conservation objectives, and all other objectives for relevant coho stocks other than and including those listed in Table 5.

## **8.0 PINK SALMON MANAGEMENT**

Pink salmon are sufficiently abundant to merit management consideration in 2015. Impacts on Chinook and coho in pink-directed fisheries were 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).

### **9.1 Commercial**

Adopted management measures in the area north of Cape Falcon are similar to those adopted in 2014 with slightly higher Chinook TACs (total allowable catch) and lower coho TACs because of higher abundance of Columbia River fall Chinook and lower abundance of OPI hatchery coho.

Sixty percent of the non-Indian troll Chinook quota is assigned to the May-June fishery, which opens initially seven days per week with a landing and possession limit of 60 Chinook per vessel per trip in the area between the U.S./Canada border and the Queets River. The summer all-salmon fishery is open July 1 through 7, then Friday through Tuesday during July 10 through September 22 and includes Chinook and coho landing and possession limits similar to recent years. In both fisheries, Chinook sub-quotas of no more than 9,000 in the spring and 11,000 in the summer were applied to the area between the U.S./Canada border and the Queets River; a Chinook sub-quota of no more than 15,000 was also applied to the area between Leadbetter Point and Cape Falcon during the spring fishery. A preseason trade of 8,000 coho from the commercial troll fishery for 2,000 Chinook from the recreational fishery was adopted.

The commercial fishery in the area south of Cape Falcon is primarily constrained by the California coastal Chinook consultation standard that limits the forecasted KRFC age-4 ocean harvest rate to a maximum of 16 percent. Commercial fisheries south of Point Arena are also constrained by (1) the maximum allowable

age-3 impact rate of 19.0 percent on ESA-listed SRWC, (2) CDFW guidance to craft fisheries that result in a SRWC age-3 impact rate no higher than 17.9 percent, (3) and CDFW guidance regarding the closing dates for fisheries south of Point Arena. The 2015 forecast of the Sacramento Index (SI) is sufficiently large such that Sacramento River fall Chinook (SRFC) will not constrain fisheries this year.

For the north and central Oregon coast south of Cape Falcon, Chinook fisheries opened on April 1 and will run through the end of September, with a five day closure between late August and early September. Weekly landing and possession limits will be in place for the September fishery.

For the Oregon KMZ, the Chinook fishery opened on April 1 and will run through May. The months of June, July, and August have month-specific quotas with daily landing and possession limits. Unused or exceeded quota from June and/or July can be transferred to the following quota period through August on an impact neutral, fishery equivalent basis.

For the California KMZ, the adopted management measures allow for a September quota fishery with daily landing and possession limits.

The Fort Bragg area will have some fishing opportunity for each month between May and September. The entire month of May will be open while June and July will have closures for the beginning portions of those months. August and September will be open with the exception of a five day closure at the end of August.

Fisheries from Point Arena to the U.S./Mexico border will be open from May 1 through the end of July, with approximately one week closures at the beginning of both June and July. For the area between Point Arena to Pigeon Point (the San Francisco management area), the fishery will continue through September, with a short closure at the end of August. The Monday through Friday fall area target zone fishery between Point Reyes and Point San Pedro will occur in October. For areas south of Pigeon Point, the fishery will end earlier than the SF management area owing to protective measures intended to reduce SRWC encounters. These measures include a closing date of August 15 for the area between Pigeon Point and Point Sur and a closing date of July 31 for the area south of Point Sur.

## *9.2 Recreational*

In the area between the U.S. Canada Border and Cape Falcon, an area-wide mark-selective Chinook fishery was adopted; starting and ending dates differ between subareas, opening on May 15 in the Neah Bay and La Push subareas and on May 30 in the Westport and Columbia River subareas. The fishery will be open for a total of 18 days in the northern subareas and 14 days in the southern subareas and is operating under a coastwide quota of 10,000 marked Chinook.

The all-salmon recreational fisheries in the subareas between the U.S. Canada Border and Cape Falcon open on June 13, and operate under regulations similar to recent years. Chinook guidelines are increased compared with 2014 and coho subarea quotas are reduced relative to 2014. No Area 4B add-on fishery is scheduled in 2015.

For the north and central Oregon coast south of Cape Falcon, the Chinook fishery opened March 15 and will run uninterrupted through October. Coho fisheries consist of a mark-selective coho quota fishery beginning in late June for the area from Cape Falcon to the Oregon/California border and a non-mark-selective coho quota fishery beginning on September 4 for the area from Cape Falcon to Humbug Mountain. Any quota remaining from the mark-selective coho fishery may be transferred to the non-mark-selective quota on an impact neutral basis.

Chinook fishing in both the Oregon and California KMZ will open on May 1 and run through September 7. The mark-selective coho quota fishery described above will allow for marked coho retention in the Oregon KMZ. The minimum size limit will be 24 inches in the Oregon KMZ and 20 inches in the California KMZ.

South of the KMZ, all areas opened on April 4. The fishery in the Fort Bragg area will be open through November 8 with a 20 inch minimum size limit. In the San Francisco area, the minimum size limit will be 24 inches through April 30, then 20 inches until the end of the season on October 31. From Pigeon Point to Point Sur, the minimum size limit will be 24 inches until May 31, then 20 inches until the ending date of September 7. South of Point Sur, the season will close on July 19 and the size limit will be 24 inches through May 31, and 20 inches thereafter. The closing dates in areas south of Point Arena reflect management measures intended to reduce mortality on SRWC.

### **9.3 *Treaty Indian***

The adopted management measures are generally similar in structure as in recent years. Chinook and coho quotas were decreased due to decreased abundance of Columbia River hatchery Chinook and lower abundance of OPI hatchery coho and the less restrictive standard for LCN coho specified in the NMFS guidance for 2015. The Treaty Indian troll fishery opens on May 1 with a Chinook only fishery and runs until June 30 with a 30,000 sub-quota. The all-salmon fishery will open July 1 until September 15 with a sub-quota of 30,000 Chinook and 42,500 coho. 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 catch area expressed in terms of estimated potential exvessel value. Table 10 shows projected recreational fisheries 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 an activity. While reductions in income impacts may not necessarily reflect a net loss coastwide, they likely do indicate losses to businesses and individuals in affected communities that depend on that activity for their livelihood.

Total economic effects may vary from what is indicated by the short-term impacts 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 harvests, provide additional spawning escapement, or contribute 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 catch per unit effort (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 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 (and Table 11) are based on projected deliveries by landing area. Historically there has been a divergence between these two measures. The difference is due to deliveries of salmon caught in certain catch areas to ports serving neighboring catch areas. This pattern is particularly true for areas between Humbug Mountain Oregon and Point Arena California. In an attempt to account for this effect, landings and income impacts were assigned based on historically observed transfer patterns. The patterns are typically inferred from the most recent year's catch and landings data. For example, in 2014 there were substantial deliveries of salmon caught between Cape Falcon and Humbug Mountain to landing ports to the south in the Oregon KMZ, and a substantial amount of salmon caught between Horse Mountain and Point Arena or in the San Francisco were landed to the north in the California KMZ region. There were also transfers of harvests between other catch areas and landings ports but these were smaller by comparison.

The expected harvests used to model commercial fishery impacts are taken from Table 6. The prior year's exvessel prices were assumed to be the best indicator of prices expected in the coming season. Coastwide average exvessel Chinook prices in 2014 were 10 percent lower in inflation-adjusted terms than the prior year, and only slightly above their 2012 level, which was the lowest inflation-adjusted average price since 2005. The average weight per fish landed in 2014 was slightly above the 2010-2014 average. However if in 2015, actual exvessel prices, average weight per fish, and/or transfers between catch areas and landing ports diverge substantially from the values assumed for these projections, then the actual distribution of commercial fisheries revenue and associated income impacts may differ from the values shown in Table 9 and Figure 3.

Fishing effort estimates for the recreational fishery south of Cape Falcon are based on measures developed by the STT for modeling biological impacts. STT estimates for south of Cape Falcon use multi-year averages to predict effort for the coming year. Consequently, if the multi-year average for a particular time period and area happens to be higher than last year's year effort level, then the model may forecast an increase in effort for the coming year even though management measures may actually be relatively more constraining or vice-versa. Recreational fishery effort north of Cape Falcon was estimated using historical CPUE estimates applied to salmon quotas under the Alternatives. For the summer mark-selective coho fishery, coho quotas North of Cape Falcon, although somewhat lower than last year, are still relatively high compared with the recent past. Chinook quotas are somewhat higher than last year. For modeling projected economic impacts of the summer recreational coho fishery, the average 2014 Washington coho CPUE was applied to the coho quota under each Alternative. For the June Chinook fisheries Alternatives, average 2011-2013 Washington Chinook CPUE was applied. However if in 2015, actual CPUE or availability of coho and chinook salmon in the recreational fishery diverge substantially from the values assumed for these projections, then the actual distribution of recreational fisheries effort and associated income impacts may differ from the values shown in Table 10 and Figure 4.

## 10.2 *Community Impacts*

Projected income impacts by coastal region for commercial and recreational salmon fisheries under the Proposed Action are shown in Figure 3 and Figure 4, and comparisons of impacts under the Proposed Action with the other Alternatives are summarized in Table 11. Projected income impacts from commercial salmon landings and processing under the Proposed Action are within the range analyzed under the Alternatives, and overall are about 18 percent below estimated total coastwide commercial fisheries income impacts from last year (Table 11). Regionally, commercial fisheries income impacts under the Proposed Action are projected to be higher than last year North of Cape Falcon and South of Point Arena, but lower than last year in areas between Cape Falcon and Humbug Mountain, in the KMZ, and Fort Bragg management areas. Compared with the 2010-2014 inflation-adjusted average, commercial fisheries income impacts under the Proposed Action are projected to be higher North of Cape Falcon, in the KMZ and South

of Point Arena, but slightly lower in areas between Cape Falcon and Humbug Mountain, and in the Fort Bragg management area (Figure 3).

Projected income impacts from expenditures by recreational salmon anglers under the Proposed Action are within the range analyzed under the Alternatives, and overall are about 17 percent above the estimated total coastwide recreational fisheries income impact from last year (Table 11). Regionally, recreational fisheries income impacts under the Proposed Action are projected to be lower than last year in areas between Cape Falcon and Humbug Mountain, but at least somewhat higher than last year's estimate in areas North of Cape Falcon, in the KMZ, Fort Bragg management area, and South of Point Arena. Compared with the 2010-2014 inflation-adjusted average, recreational fisheries income impacts under the Proposed Action are projected to be at least somewhat higher in all management areas (Figure 4).

### **10.3 Social Impacts**

The effect of the alternatives on other indicators of community social welfare (e.g., poverty, divorce rates, graduation/dropout rates, incidents of domestic violence, etc.) cannot be directly measured, but are expected to be negligible. Change in personal income in communities may be used as a rough proxy for other socioeconomic effects to the degree change in these indicators correlates with potential change in income. However, changes in the broader regional economy ("cumulative 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 alternatives.

To the extent practicable, social impacts were considered when non-tribal commercial and recreational salmon seasons were shaped. To minimize regulatory complexity in recreational fisheries, season dates and regulations were kept relatively consistent within major management areas (i.e. North of Cape Falcon, Cape Falcon to Humbug Mountain, Klamath Management Zone, South of Point Area). Minimum size limits either remain consistent throughout the season or decrease during the season, which, in addition to biological benefits, tend to increase regulatory compliance. Efforts were made to include important cultural events such as the 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 as an effort to stretch quota attainment over a greater period of time. Doing so can provide greater access for smaller vessels, increase safety at sea by making it easier to avoid inclement weather, expand marketability of landings, and improve consumer access. Notification mechanisms by phone or email allow commercial vessels greater flexibility in choosing a port of landing to take advantage of better markets or to access better infrastructure.

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, Washington coastal treaty tribes are projected to have similar ocean salmon fishery opportunities relative to 2014. The Klamath River tribal allocation under the Proposed Action is 43,581 KRFC, an increase over the 2014 allocation of 27,294.

## **11.0 ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION**

The Proposed Action, adoption of the 2015 ocean salmon regulations, was assessed relative to the environmental components and criteria established in Preseason Report II (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 fall outside the range of impacts under the Alternatives in Preseason Report II (Skagit coho, Snohomish coho, Hood Canal coho, Stillaguamish coho, Strait of Juan de Fuca coho, Interior Fraser coho, and SONCC coho), such impacts differ only in small amounts from those of the Alternatives and are within the impact limitations of the FMP, ESA consultation standards, and Pacific Salmon Treaty (Table 11). Economic

impacts of the Proposed Action fall within the range of impacts projected for the Alternatives in Preseason Report II.

The No-Action Alternative would result in at least three stocks not meeting conservation objectives, and thus would not meet the purpose and need of the Proposed Action. Under No Action, the seasons would be the same as in 2014. Given that in aggregate the 2015 stock abundances are expected to be relatively similar to the 2014 fishery, the economic values generated by the 2014 fishery serve as the best estimate of the No Action Alternative. Comparisons to 2014 provided in Tables 9 and 10 and Figures 3 and 4 provide an indicator of the expected impact of the Action Alternative relative to No Action. Relative to No Action, as represented by the 2014 values, the Proposed Action would have slightly greater coastwide economic impacts from recreational fishing and slightly lower coastwide economic impacts from commercial fishing.

As stated in Preseason Report II, it was not possible to discern differences in the effects of the Alternatives on other components of the environment (non-target fish species, marine mammals, other ESA-listed species, sea birds, biodiversity and ecosystem function, and public health and safety), and the effects were not expected to be significant.

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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<b>A. SEASON ALTERNATIVE DESCRIPTIONS</b>
<b>North of Cape Falcon</b>
<b>Supplemental Management Information</b>
<p>1. Overall non-Indian TAC: 131,000 (non-mark-selective equivalent of 125,000) Chinook and 170,000 coho marked with a healed adipose fin clip (marked).</p> <p>2. Non-Indian commercial troll TAC: 67,000 Chinook and 19,200 marked coho.</p> <p>3. Trade: Commercial troll traded 8,000 coho to the recreational fishery for 2,000 Chinook.</p>
<p><b>U.S./Canada Border to Cape Falcon</b></p> <ul style="list-style-type: none"> <li>• May 1 through earlier of June 30 or 40,200 Chinook, no more than 9,000 of which may be caught in the area between the U.S./Canada border and the Queets River and no more than 15,000 may be caught in the area between, Leadbetter Pt. and Cape Falcon.</li> </ul> <p>Seven days per week with a landing and possession limit of 60 Chinook per vessel per trip from the U.S./Canada Border to the Queets River (C.1). All salmon except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B). Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW at 360-902-2739 with area fished, total Chinook and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW at 360-902-2739 with area fished, total Chinook and halibut catch aboard, and destination. See compliance requirements and gear restrictions and definitions (C.2, C.3). When it is projected that 29,250 Chinook have been landed overall, or 6,750 Chinook have been landed in the area between the U.S./Canada border and the Queets River, or 11,250 Chinook have been landed in the area between Leadbetter Pt. and Cape Falcon, inseason action modifying the open period to five days per week and adding landing and possession limits will be considered to ensure the guideline is not exceeded. Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Under state law, vessels must report their catch on a state fish receiving ticket. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. Oregon State regulations require all fishers landing salmon into Oregon from any fishery between Leadbetter Point, Washington and Cape Falcon, Oregon must notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 271 or sending notification via e-mail to <a href="mailto:nfalcon.trollreport@state.or.us">nfalcon.trollreport@state.or.us</a>. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).</p>
<p><b>U.S./Canada Border to Cape Falcon</b></p> <ul style="list-style-type: none"> <li>• July 1 through earlier of September 22 or attainment of the quota of 26,800 Chinook, no more than 11,000 of which may be caught in the area between the U.S./Canada border and the Queets River or 19,200 marked coho (C.8.d).</li> </ul> <p>July 1-7 then Friday through Tuesday July 10 through September 22 with a landing and possession limit of 50 Chinook and 50 coho per vessel per open period (C.1). Vessels in possession of salmon north of the Queets River may not cross the Queets River line without first notifying WDFW at 360-902-2739 with area fished, total Chinook, coho, and halibut catch aboard, and destination. Vessels in possession of salmon south of the Queets River may not cross the Queets River line without first notifying WDFW at 360-902-2739 with area fished, total Chinook, coho, and halibut catch aboard, and destination. When it is projected that 19,500 Chinook have been landed overall, or 8,250 Chinook have been landed in the area between the U.S./Canada border and the Queets River, inseason action modifying the open period to five days per week and adding landing and possession limits will be considered to ensure the guideline is not exceeded. No earlier than September 1, if at least 5,000 marked coho remain on the quota, inseason action may be considered to allow non-selective coho retention (C.8). All salmon, except no chum retention north of Cape Alava, Washington in August and September (C.7). Chinook minimum size limit of 28 inches total length (B, C.1). All coho must be marked except as noted above (C.8.d). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Mandatory Yelloweye Rockfish Conservation Area, Cape Flattery and Columbia Control Zones, and beginning August 9, Grays Harbor Control Zone closed (C.5). Vessels must land and deliver their fish within 24 hours of any closure of this fishery. Vessels fishing or in possession of salmon while fishing north of Leadbetter Point must land and deliver their fish within the area and north of Leadbetter Point. Vessels fishing or in possession of salmon while fishing south of Leadbetter Point must land and deliver their fish within the area and south of Leadbetter Point, except that Oregon permitted vessels may also land their fish in Garibaldi, Oregon. 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 must notify ODFW within one hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 271 or sending notification via e-mail to <a href="mailto:nfalcon.trollreport@state.or.us">nfalcon.trollreport@state.or.us</a>. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.8).</p>

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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<b>A. SEASON ALTERNATIVE DESCRIPTIONS</b>
<b>South of Cape Falcon</b>
<b>Supplemental Management Information</b>
<p>1. Sacramento River fall Chinook spawning escapement of 341,017 adults.                      2. Sacramento Index exploitation rate of 47.7%                      3. Klamath River recreational fishery allocation: 14,133 adult Klamath River fall Chinook.                      4. Klamath tribal allocation: 43,581 adult Klamath River fall Chinook.</p>
<p><b>Cape Falcon to Humbug Mountain</b></p> <ul style="list-style-type: none"> <li>• April 1-August 27;</li> <li>• September 2-30 (C.9.a).</li> </ul> <p>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 fish in the State of Oregon. See gear restrictions and definitions (C.2, C.3) and Oregon State regulations for a description of special regulations at the mouth of Tillamook Bay.</p> <p>Beginning September 2, no more than 60 Chinook per vessel per landing week (Thursday through Wednesday).</p> <p>In 2016, the season will open March 15 for all salmon except coho. Chinook minimum size limit of 28 inches total length. Gear restrictions same as in 2015. This opening could be modified following Council review at its March 2016 meeting.</p>
<p><b>Humbug Mountain to OR/CA Border (Oregon KMZ)</b></p> <ul style="list-style-type: none"> <li>• April 1-May 31;</li> <li>• June 1 through earlier of June 30, or a 1,800 Chinook quota;</li> <li>• July 1 through earlier of July 31, or a 1,000 Chinook quota;</li> <li>• August 1 through earlier of August 27, or a 500 Chinook quota (C.9.a).</li> </ul> <p>Seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). Prior to June 1, all fish caught in this area must be landed and delivered in the State of Oregon.</p> <p>June 1 through August 27, single daily landing and possession limit 30 Chinook per vessel per day (C.8.f). Any remaining portion of the June and/or July Chinook quotas may be transferred inseason on an impact neutral basis to the next open quota period. All vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure of this fishery, and prior to fishing outside of this area. Oregon State regulations require all fishers landing salmon from any quota managed season within this area to notify ODFW within 1 hour of delivery or prior to transport away from the port of landing by either calling 541-867-0300 ext. 252 or sending notification via e-mail to KMZOR.trollreport@state.or.us. Notification shall include vessel name and number, number of salmon by species, port of landing and location of delivery, and estimated time of delivery. See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).</p> <p>In 2016, the season will open March 15 for all salmon except coho, with a 28 inch Chinook minimum size limit. This opening could be modified following Council review at its March 2016 meeting.</p>
<p><b>OR/CA Border to Humboldt South Jetty (California KMZ)</b></p> <ul style="list-style-type: none"> <li>• September 11 through earlier of September 30, or a 3,000 Chinook quota (C.9.b).</li> </ul> <p>Five days per week, Friday through Tuesday. All salmon except coho (C.4, C.7). Chinook minimum size limit of 28 inches total length (B, C.1). Landing and possession limit of 20 Chinook per vessel per day (C.8.f). All fish caught in this area must be landed within the area and within 24 hours of any closure of the fishery and prior to fishing outside the area (C.10). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3). Klamath Control Zone closed (C.5.e). See California State regulations for additional closures adjacent to the Smith and Klamath rivers. When the fishery is closed between the OR/CA border and Humbug Mountain and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival (C.6).</p>
<p><b>Humboldt South Jetty to Horse Mountain</b> Closed.</p>
<p><b>Horse Mountain to Point Arena (Fort Bragg)</b></p> <ul style="list-style-type: none"> <li>• May 1-31;</li> <li>• June 15-30;</li> <li>• July 12-31;</li> <li>• August 1-26;</li> <li>• September 1-30 (C.9.b).</li> </ul> <p>Seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). All fish must be landed in California. All salmon caught in California prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30 (C.6). When the CA KMZ fishery is open, all fish caught in the area must be landed south of Horse Mountain (C.6). During September, all fish must be landed north of Point Arena (C.6). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).</p> <p>In 2016, the season will open April 16-30 for all salmon except coho, with a 27 inch Chinook minimum size limit and the same gear restrictions as in 2015. All fish caught in the area must be landed in the area. This opening could be modified following Council review at its March 2016 meeting.</p>

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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**A. SEASON ALTERNATIVE DESCRIPTIONS**

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

- May 1-31;
- June 7-30;
- July 8-31;
- August 1-29;
- September 1-30 (C.9.b).

Seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length prior to September 1, 26 inches thereafter (B, C.1). All fish must be landed in California. All salmon caught in California prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30 (C.6). During September, all fish must be landed south of Point Arena (C.6). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).

**Point Reyes to Point San Pedro (Fall Area Target Zone)**

- October 1-2, 5-9, and 12-15.

All salmon except coho (C.4, C.7). Chinook minimum size limit of 26 inches total length (B, C.1). All fish caught in this area must be landed between Point Arena and Pigeon Point (C.6). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).

**Pigeon Point to Point Sur (Monterey North)**

- May 1-31;
- June 7-30;
- July 8-31;
- August 1-15 (C.9.b).

Seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). All fish must be landed in California. All salmon caught in California prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30 (C.6). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).

**Point Sur to U.S./Mexico Border (Monterey South)**

- May 1-31;
- June 7-30;
- July 8-31 (C.9.b).

Seven days per week. All salmon except coho (C.4, C.7). Chinook minimum size limit of 27 inches total length (B, C.1). All fish must be landed in California. All salmon caught in California prior to September 1 must be landed and offloaded no later than 11:59 p.m., August 30 (C.6). See compliance requirements (C.1) and gear restrictions and definitions (C.2, C.3).

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)**

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to OR/CA Border	28.0	21.5	-	-	None
OR/CA Border to Humboldt South Jetty	28.0	21.5	-	-	None
Horse Mt. to Pt. Arena	27.0	20.5	-	-	None
Pt. Arena to Pigeon Pt.					
Prior to August 30	27.0	20.5	-	-	None
Sept. 1 to October 15	26.0	19.5	-	-	None
Pigeon Pt. to U.S./Mexico Border	27.0	20.5	-	-	None

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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### 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. In that portion of the fishery management area off Oregon and Washington, the line or lines must be affixed to the vessel and must not be intentionally disengaged from the vessel at any time during the fishing operation.

*Spread defined:* A single leader connected to an individual lure and/or bait.

*Circle hook defined:* A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

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

- a. Except as provided under C.4.b below, it is unlawful for a vessel to have troll or recreational gear in the water while in any area closed to fishing for a certain species of salmon, while possessing that species of salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species, and no salmon are in possession.
- b. When Genetic Stock Identification (GSI) samples will be collected in an area closed to commercial salmon fishing, the scientific research permit holder shall notify NOAA OLE, USCG, CDFW 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. *Mandatory Yelloweye Rockfish Conservation Area* - The area in Washington Marine Catch Area 3 from 48°00.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°14.00' W. long. to 48°02.00' N. lat.; 125°16.50' W. long. to 48°00.00' N. lat.; 125°16.50' W. long. and connecting back to 48°00.00' N. lat.; 125°14.00' W. long.
- c. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 55'36" N. lat., 124°10'51" W. long.).
- d. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09" N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" W. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long.), and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W. long. (approximately 12 nautical miles off shore); and on the south, by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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- C.6. Notification When Unsafe Conditions Prevent Compliance with Regulations: If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate amount 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 Halibut Harvest: During authorized periods, the operator of a vessel that has been issued an incidental halibut harvest license may retain Pacific halibut caught incidentally in Area 2A while trolling for salmon. Halibut retained must be no less than 32 inches 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. When halibut are caught and landed incidental to commercial salmon fishing by an IPHC license holder, any person who is required to report the salmon landing by applicable state law must include on the state landing receipt for that landing both the number of halibut landed, and the total dressed, head-on weight of halibut landed, in pounds, as well as the number and species of salmon landed.

License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone: 206-634-1838). Applicants must apply prior to mid-March 2016 for 2016 permits (*exact date to be set by the IPHC in early 2016*). Incidental harvest is authorized only during April, May, and June of the 2015 troll seasons and after June 30 in 2015 if quota remains and if announced on the NMFS hotline (phone: 800-662-9825 or 206-526-6667). WDFW, ODFW, and CDFW will monitor landings. If the landings are projected to exceed the IPHC's 29,035 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to prohibit retention of halibut in the non-Indian salmon troll fishery.

May 1, 2015 through December 31, 2015 and April 1-30, 2016, license holders may land or possess no more than one Pacific halibut per each four Chinook, except one Pacific halibut may be possessed or landed without meeting the ratio requirement, and no more than 12 halibut may be possessed or landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).

Incidental Pacific halibut catch regulations in the commercial salmon troll fishery adopted for 2015, prior to any 2015 inseason action, will be in effect when incidental Pacific halibut retention opens on April 1, 2016 unless otherwise modified by inseason action at the March 2016 Council meeting.

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

- C.8. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
- Chinook remaining from the May through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline if the transfer would not result in exceeding preseason impact expectations on any stocks.
  - Chinook remaining from the June and/or July non-Indian commercial troll quotas in the Oregon KMZ may be transferred to the Chinook quota for the next open period if the transfer would not result in exceeding preseason impact expectations on any stocks.
  - NMFS may transfer fish 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.
  - At the March 2016 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2015).
  - If retention of unmarked coho is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected impacts on all stocks is not exceeded.
  - Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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- 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.  
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 Horse Mountain, California.

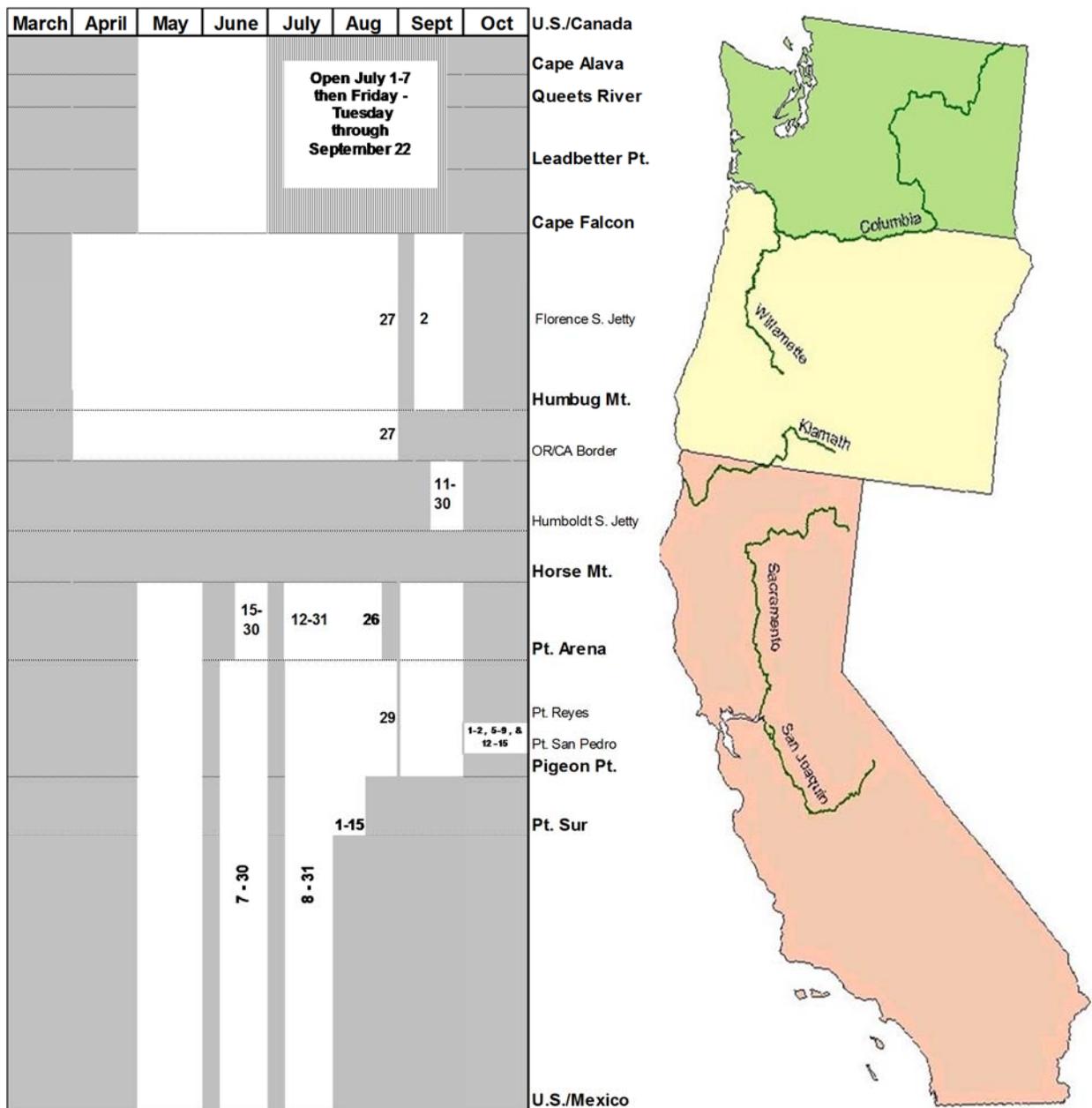


FIGURE 1. Council-adopted non-Indian commercial salmon seasons for 2015. Dates are the first or last days of the month unless otherwise specified.

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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<b>A. SEASON ALTERNATIVE DESCRIPTIONS</b>
<b>North of Cape Falcon</b>
<b>Supplemental Management Information</b>
<p>1. Overall non-Indian TAC: 131,000 (non-mark-selective equivalent of 125,000) Chinook and 170,000 coho marked with a healed adipose fin clip (marked).</p> <p>2. Recreational TAC: 64,000 (non-mark selective equivalent of 58,000) Chinook and 150,800 marked coho; all retained coho must be marked. 2,000 Chinook were traded to commercial troll for 8,000 coho which were added to the quota between Leadbetter Pt. and Cape Falcon.</p> <p>4. No Area 4B add-on fishery.</p> <p>5. Buoy 10 fishery opens August 1 with an expected landed catch of 45,000 marked coho in August and September.</p>
<p><b>U.S./Canada Border to Queets River</b></p> <ul style="list-style-type: none"> <li>• May 15-16, May 22-23, and May 30-June 12 or a coastwide marked Chinook quota of 10,000 (C.5). Seven days per week. All salmon except coho, two fish per day. All Chinook must be marked with a healed adipose fin clip (C.1). Chinook 24-inch total length minimum size limit (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 recreational TAC for north of Cape Falcon (C.5).</li> </ul>
<p><b>Queets River to Leadbetter Point</b></p> <ul style="list-style-type: none"> <li>• May 30 through earlier of June 12 or a coastwide marked Chinook quota of 10,000 (C.5). Seven days per week. All salmon except coho, two fish per day. All Chinook must be marked with a healed adipose fin clip (C.1). Chinook 24-inch total length minimum size limit (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 recreational TAC for north of Cape Falcon (C.5).</li> </ul>
<p><b>Leadbetter Point to Cape Falcon</b></p> <ul style="list-style-type: none"> <li>• May 30 through earlier of June 12 or a coastwide marked Chinook quota of 10,000 (C.5). Seven days per week. All salmon except coho, two fish per day. All Chinook must be marked with a healed adipose fin clip (C.1). Chinook 24-inch total length minimum size limit (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 recreational TAC for north of Cape Falcon (C.5).</li> </ul>
<p><b>U.S./Canada Border to Cape Alava (Neah Bay)</b></p> <ul style="list-style-type: none"> <li>• June 13 through earlier of September 30 or 14,850 marked coho subarea quota with a subarea guideline of 8,400 Chinook (C.5). Seven days per week. All salmon except no chum beginning August 1; two fish per day plus two additional pink. All coho must be marked with a healed adipose fin clip (C.1). Beginning August 1, Chinook non-retention east of the Bonilla-Tatoosh line (C.4.a) during Council managed ocean fishery. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</li> </ul>
<p><b>Cape Alava to Queets River (La Push Subarea)</b></p> <ul style="list-style-type: none"> <li>• June 13 through earlier of September 30 or 3,610 marked coho subarea quota with a subarea guideline of 2,600 Chinook (C.5).</li> <li>• October 1 through earlier of October 11 or 100 marked coho quota or 100 Chinook quota (C.5) in the area north of 47°50'00" N. lat. and south of 48°00'00" N. lat. Seven days per week. All salmon, two fish per day plus two additional pink. All coho must be marked with a healed adipose fin clip (C.1). 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).</li> </ul>
<p><b>Queets River to Leadbetter Point (Westport Subarea)</b></p> <ul style="list-style-type: none"> <li>• June 13 through earlier of September 30 or 52,840 marked coho subarea quota with a subarea guideline of 27,900 Chinook (C.5). Seven days per week. All salmon; two fish per day, no more than one of which can be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 11 (C.4.b). 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).</li> </ul>
<p><b>Leadbetter Point to Cape Falcon (Columbia River Subarea)</b></p> <ul style="list-style-type: none"> <li>• June 13 through earlier of September 30 or 79,400 marked coho subarea quota with a subarea guideline of 15,000 Chinook (C.5). Seven days per week. All salmon; two fish per day, no more than one of which can be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).</li> </ul>

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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<b>A. SEASON ALTERNATIVE DESCRIPTIONS</b>
<b>South of Cape Falcon</b>
<b>Supplemental Management Information</b>
<ol style="list-style-type: none"> <li>1. Sacramento River fall Chinook spawning escapement of 341,017 adults.</li> <li>2. Sacramento Index exploitation rate of 47.7%</li> <li>3. Klamath River recreational fishery allocation: 14,133 adult Klamath River fall Chinook.</li> <li>4. Klamath tribal allocation: 43,581 adult Klamath River fall Chinook.</li> <li>5. Overall recreational coho TAC: 55,000 coho marked with a healed adipose fin clip (marked), and 12,500 coho in the non-mark-selective coho fishery.</li> </ol>
<p><b>Cape Falcon to Humbug Mountain</b></p> <ul style="list-style-type: none"> <li>• March 15 through October 31 (C.6), except as provided below during the all-salmon mark-selective and September non-mark-selective coho fisheries.</li> </ul> <p>Seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <ul style="list-style-type: none"> <li>• Non-mark-selective coho fishery: September 4 through the earlier of September 30 or a landed catch of 12,500 coho (C.5). Seven days per week. All salmon, two fish per day (C.5).</li> </ul> <p>The all salmon except coho season reopens the earlier of October 1 or attainment of the coho quota (C.5).</p> <p>In 2016, the season between Cape Falcon and Humbug Mountain will open March 15 for all salmon except coho, two fish per day (B, C.1, C.2, C.3).</p> <p>Fishing in the Stonewall Bank yelloweye rockfish conservation area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d).</p>
<p><b>Cape Falcon to OR/CA Border</b></p> <ul style="list-style-type: none"> <li>• All-salmon mark-selective coho fishery: June 27 through earlier of August 9 or a landed catch of 55,000 marked coho. Seven days per week. All salmon, two fish per day. All retained 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). Any remainder of the mark selective coho quota will be transferred on an impact neutral basis to the September non-selective coho quota from Cape Falcon to Humbug Mountain (C.5). The all salmon except coho season reopens the earlier of August 10 or attainment of the coho quota.</li> </ul> <p>Fishing in the Stonewall Bank Yelloweye Rockfish Conservation Area restricted to trolling only on days the all depth recreational halibut fishery is open (call the halibut fishing hotline 1-800-662-9825 for specific dates) (C.3.b, C.4.d).</p>
<p><b>Humbug Mountain to OR/CA Border (Oregon KMZ)</b></p> <ul style="list-style-type: none"> <li>• May 1 through September 7 (C.6).</li> </ul> <p>Seven days per week. All salmon except coho, except as noted above in the all-salmon mark-selective coho fishery; two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p>
<p><b>OR/CA Border to Horse Mountain (California KMZ)</b></p> <ul style="list-style-type: none"> <li>• May 1 through September 7 (C.6).</li> </ul> <p>Seven days per week. All salmon except coho, two fish 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.e). See California State regulations for additional closures adjacent to the Smith, Eel, and Klamath rivers.</p>
<p><b>Horse Mountain to Point Arena (Fort Bragg)</b></p> <ul style="list-style-type: none"> <li>• April 4 through November 8 (C.6).</li> </ul> <p>Seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2016, season opens April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 20 inches total length (B); and the same gear restrictions as in 2015 (C.2, C.3).</p>
<p><b>Point Arena to Pigeon Point (San Francisco)</b></p> <ul style="list-style-type: none"> <li>• April 4 through October 31 (C.6).</li> </ul> <p>Seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length through April 30, 20 inches thereafter (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2016, season opens April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2015 (C.2, C.3).</p>

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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<b>A. SEASON ALTERNATIVE DESCRIPTIONS</b>
<p><b>Pigeon Point to Point Sur (Monterey North)</b></p> <ul style="list-style-type: none"> <li>April 4 through September 7 (C.6).</li> </ul> <p>Seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length through May 31, 20 inches thereafter (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2016, season opens April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2015 (C.2, C.3).</p>
<p><b>Point Sur to U.S./Mexico Border (Monterey South)</b></p> <ul style="list-style-type: none"> <li>April 4 through July 19 (C.6).</li> </ul> <p>Seven days per week. All salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length through May 31, 20 inches thereafter (B). See gear restrictions and definitions (C.2, C.3).</p> <p>In 2016, season opens April 2 for all salmon except coho, two fish per day (C.1). Chinook minimum size limit of 24 inches total length (B); and the same gear restrictions as in 2015 (C.2, C.3).</p> <p>California State regulations require all salmon be made available to a CDFW representative for sampling immediately at port of landing. Any person in possession of a salmon with a missing adipose fin, upon request by an authorized agent or employee of the CDFW, shall immediately relinquish the head of the salmon to the state. (California Code of Regulations Title 14 Section 1.73)</p>

<b>B. MINIMUM SIZE (Inches) (See C.1)</b>			
Area (when open)	Chinook	Coho	Pink
North of Cape Falcon	24.0	16.0	None
Cape Falcon to Humbug Mt.	24.0	16.0	None
Humbug Mt. to OR/CA Border	24.0	16.0	None
OR/CA Border to Horse Mt.	20.0	-	20.0
Horse Mt to Pt. Arena	20.0	-	20.0
Pt. Arena to Pigeon Pt.	Through April 30	-	24.0
	After April 30	-	20.0
Pigeon Pt. to U.S./Mexico Border	Through May 31	-	24.0
	After May 31	-	20.0

<b>C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS</b>
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- 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 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. [Note: ODFW regulations in the state-water fishery off Tillamook Bay may allow the use of barbed hooks to be consistent with inside regulations.]
  - b. *Horse Mt., California, 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.

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2015.  
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**C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS**

**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. *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:  
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.
- 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).

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

- a. Actions could include modifications to bag limits, or days open to fishing, and extensions or reductions in areas open to fishing.
- b. Coho may be transferred inseason among recreational subareas north of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with representatives of the affected ports and the Council's SAS recreational representatives north of Cape Falcon, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
- c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon if there is agreement among the representatives of the SAS, and if the transfer would not result in exceeding preseason impact expectations on any stocks.
- d. Fishery managers may consider inseason action modifying regulations restricting retention of unmarked coho. To remain consistent with preseason expectations, any inseason action shall consider, if significant, the difference between observed and preseason forecasted 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 recreational mark-selective coho quota may be transferred inseason to the Cape Falcon to Humbug Mt. non-mark-selective recreational fishery if the transfer would not result in exceeding preseason impact expectations on any stocks.

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

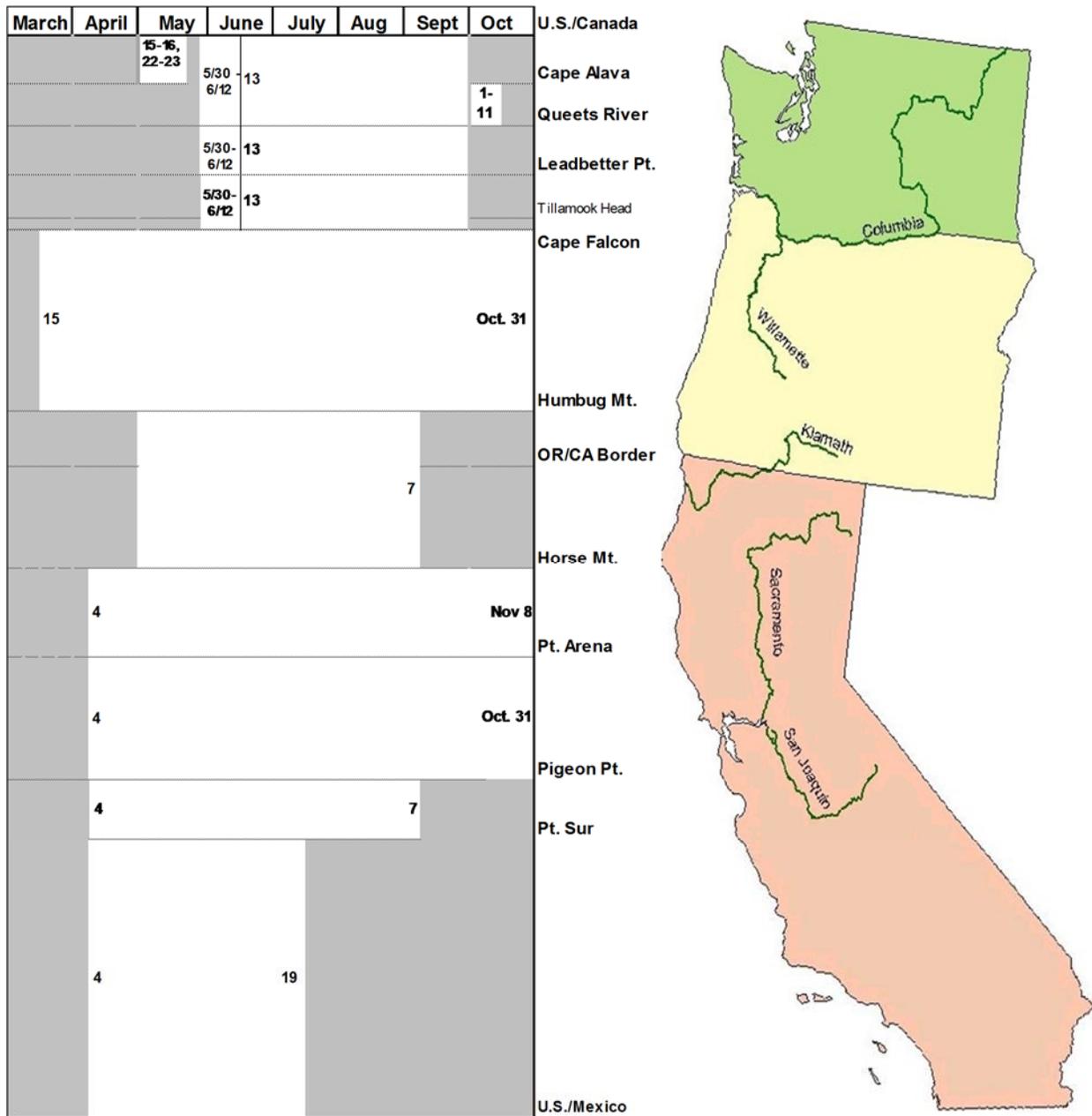


FIGURE 2. Council-adopted recreational salmon seasons for 2015. Dates are the first or last days of the month unless otherwise specified.

TABLE 3. Treaty Indian ocean troll management measures adopted by the Council for ocean salmon fisheries, 2015.

<b>A. SEASON DESCRIPTIONS</b>
<b>Supplemental Management Information</b>
1. Overall Treaty-Indian TAC: 60,000 Chinook and 42,500 coho.
<ul style="list-style-type: none"> <li>• May 1 through the earlier of June 30 or 30,000 Chinook quota. All salmon 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).</li> <li>• July 1 through the earlier of September 15, or 30,000 preseason Chinook quota (C.5), or 42,500 coho quota. All Salmon. See size limit (B) and other restrictions (C).</li> </ul>

<b>B. MINIMUM SIZE (Inches)</b>					
Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	24.0 (61.0 cm)	18.0 (45.7 cm)	16.0 (40.6)	12.0 (30.5 cm)	None

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

C.1. Tribe and Area Boundaries. All boundaries may be changed to include such other areas as may hereafter be authorized by a Federal court for that tribe's treaty fishery.

S'KLALLAM - Washington State Statistical Area 4B (All).

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 - That portion of the FMA between 48°07'36" N. lat. (Sand Pt.) and 47°31'42" N. lat. (Queets River) and east of 125°44'00" W. long.

HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.

QUINAULT - That portion of the FMA between 47°40'06" N. lat. (Destruction Island) and 46°53'18"N. lat. (Point Chehalis) and east of 125°44'00" W. long.

C.2. Gear restrictions

- a. Single point, single shank, barbless hooks are required in all fisheries.
- b. No more than eight fixed lines per boat.
- c. No more than four hand held lines per person in the Makah area fishery (Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.)

C.3. Quotas

- a. The quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1 through September 15.
- b. The Quileute Tribe will continue a ceremonial and subsistence fishery during the time frame of September 15 through October 15 in the same manner as in 2004-2014. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2015 season (estimated harvest during the October ceremonial and subsistence fishery: 20 Chinook; 40 coho).

C.4. Area Closures

- a. The area within a six nautical mile radius of the mouths of the Queets River (47°31'42" N. lat.) and the Hoh River (47°45'12" N. lat.) will be closed to commercial fishing.
- b. A closure within two nautical miles of the mouth of the Quinault River (47°21'00" N. lat.) may be enacted by the Quinault Nation and/or the State of Washington and will not adversely affect the Secretary of Commerce's management regime.

C.5. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:

- a. Chinook remaining from the May through June treaty-Indian ocean troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.

TABLE 4. Chinook and coho harvest quotas and guidelines (\*) for 2015 ocean salmon fishery management measures adopted by the Council.

Fishery or Quota Designation	Chinook	Coho
<b>NORTH OF CAPE FALCON</b>		
TREATY INDIAN OCEAN TROLL <sup>a/</sup>		
U.S./Canada Border to Cape Falcon (All Except Coho)	30,000	-
U.S./Canada Border to Cape Falcon (All Species)	30,000	42,500
Subtotal Treaty Indian Ocean Troll	60,000	42,500
NON-INDIAN COMMERCIAL TROLL <sup>b/</sup>		
U.S./Canada Border to Cape Falcon (All Except Coho)	40,200	-
U.S./Canada Border to Cape Falcon (All Species)	26,800	19,200
Subtotal Non-Indian Commercial Troll	67,000	19,200
RECREATIONAL		
U.S./Canada Border to Cape Falcon (All Except Coho) <sup>c/</sup>	10,000 *	-
U.S./Canada Border to Cape Alava <sup>b/</sup>	8,400 *	14,850
Cape Alava to Queets River <sup>b/</sup>	2,700 *	3,710
Queets River to Leadbetter Pt. <sup>b/</sup>	27,900 *	52,840
Leadbetter Pt. to Cape Falcon <sup>b/d/</sup>	15,000 *	79,400
Subtotal Recreational	64,000	150,800
TOTAL NORTH OF CAPE FALCON	191,000	212,500
<b>SOUTH OF CAPE FALCON</b>		
COMMERCIAL TROLL <sup>a/</sup>		
Humbug Mt. to OR/CA Border	3,300	-
OR/CA Border to Humboldt South Jetty	3,000	-
Subtotal Troll	6,300	-
RECREATIONAL		
Cape Falcon to Oregon/California Border	-	67,500 <sup>e/</sup>
TOTAL SOUTH OF CAPE FALCON	6,300	67,500

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/ Quotas are mark-selective for Chinook, equivalent to unmarked quota of 4,000.

d/ Does not include Buoy 10 fishery. Expected catch in August and September of 34,300 Chinook and 45,000 marked coho.

e/ The quota consists of both mark-selective and non-mark-selective quotas of 55,000 and 12,500, respectively.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2015 ocean fishery management measures adopted by the Council.<sup>a/</sup> (Page 1 of 4)

Key Stock/Criteria	Projected Ocean Escapement <sup>b/</sup> or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted
<b>CHINOOK</b>		
<u>PUGET SOUND:</u>		
Elwha Summer/Fall	6.0%	≤ 10.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
Dungeness Spring	6.2%	≤ 10.0% Southern U.S. CERC (NMFS ESA consultation standard)
Mid-Hood Canal Summer/Fall	11.5%	≤ 12.0% Preterminal Southern U.S. (NMFS ESA consultation standard)
Skokomish Summer/Fall	49.8%	≤ 50.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
Nooksack Spring	7.0%	≤ 7.0% Southern U.S. CERC, not to exceed in four out of five years (NMFS ESA consultation standard)
	21.8%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Skagit Summer/Fall	46.0%	≤ 50.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	61.4%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Skagit Spring	33.0%	≤ 38.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	34.7%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Stillaguamish Summer/Fall	12.0%	≤ 15.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	21.1%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Snohomish Summer/Fall	10.8%	≤ 15.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	21.2%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Lake Washington Summer/Fall	20.0%	≤ 20.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	46.5%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Green River Summer/Fall	9.8%	≤ 15.0% Preterminal Southern U.S. CERC (NMFS ESA consultation standard)
	3.2	≥ 5.800 Natural spawning escapement (NMFS ESA consultation standard)
	36.1%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
White River Spring	19.6%	≤ 20.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
Puyallup Summer/Fall	50.0%	≤ 50.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
Nisqually River Summer/Fall	51.9%	≤ 52.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
<u>WASHINGTON COAST:</u>		
Hoko Fall	3.0	0.85 FMP MSY spawning escapement objective
	81.0%	≤ 60.0% ISBM Index (PSC General Obligation) compliance assessed postseason.
Quillayute Fall	<sup>d/</sup>	3.0 FMP MSY spawning escapement objective
	133.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Hoh Fall	<sup>d/</sup>	1.2 FMP MSY spawning escapement objective
	122.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Queets Fall	<sup>d/</sup>	2.5 FMP MSY spawning escapement objective
	73.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Grays Harbor Fall	<sup>d/</sup>	13.5 FMP MSY spawning escapement objective
	76.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2015 ocean fishery management measures adopted by the Council.<sup>a/</sup> (Page 2 of 4)

Key Stock/Criteria	Projected Ocean Escapement <sup>b/</sup> or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted
<b>CHINOOK</b>		
<u>COLUMBIA RIVER</u>		
Columbia Upriver Brights	516.2	74.0 Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
	132.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Deschutes Upriver Brights	55.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Mid-Columbia Brights	116.9	14.9 Minimum ocean escapement to attain 0.9 adults for Umatilla and 4.5 for Little White Salmon and Bonneville Hatchery egg-takes, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules <sup>e/</sup>	96.8	25.0 Minimum ocean escapement to attain 14.5 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules (threatened)	40.0%	≤ 41.0% Total adult equivalent fishery exploitation rate (2015 NMFS ESA guidance).
Columbia Lower River Wild <sup>c/</sup> (threatened)	19.4	6.9 Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
	80.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Spring Creek Hatchery Tules	163.9	8.2 Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Snake River Fall (threatened) SRFI	45.9%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Columbia Upriver Summers	100.1	29.0 Minimum ocean escapement to attain 12.1 adults over Rock Island Dam.
	73.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
<u>OREGON COAST:</u>		
Nehalem Fall	144.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Siletz Fall	120.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met
Siuslaw Fall	143.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2015 because PSC escapement goal met

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2015 ocean fishery management measures adopted by the Council.<sup>a/</sup> (Page 3 of 4)

Key Stock/Criteria	Projected Ocean Escapement <sup>b/</sup> or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted
<b>CHINOOK</b>		
<b>CALIFORNIA</b>		
Klamath River Fall	40.7	40.7 MSY natural area adult spawners
Federally recognized tribal harvest	50.0%	50.0% Equals 43.6 (thousand) adult fish for Yurok and Hoopa Valley tribal fisheries.
Spawner Reduction Rate	58.9%	≤ 58.9% FMP.
Adult river mouth return	119.8	NA Total adults.
Age 4 ocean harvest rate	16.0%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	10.5%	No Council guidance for 2015.
River recreational fishery share	32.4%	NA Equals 14.1 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	17.5%	≤ 19.0% 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 2015 ESA Guidance).
Sacramento River Fall	341.0	≥ 195.6 2015 preseason ACL.
Sacramento Index Exploitation Rate	47.7%	≤ 70.0% FMP.
Ocean commercial impacts	169.9	Include fall (Sept-Dec) 2014 impacts (17.9 thousand SRFC).
Ocean recreational impacts	85.6	Include fall 2014 impacts (7.8 thousand SRFC).
River recreational impacts	55.5	No guidance in 2015.
Hatchery spawner goal	Met	22.0 Aggregate number of adults to achieve egg take goals at Coleman, Feather River, and Nimbus hatcheries.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2015 ocean fishery management measures adopted by the Council.<sup>a/</sup> (Page 4 of 4)

Key Stock/Criteria	Projected Ocean Escapement <sup>b/</sup> or Other Criteria		Spawner Objective or Other Comparative Standard as Noted
	(Council Area Fisheries)		
			<b>COHO</b>
Interior Fraser (Thompson River)	10.0% (4.0%)	≤ 10.0%	2015 Southern U.S. exploitation rate ceiling; PSC coho agreement.
Skagit	39.1% (4.0%)	≤ 60.0%	2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Stillaguamish	34.4% (2.7%)	≤ 50.0%	2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Snohomish	32.7% (2.7%)	≤ 60.0%	2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Hood Canal	53.8% (4.3%)	≤ 65.0%	2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Strait of Juan de Fuca	12.6% (3.4%)	≤ 20.0%	2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Quillayute Fall	9.8	6.3	FMP MSY adult spawner estimate. <sup>d/</sup> Value depicted is ocean escapement.
Hoh	4.3	2.0	FMP MSY adult spawner estimate. <sup>d/</sup> Value depicted is ocean escapement.
Queets Wild	6.2	5.8	FMP MSY adult spawner estimate. <sup>d/</sup> Value depicted is ocean escapement.
Grays Harbor	127.6	24.4	FMP MSY adult spawner estimate. <sup>d/</sup> Value depicted is ocean escapement.
Willapa Bay Natural	38.5	17.2	FMP MSY adult spawner estimate. Value depicted is ocean escapement.
Lower Columbia River Natural (threatened)	23% (13.6%)	≤ 23%	Total marine and mainstem Columbia R. fishery exploitation rate (2015 NMFS ESA guidance).
Upper Columbia <sup>e/</sup>	63%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	331.5	41.2	Minimum ocean escapement to attain hatchery egg-take goal of 21.8 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	155.5	8.8	Minimum ocean escapement to attain hatchery egg-take goal of 6.3 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	14.9 (11.4%)	≤ 15.0%	Marine and freshwater fishery exploitation rate (NMFS ESA consultation standard).
Southern Oregon/Northern California Coast (threatened)	6.8%	≤ 13.0%	Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

a/ Reflects 2015 fisheries and abundance estimates.

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 exploitation rates 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 OCN coho include impacts of freshwater fisheries. 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 minor contributions from East Fork Lewis River and Sandy River.

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

TABLE 6. Preliminary projections of Chinook and coho harvest impacts for 2015 ocean salmon fishery management measures adopted by the Council.

Area and Fishery	Catch Projection	Bycatch Mortality <sup>a/</sup> Projection	Bycatch Projection <sup>b/</sup>	Observed in 2014	
				Catch	Bycatch Mortality
<b>OCEAN FISHERIES<sup>c/</sup>:</b>					
<b>CHINOOK (thousands of fish)</b>					
<b>NORTH OF CAPE FALCON</b>					
Treaty Indian Ocean Troll	60.0	14.2	46.8	61.5	47.8
Non-Indian Commercial Troll	67.0	36.2	132.1	54.9	25.5
Recreational	64.0	15.5	91.2	42.3	10.5
<b>CAPE FALCON TO HUMBUG MT.</b>					
Commercial Troll	83.5	12.3	31.6	175.6	22.6
Recreational	7.9	0.9	2.9	9.3	0.9
<b>HUMBUG MT. TO HORSE MT.</b>					
Commercial Troll	7.5	1.1	2.8	16.7	3.2 <sup>d/</sup>
Recreational	22.7	2.5	8.4	22.6	2.8 <sup>d/</sup>
<b>SOUTH OF HORSE MT.</b>					
Commercial Troll	151.3	22.2	57.3	165.9	24.4 <sup>d/</sup>
Recreational	82.6	8.9	26.0	58.9	6.1 <sup>d/</sup>
<b>TOTAL OCEAN FISHERIES</b>					
Commercial Troll	369.3	86.0	270.7	474.6	123.5
Recreational	177.2	27.8	128.6	133.1	20.4
<b>INSIDE FISHERIES:</b>					
Area 4B	-	-	-	-	-
Buoy 10	34.3	0.6	3.1	26.8	4.4 <sup>d/</sup>
<b>COHO (thousands of fish)</b>					
<b>NORTH OF CAPE FALCON</b>					
Treaty Indian Ocean Troll	42.5	3.5	7.5	55.7	4.2
Non-Indian Commercial Troll	19.2	13.9	48.0	23.1	9.9
Recreational	150.8	32.5	146.7	139.8	20.4
<b>SOUTH OF CAPE FALCON</b>					
Commercial Troll	-	13.2	50.9	3.3	9.8
Recreational	67.5	21.9	104.9	82.8	22.4
<b>TOTAL OCEAN FISHERIES</b>					
Commercial Troll	61.7	30.6	106.4	82.1	23.9
Recreational	218.3	54.4	251.6	222.6	42.8
<b>INSIDE FISHERIES:</b>					
Area 4B	-	-	-	-	-
Buoy 10	45.0	9.5	37.6	57.7	10.3 <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: 19% (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/ Based on reported released Chinook.

d/ Based on reported released Chinook or coho.

TABLE 7. Expected coastwide lower Columbia Natural (LCN), Oregon coastal natural (OCN), and Rogue/Klamath (RK) coho, and Lower Columbia River (LCR) natural tule Chinook exploitation rates by fishery for 2015 ocean fisheries management measures adopted by the Council.

Fishery	Exploitation Rate (Percent)			
	LCN Coho	OCN Coho	RK Coho	LCR Tule
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	1.6%
BRITISH COLUMBIA	0.2%	0.4%	0.2%	10.5%
PUGET SOUND/STRAIT/BAY	0.2%	0.1%	0.0%	0.5%
NORTH OF CAPE FALCON				
Treaty Indian Ocean Troll	1.9%	0.4%	0.0%	5.4%
Recreational	5.8%	1.1%	0.1%	3.7%
Non-Indian Troll	1.6%	0.4%	0.0%	8.0%
SOUTH OF CAPE FALCON				
Recreational:				0.1%
Cape Falcon to Humbug Mt.	3.0%	5.9%	0.4%	
Humbug Mt. to OR/CA border (KMZ)	0.1%	0.2%	0.5%	
OR/CA border to Horse Mt. (KMZ)	0.1%	0.4%	1.7%	
Fort Bragg	0.0%	0.3%	0.9%	
South of Pt. Arena	0.0%	0.3%	0.7%	
Troll:				1.5%
Cape Falcon to Humbug Mt.	0.8%	0.9%	0.1%	
Humbug Mt. OR/CA border (KMZ)	0.0%	0.0%	0.0%	
OR/CA border to Horse Mt. (KMZ)	0.0%	0.0%	0.1%	
Fort Bragg	0.1%	0.7%	1.7%	
South of Pt. Arena	0.0%	0.3%	0.2%	
BUOY 10	2.3%	0.1%	0.0%	8.7%
ESTUARY/FRESHWATER	7.1%	3.5% <sup>a/</sup>	0.2%	
<b>TOTAL</b>	<b>23.0%</b>	<b>14.9%</b>	<b>6.8%</b>	<b>40.0%</b>

a/ Includes adult mortalities associated with PSC funded Chinook escapement monitoring studies in Oregon.

TABLE 8. Projected coho mark rates for 2015 mark-selective fisheries under Council adopted management measures (percent marked).

Area	Fishery	June	July	August	Sept
Canada					
Johnstone Strait	Recreational	-	25%	22%	-
West Coast Vancouver Island	Recreational	42%	33%	42%	44%
North Georgia Strait	Recreational	42%	43%	42%	37%
South Georgia Strait	Recreational	33%	47%	38%	41%
Juan de Fuca Strait	Recreational	43%	45%	46%	42%
Johnstone Strait	Troll	50%	41%	23%	37%
NW Vancouver Island	Troll	43%	36%	34%	28%
SW Vancouver Island	Troll	48%	45%	45%	46%
Georgia Strait	Troll	50%	50%	52%	46%
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational	54%	49%	47%	47%
Strait of Juan de Fuca (Area 6)	Recreational	51%	46%	47%	44%
San Juan Island (Area 7)	Recreational	39%	46%	43%	31%
North Puget Sound (Areas 6 & 7A)	Net	-	51%	43%	37%
Council Area					
Neah Bay (Area 4/4B)	Recreational	36%	51%	49%	54%
LaPush (Area 3)	Recreational	57%	55%	56%	39%
Westport (Area 2)	Recreational	63%	62%	59%	51%
Columbia River (Area 1)	Recreational	71%	70%	65%	67%
Tillamook	Recreational	62%	58%	53%	40%
Newport	Recreational	58%	54%	52%	39%
Coos Bay	Recreational	50%	47%	37%	23%
Brookings	Recreational	44%	33%	28%	11%
Neah Bay (Area 4/4B)	Troll	47%	48%	48%	47%
LaPush (Area 3)	Troll	51%	55%	49%	48%
Westport (Area 2)	Troll	46%	54%	57%	52%
Columbia River (Area 1)	Troll	65%	65%	62%	60%
Tillamook	Troll	59%	56%	56%	53%
Newport	Troll	56%	55%	51%	50%
Coos Bay	Troll	50%	47%	42%	29%
Brookings	Troll	39%	39%	42%	56%
Columbia River					
Buoy 10	Recreational	-	-	-	66%

TABLE 9. Preliminary projected exvessel value by catch area under Council-adopted 2015 non-Indian commercial troll management measures compared with 2014 and two five year averages (2003-2007 and 2010-2014) (inflation adjusted).

Management Area	Exvessel Value (thousands of dollars) <sup>a/</sup>				Percent Change		
	2015 Projected <sup>b/</sup>	2014	2003-2007 Average <sup>c/</sup>	2010-2014 Average <sup>c/</sup>	From 2014	From 2003-2007	From 2010-2014
					Modeled	Average	Average
North of Cape Falcon	5,251	4,077	1,774	3,261	+29%	+196%	+61%
Cape Falcon to Humbug Mt.	6,064	12,095	6,728	5,412	-50%	-10%	+12%
Humbug Mt. to Horse Mt. (KMZ)	537	1,269	718	672	-58%	-25%	-20%
Horse Mt. to Pt. Arena (Fort Bragg)	3,760	5,422	3,289	4,060	-31%	+14%	-7%
South of Pt. Arena	8,882	6,956	9,679	7,102	+28%	-8%	+25%
Total South of Cape Falcon	19,242	25,741	20,414	17,245	-25%	-6%	+12%
West Coast Total	24,493	29,818	22,188	20,506	-18%	+10%	+19%

a/ Exvessel values are not comparable to the community income impacts shown in Table 10.

b/ Dollar value estimates are based on expected catches in the Council management areas, and 2014 exvessel prices and average weight per fish.

c/ All dollar amounts are inflation adjusted to 2014 values.

TABLE 10. Preliminary projected angler trips and state level personal income impacts generated under Council-adopted 2015 recreational ocean salmon fishery management measures compared to estimated 2014 and two five year averages (2003-2007 and 2010-2014) (inflation adjusted).

Management Area	Coastal Community Income Impacts											
	Angler Trips (thousands)				(thousands of dollars) <sup>a/</sup>				Percent Change in Income Impacts			
	2015 Projected	2014	2010-2014 Avg. <sup>b/</sup>	2003-2007 Avg.	2015 Projected	2014	2010-2014 Avg.b/	2003-2007 Avg.	Compared to 2014	Compared to 2010-2014 Avg. <sup>b/</sup>	Compared to 2003-2007 Avg.	
North of Cape Falcon	160.9	125.0	91.6	105.6	31,988	24,838	18,551	11,152	+29%	+72%	+187%	
Cape Falcon to Humbug Mt.	62.7	92.2	53.5	75.5	6,548	9,623	5,411	5,132	-32%	+21%	+28%	
Humbug Mt. to Horse Mt. (KMZ)	42.9	37.7	33.8	32.6	5,731	5,040	4,545	1,762	+14%	+26%	+225%	
Horse Mt. to Pt. Arena (Fort Bragg)	20.7	17.5	14.1	23.3	4,136	3,485	2,796	1,958	+19%	+48%	+111%	
South of Pt. Arena	105.8	82.2	76.9	109.1	24,268	18,841	16,936	10,536	+29%	+43%	+130%	
Total South of Cape Falcon	232.1	229.5	178.3	240.6	40,682	36,989	29,687	19,388	+10%	+37%	+110%	
West Coast Total	393.1	354.5	269.8	346.2	72,670	61,827	48,237	30,540	+18%	+51%	+138%	

a/ Income impacts are sums of the impacts for individual communities within each management area. Income impacts are not comparable to exvessel values shown in Table 9. All dollar amounts are inflation adjusted to 2014 values.

b/ The 2010-2014 average includes one year of historically low effort in the KMZ (Humbug Mt. to Horse Mt., 2010).

TABLE 11. Environmental effects of the Proposed Action relative to criteria and Alternatives analyzed in Preseason Reports I and II. Bold entries represent estimates that were not in compliance at the time the Alternative was adopted.<sup>a/</sup>

Environmental Component	No-Action	Alternative			Proposed Action	2015 Criteria or Comparison
	Alternative <sup>b/</sup>	I	II	III		
<b>Target Stocks</b>						
SRFC Spawning Escapement	337,602	342,820	335,846	327,827	341,017	≥ 195.6 2015 preseason ACL.
Exploitation Rate	48.2%	47.4%	48.5%	49.7%	47.7%	≤ 70.0% FMP
KRFC Spawning Escapement	57,792	40,700	40,700	40,700	40,700	≥40,700 MSY natural area spawners.
Exploitation Rate	41.7%	58.9%	58.9%	58.9%	58.9%	≤ 58.9% FMP
Strait of Juan de Fuca Coho	12.0%	12.3%	11.9%	11.1%	12.6%	≤ 20.0% 2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Skagit Coho	35.0%	38.4%	37.9%	37.3%	39.1%	≤ 60.0% 2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Stillaguamish Coho	33.0%	32.3%	32.4%	31.9%	34.4%	≤ 50.0% 2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Snohomish Coho	31.0%	31.5%	31.1%	30.6%	32.7%	≤ 60.0% 2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
Hood Canal Coho	54.0%	53.9%	53.5%	53.0%	53.8%	≤ 65.0% 2015 total exploitation rate ceiling; FMP matrix <sup>d/e/</sup>
<b>Canadian Stocks</b>						
Interior Fraser Coho	<b>10.4%</b>	9.5%	8.3%	7.9%	10.0%	≤ 10.0% Southern U.S. exploitation rate limit under the PST
<b>ESA-Listed Salmon</b>						
SRWC	15.2%	17.9%	18.0%	14.8%	17.5%	≤ 19.0% SRWC age-3 ocean impact rate in fisheries south of Pt. Arena.
California Coastal Chinook	13.5%	16.0%	16.0%	16.0%	16.0%	≤ 16.0% KRFC age-4 ocean harvest rate.
LCR Natural Tule Chinook	NA	<b>41.5%</b>	39.9%	38.2%	40.0%	≤ 41.0% Total adult equivalent fishery exploitation rate.
LCN Coho <sup>f/</sup>	<b>25.6%</b>	14.4%	13.4%	10.5%	13.6%	≤ 23.0% Total marine and mainstem Columbia fishery exploitation rate.
OCN coho <sup>f/</sup>	<b>26.3%</b>	13.4%	11.1%	8.3%	11.4%	≤ 15.0% Marine and freshwater fishery exploitation rate.
SONCC (RK) coho	7.1%	6.7%	6.3%	6.0%	6.8%	≤ 13.0% Marine fishery exploitation rate.
<b>Socioeconomics</b>						
Commercial Community Personal Income Impacts (thousands of dollars)						
North of Cape Falcon	6,589	8,747	7,860	7,035	8,716	
Cape Falcon to Humbug Mt.	20,716	9,423	8,968	8,799	9,034	
KMZ	4,464	4,451	3,423	2,907	3,433	
Fort Bragg	9,472	6,773	7,226	7,263	7,122	
South of Pt. Arena	11,652	14,412	15,936	16,322	14,821	
West Coast Total	52,894	43,805	43,412	42,326	43,126	
Recreational Community Personal Income Impacts (thousands of dollars)						
North of Cape Falcon	24,838	33,547	28,889	25,733	31,988	
Cape Falcon to Humbug Mt.	9,623	6,548	6,036	5,790	6,548	
KMZ	5,040	5,731	5,505	5,138	5,731	
Fort Bragg	3,485	4,136	4,136	3,977	4,136	
South of Pt. Arena	18,841	24,551	24,551	22,505	24,268	
West Coast Total	61,827	74,512	69,116	63,143	72,670	

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.

b/ Socioeconomic impacts under the No-Action Alternative are assumed equal to 2014 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. Total exploitation rate includes Alaskan, Canadian, Council area, Puget Sound, and freshwater fisheries and is calculated as total fishing mortality divided by total fishing mortality plus spawning escapement.

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.

e/ Includes projected impacts of inriver fisheries.

f/ Impact rates listed under Alternatives I-III and the Proposed Action for LCN coho and OCN coho represent marine impacts. It is anticipated that when combined with freshwater impacts, the exploitation rates will meet, but not exceed, NMFS guidance. Total exploitation rates are shown for the No-Action Alternative, including freshwater impacts.

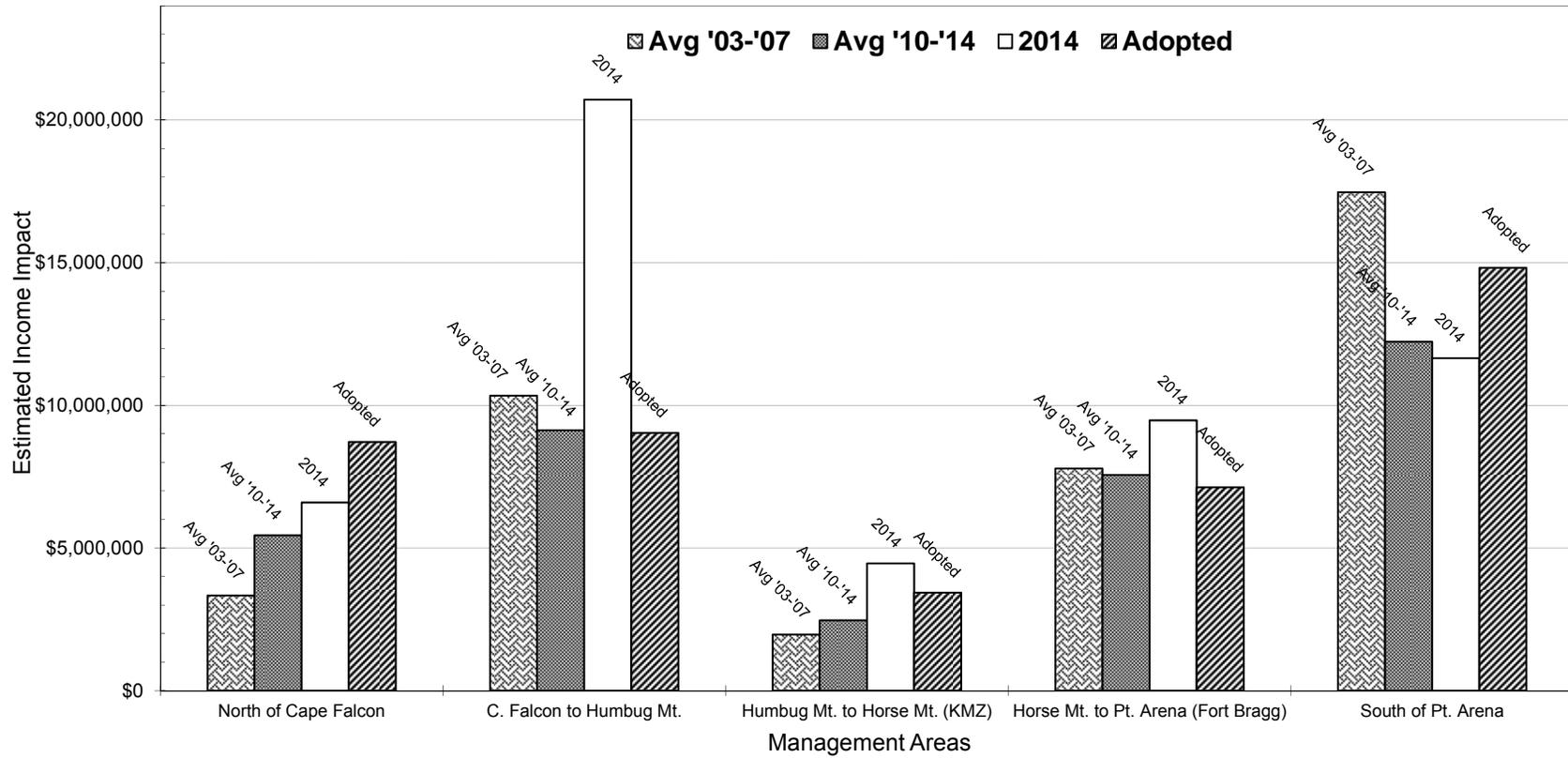


FIGURE 3. Projected coastal community personal income impacts associated with the 2015 commercial troll fishery under Council-adopted management measures compared to estimated 2014 and the 2003-2007 and 2010-2014 averages in inflation-adjusted dollars.

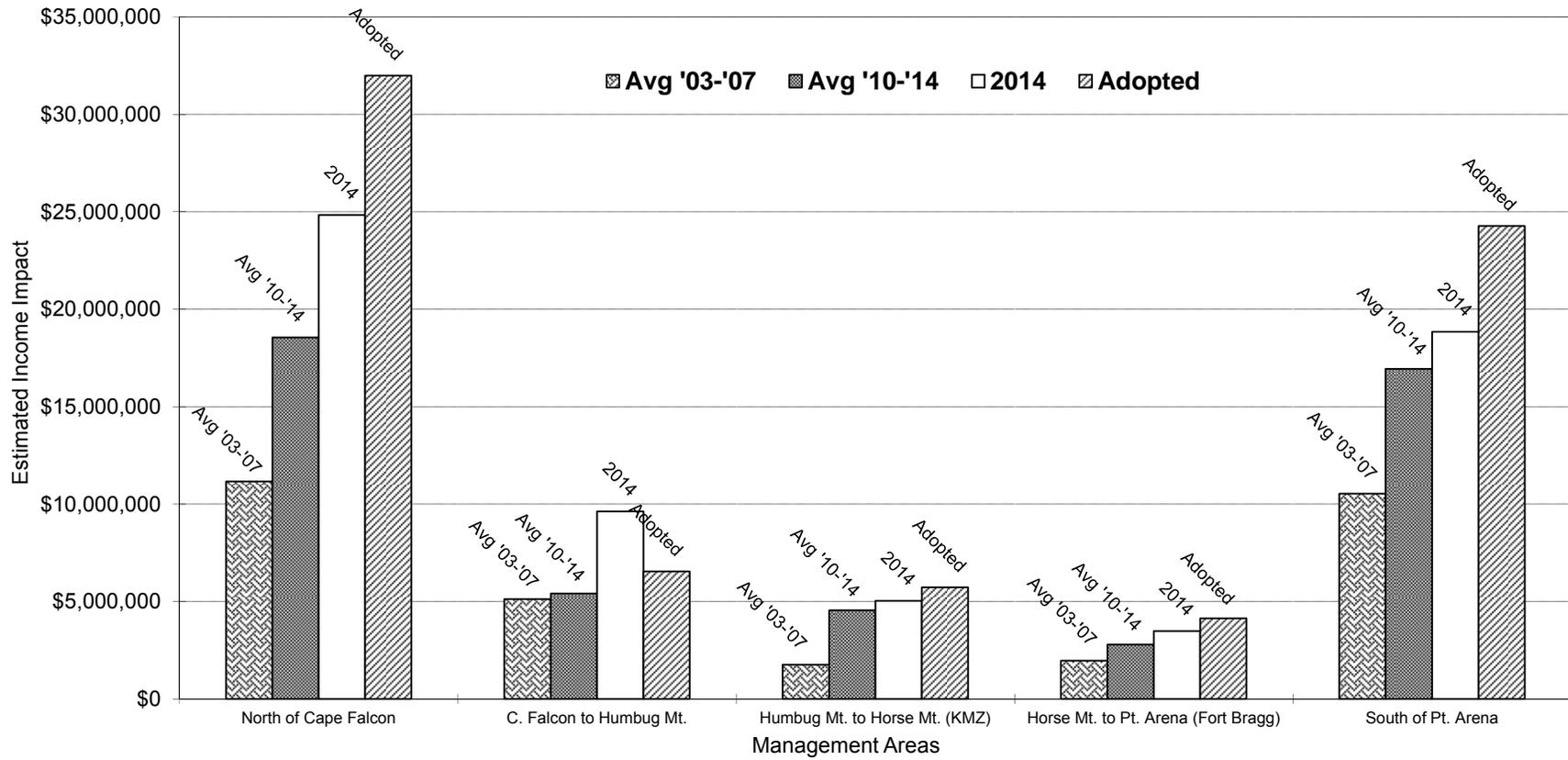
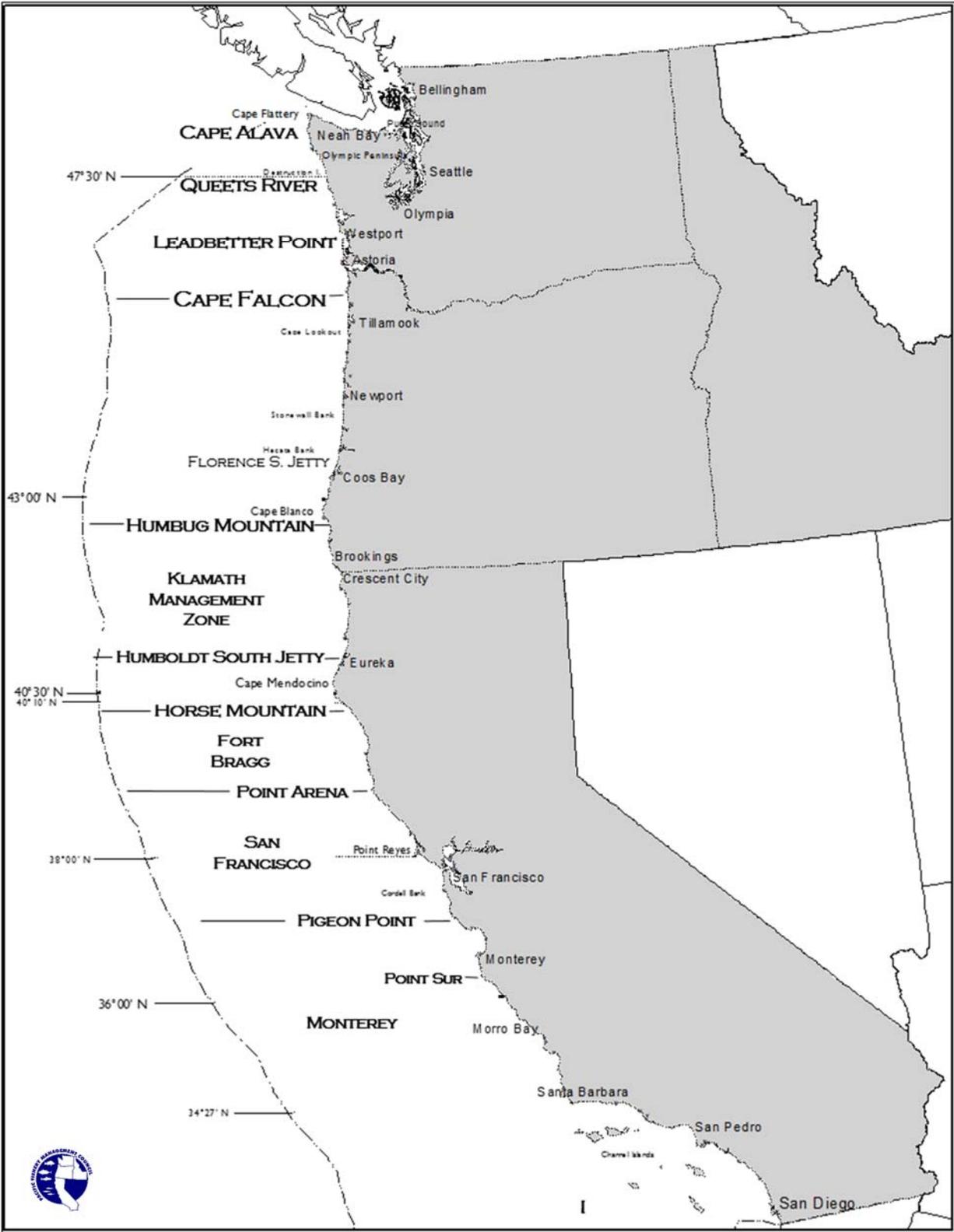


FIGURE 4. Projected coastal community personal income impacts associated with the 2015 recreational fishery under Council-adopted management measures compared to estimated 2014 and the 2003-2007 and 2010-2014 averages in inflation-adjusted dollars.



This map is for reference only and is not intended for use in navigation or fishery regulation.