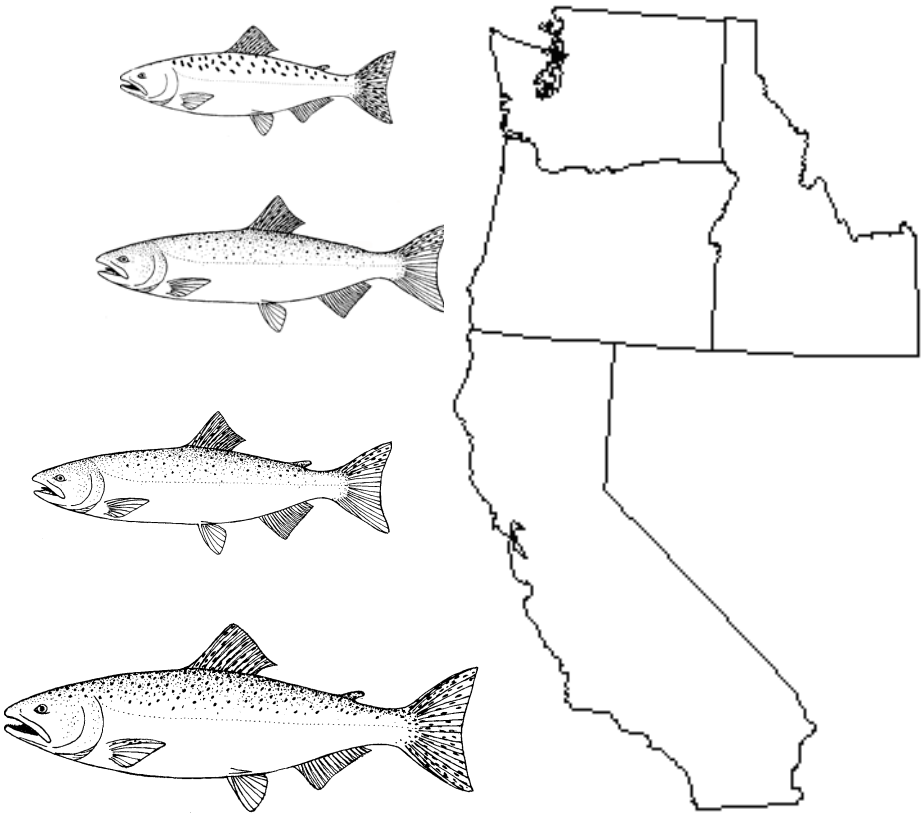
PRESEASON REPORT III

ANALYSIS OF COUNCIL ADOPTED MANAGEMENT MEASURES FOR 2010 OCEAN SALMON FISHERIES

PREPARED BY THE SALMON TECHNICAL TEAM



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LIST OF ACRONYMS AND ABBREVIATIONS

AABM	Aggregate Abundance Based Management
AEQ	adult equivalent
BO	biological opinion
CDFG	California Department of Fish and Game
CFGC	California Fish and Game Commission
CO	central Oregon (Florence south jetty to Humbug Mt.)
Council	Pacific Fishery Management Council
CPUE	catch per unit effort
CWT	coded-wire tag
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FB	Fort Bragg (Horse Mt. to Point Arena)
FRAM	Fishery Regulation Assessment Model
FMP	fishery management plan
GSI	genetic stock identification
ISBM	Individual Stock Based Management
KC	California Klamath Management Zone (Oregon/California border to Horse Mt.)
KO	Oregon Klamath Management Zone (Humbug Mt. to Oregon/California border)
KOHM	Klamath Ocean Harvest Model
KMZ	Klamath Management Zone (the ocean zone between Humbug Mountain and Horse Mountain where management emphasis is on Klamath River fall Chinook)
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)
MCB	Mid-Columbia River brights (upriver bright stock hatchery fall Chinook released below McNary Dam
MEW	Model Evaluation Workgroup
MO	Monterey (Pigeon Point to Point Sur)
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NO	northern Oregon (Cape Falcon to Florence south jetty)
ODFW	Oregon Department of Fish and Wildlife
OCN	Oregon coastal natural (coho)
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RER	rebuilding exploitation rate
RMP	Resource Management Plan
RK	Rogue/Klamath (hatchery coho)
SCH	Spring Creek Hatchery (tule fall Chinook returning to Spring Creek Hatchery)
SF	San Francisco (Point Arena to Pigeon Point)
SHM	Sacramento Harvest Model
SI	Sacramento index
SRFC	Sacramento River fall Chinook
SRFI	Snake River fall (Chinook) index
SRW	Snake River wild fall Chinook
STT	Salmon Technical Team
URB	upper river brights (bright fall Chinook normally migrating past McNary Dam)
WCVI	West Coast Vancouver Island
WDFW	Washington Department of Fish and Wildlife

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 2010 ocean salmon fishery management measures adopted by the Council for submission to the U.S. Secretary of Commerce. This report is analogous to a description and analysis of a preferred alternative in a National Environmental Policy Act (NEPA) analysis.

The Council's recommendations for the 2010 ocean salmon fishery regulations meet or exceed the obligations under the Pacific Salmon Treaty (PST) (Section 5), the level of protection required by all consultation standards for salmon species listed under the ESA (Section 4), and all objectives of the Pacific Coast Salmon Plan (Salmon FMP) (Section 3).

2.0 SELECTION OF FINAL MANAGEMENT MEASURES

The following figures and tables describe the Council-adopted management measures covering the period from May 1, 2010 to April 30, 2011:

Table 1-Non-Indian commercial ocean salmon management measures, pages 14-18;
Figure 1-Geographic outline of commercial troll (non-Indian) ocean salmon seasons, page 19;
Table 2-Recreational ocean salmon management measures, pages 20-23;
Figure 2-Geographic outline of recreational ocean salmon seasons, page 24;
Table 3-Treaty Indian commercial ocean management measures, page 25; and
Table 4-Allowable catch quotas for Chinook and coho, page 26.

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 mark-selective fisheries. Tables 9 and 10, and Figures 3 and 4, provide information on the economic impacts of the proposed fisheries.

The 2010 seasons are constrained primarily by: (1) Sacramento River fall Chinook (SRFC) south of Cape Falcon, (2) endangered Sacramento winter Chinook south of Point Arena, (3) threatened lower Columbia River (LCR) natural tule fall Chinook north of Cape Falcon, (4) threatened Lower Columbia natural (LCN) coho north of the Oregon/California border, and (5) Upper Fraser (Thompson River) coho north of Cape Falcon. Coho retention fisheries operate under restrictions that permit retention only of marked coho, except for treaty Indian ocean fisheries.

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 Salmon fishery management plan (FMP) goals, especially in regard to conservation and allocation goals, Federally-recognized Indian fishing rights, consultation standards for Endangered Species Act (ESA)-listed salmon stocks, and obligations under the Pacific Salmon Treaty (PST).

Inseason actions that are anticipated for the 2010-2011 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 retention restrictions.
6. Closing Oregon recreational and commercial fisheries scheduled to open March 15, 2011 if necessary to meet 2011 management objectives.
7. Potentially opening California recreational fisheries in April 2011 if 2010 spawner escapement estimates and 2011 abundance forecasts allow for such early season openings.

Inseason action will generally be accomplished through National Marine Fisheries Service (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 Chetco and Elk Rivers and at the mouth of Tillamook Bay. 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 state marine water salmon fisheries in 2010.

3.0 SALMON FISHERY MANAGEMENT PLAN REQUIREMENTS

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

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

Biological objectives can be modified through formal plan amendment, technical amendment, or regulatory amendment. For 2008-2010 management measures, an additional management objective for KRFC has been proposed by regulatory amendment. The current KRFC conservation objective requires a spawner reduction rate of no more than 67 percent and a minimum of 35,000 adults spawning in natural areas. The proposed regulatory amendment would require a minimum natural area spawning escapement of 40,700 adult KRFC as a preseason management objective in 2010 and possibly beyond. This proposal resulted from a rebuilding plan adopted by the Council after KRFC triggered an Overfishing Concern by failing to meet the 35,000 natural area adult spawner objective in 2004, 2005, and 2006.

Administrative objectives are requirements for meeting other applicable law outside of the Salmon FMP. These requirements include ESA consultation standards, international treaties, and tribal trust responsibilities. The Salmon FMP defers to NMFS consultation standards for salmon stocks listed under the ESA in regards to biological conservation objectives. The Council considers the ESA requirements sufficient to meet the intent of FMP conservation objectives for the annual management measures as well as the Magnuson-Stevens Act (MSA) overfishing provisions requiring rebuilding of depressed stocks to MSY levels. 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 Salmon 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.

Treaty trust responsibilities of the Salmon FMP require the Council to abide by Court orders in the *U.S. v Washington* (Puget Sound), *Hoh v. Baldrige* (Washington coast), and *U.S. v. Oregon* (Columbia River) cases, and the Solicitor General opinion (Klamath River) governing allocation and management of shared salmon resources. Much of the North of Falcon forum is dedicated to annual negotiations establishing allocation among the tribes, non-Indian fishing sectors, and ocean and inside interests. The results of these negotiations allow the Council to complete final management measure recommendations while meeting its biological, administrative, and allocation objectives. Among the annual agreements reached by the co-managers in the North of Falcon forum are conservation objectives for Puget Sound and Washington coastal stocks. These objectives can supersede the Salmon FMP conservation objectives for annual management measures and for Council action when a Conservation Alert is triggered; however, they cannot be used in place of the FMP objectives for determination of an Overfishing Concern; nor can they supersede ESA consultation standards. In recent years, the annual agreed to conservation objectives for Puget Sound coho have been based on the Comprehensive Coho Agreement. In November 2009, the Council adopted permanent FMP conservation objectives for Puget Sound coho consistent with the Comprehensive Coho Agreement.

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 up to 50 percent of the total KRFC harvest, which is calculated as a harvest of KRFC equal to that taken in all non-Indian fisheries. The Council must account for all harvest impacts when assessing the achievement of KRFC conservation objectives.

In addition to the allocation objectives associated with sharing between treaty Indian and non-Indian sectors, the Salmon FMP includes formulas for sharing Chinook and coho quotas north of Cape Falcon between commercial and recreational sectors, and among recreational port areas, and for coho south of Cape Falcon between commercial and recreational sectors. The 2010 salmon management measures adopted by the Council meet the allocation requirements for fisheries in the Salmon FMP.

4.0 SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

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

Species	ESU	Status	Federal Register Notice			
			Most Recent		Original Listing	
Chinook Salmon	Sacramento River Winter	Endangered	70 FR 37160	6/28/2005	54 FR 32085	8/1/1989
(*O. tshawytscha*)	Snake River Fall	Threatened	70 FR 37160	6/28/2005	57 FR 14653	4/22/1992
	Snake River Spring/Summer	Threatened	70 FR 37160	6/28/2005	57 FR 14653	4/22/1992
	Puget Sound	Threatened	70 FR 37160	6/28/2005	64 FR 14308	3/24/1999
	Lower Columbia River	Threatened	70 FR 37160	6/28/2005	64 FR 14308	3/24/1999
	Upper Willamette River	Threatened	70 FR 37160	6/28/2005	64 FR 14308	3/24/1999
	Upper Columbia River Spring	Threatened	70 FR 37160	6/28/2005	64 FR 14308	3/24/1999
	Central Valley Spring	Threatened	70 FR 37160	6/28/2005	64 FR 50394	9/16/1999
	California Coastal	Threatened	70 FR 37160	6/28/2005	64 FR 50394	9/16/1999
Chum Salmon	Hood Canal Summer-Run	Threatened	70 FR 37160	6/28/2005	64 FR 14508	3/25/1999
(*O. keta*)	Columbia River	Threatened	70 FR 37160	6/28/2005	64 FR 14508	3/25/1999
Coho Salmon	Central California Coastal	Endangered	70 FR 37160	6/28/2005	61 FR 56138	10/31/1996
(*O. kisutch*)	S. Oregon/ N. California Coastal	Threatened	70 FR 37160	6/28/2005	62 FR 24588	5/6/1997
	Oregon Coastal	Threatened	73 FR 7816	2/11/2008	63 FR 42587	8/10/1998
	Lower Columbia River	Threatened	70 FR 37160	6/28/2005		
Sockeye Salmon	Snake River	Endangered	70 FR 37160	6/28/2005	56 FR 58619	11/20/1991
(*O. nerka*)	Ozette Lake	Threatened	70 FR 37160	6/28/2005	64 FR 14528	3/25/1999

As the listings have occurred, NMFS has initiated formal consultations and issued biological opinions (BOs) that consider the impacts resulting from implementation of the Salmon FMP, 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 Salmon 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 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, ten steelhead ESUs and Columbia River chum (until reinitiated)
Expected prior to May 1, 2010	Sacramento River winter Chinook (April 30, 2010)
Expected prior to May 1, 2010	Puget Sound Chinook (April 30, 2010)
13-Jun-05	California coastal Chinook (until reinitiated)
Expected prior to May 1, 2010	Lower Columbia River natural coho, Lower Columbia River Chinook

Amendment 12 to the Salmon FMP added the generic category “species listed under the ESA” to the list of stocks in the salmon management unit and modified respective escapement goals to include “manage consistent with NMFS jeopardy 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.

NMFS, in a letter received by the Council on March 2, 2010, provided guidance on protective measures for species listed under the ESA during the 2010 fishing season. The letter summarized the requirements of NMFS' BOs on the effects of potential actions under the salmon FMP on listed salmon and provided the anticipated consultation standards of the BOs in preparation for the 2010 management season, as well as further guidance and recommendations for the 2010 management season. NMFS provided additional guidance on 2010 protective measures for Sacramento River winter Chinook in a letter dated March 24, 2010, updating original guidance contained in the March 2, 2010 letter.

The ESA consultation standards, exploitation rates, and other criteria in place for the 2010 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 salmon 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 stocks, Council-managed fisheries regularly impact Sacramento River winter Chinook, Central Valley spring Chinook, California coastal Chinook, Snake River wild (SRW) fall Chinook, lower Columbia River (LCR) fall Chinook, and all of the coho stocks. Additional listed salmonid ESUs found within the Council area, that are not regularly impacted by Council managed fisheries, include:

Chinook	
Snake River spring/summer (threatened)	Puget Sound (threatened)
Upper Willamette (threatened)	Upper Columbia River spring (endangered)
Sockeye	
Snake River (endangered)	Ozette Lake Sockeye (threatened)
Chum	
Columbia River (threatened)	Hood Canal summer (threatened)
Steelhead	
Southern California (endangered)	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)	Northern California (threatened)

5.0 OBLIGATIONS UNDER THE PACIFIC SALMON TREATY

5.1 Chinook Salmon Management

A new agreement under the PST was negotiated in 2008 and formally accepted by both the U.S. and Canada in December of 2008. This new agreement took effect on January 1, 2009, and includes 30 percent reductions in the catch ceilings for aggregate abundance based management (AABM) fisheries off the West Coast Vancouver Island 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 2008 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 stocks failing to achieve escapement goals adopted by the PSC.

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 stocks that are not expected to achieve agreed MSY spawning escapement goals. 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 2010 include, (1) meeting domestic conservation obligations for WCVI, Strait of Georgia, and Fraser River stocks; (2) Chinook harvests by native fisheries; and (3) incidental impacts during commercial and native fisheries directed at sockeye and chum salmon. It is anticipated that the details of the fishery regulatory package off WCVI will be driven by levels of allowable impact on WCVI, Lower Strait of Georgia, and Fraser River 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 total allowable fishery exploitation rates. Based on preseason abundance forecasts, total allowable exploitation rates for U.S. management units in 2010 are summarized in the table below.

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 harvest rate goals from the Comprehensive Coho Agreement, developed by Washington and the Puget Sound tribes, and adopted by the Council as FMP conservation objectives in November 2009. Actual exploitation rate constraints for Canadian fisheries on U.S. coho management units are determined by formulas that specify sharing of allowable exploitation rates and a "composite rule." The composite rule adjusts constraints for Canadian fishery exploitation rates based on the number of U.S. management units which fall in a given category. For example, if only one Washington coastal 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.

Some confusion may arise from the methods employed to report the categorical status for Washington coastal coho management units. For these units, a range is reported for the allowable exploitation rates based on the relationship between the pre-season abundance forecast and the upper and lower values of the spawning escapement ranges corresponding to MSY production. 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 MSY escapement range. For 2010, Puget Sound and Washington coast coho constraints are as follows:

U.S. Management Unit	Total Exploitation Rate Constraint[a/]	Categorical Status[b/]
Skagit	60%	Abundant
Stillaguamish	50%	Abundant
Snohomish	40%	Moderate
Hood Canal	45%	Moderate
Strait of Juan de Fuca	20% [10% SUS]	Low
Quillayute Fall[c/]	28%-71% (50%)	Abundant
Hoh[c/]	34%-74% (54%)	Abundant
Queets[c/]	33%-73% (53%)	Abundant
Grays Harbor	48%	Abundant

a/ Preliminary, total mortality exploitation rate ceilings. Constraints will ultimately be determined through preseason planning processes. For Puget Sound management units, the exploitation rate constraints reflect application of Comprehensive Coho Agreement rules. For the Quillayute, Hoh, and Queets management units, exploitation rate constraints represent the potential range associated with escapement goal ranges (the values in parentheses reflect the exploitation rate associated with the mid-point of the spawning escapement goal range).

b/ Category titles correspond to the general exploitation rate ranges depicted in paragraph 3(a) of the 2002 PST Southern Coho Management Plan or the exploitation rate status determinations exchanged during the negotiations that culminated in the 2002 Southern Coho Agreement. For Puget Sound management units, the categorical status categories reflect application of Comprehensive Coho Agreement rules. No formal status classification system has yet been developed for Washington coastal management units; the categorical status levels are based on exploitation rate values depicted in parentheses.

c/ For Washington Coastal coho management units, spawning escapement ranges correspond to estimates for MSY escapements. The exploitation rate ranges for these management units are based on preseason abundance forecasts and the upper and lower ends of the 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. The categorical status is determined based on the mid-point of the escapement range. Note that the exploitation rates used to report categorical status do not represent maximum allowable rates for the management units.

Key considerations for Canadian fishery management for coho in 2010 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 previous years, Canadian fisheries were managed so as not to exceed a three percent maximum exploitation rate).

The projected status of Canadian coho management units in 2010 indicates continuing concerns for the condition of Interior Fraser coho. The Interior Fraser coho management unit is anticipated to remain in low status, resulting in a requirement to constrain the total mortality fishery exploitation rate for 2010 Southern U.S. fisheries to a maximum of 10.0 percent.

6.0 CHINOOK SALMON MANAGEMENT

6.1 South of Cape Falcon

The 2010 abundance projections relevant to Chinook harvest management south of Cape Falcon are:

- *SRFC.* The Sacramento Index (SI) forecast is 245,500 SRFC adults. When compared to post-season estimated values of the SI, the forecast value is ranked the third lowest, with only the 2008 and 2009 values being lower.

- *KRFC.* The age-3 forecast is 223,400 KRFC, which is below average for the years 1985-2009. The age-4 forecast is 106,300 fish, which is slightly above average. The age-5 forecast is 1,800 fish. The 2009 preseason forecast was 474,900 age-3, 25,200 age-4, and 5,600 age-5 fish.

6.1.1 Objectives

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

- SRFC hatchery and natural-area spawner escapement goal of 122,000 to 180,000 adults (FMP conservation objective). NMFS also provided guidance that management measures for 2010 should, at a minimum, target a spawner escapement around the upper end of the FMP conservation objective in response to the stock falling below the lower end of the conservation objective for three consecutive years. The Council specified that for 2010, the spawning escapement objective was 180,000.

- KRFC natural area spawning escapement of at least 40,700 adults (2010 Council guidance), spawner reduction rate not to exceed 66.7 percent (FMP conservation objective), and 50:50 tribal-non-tribal sharing of adult harvest (Department of Interior Solicitor Opinion).

- 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 Sacramento River winter Chinook, California Coastal Chinook, SRW fall Chinook, and LCR natural tule 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 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. Appendix A presents tables of SRFC and KRFC impacts, respectively, by fishery/time/area. Descriptions pertaining to the achievement of key objectives for Chinook salmon management south of Cape Falcon are found below.

- The SRFC conservation objective of 122,000 to 180,000 natural and hatchery adult spawners is met by the adopted management measures. The adopted measures result in a projected spawner escapement level of 180,003 SFRC, which satisfies both the 2010 NMFS guidance to target the upper end of the conservation objective goal range and the Council guidance to target 180,000 adult spawners.

- The KRFC natural-area escapement of at least 40,700 adults (2010 Council guidance), as well as the maximum spawner reduction rate conservation objective of 66.7 percent, is met by the adopted management measures.

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 other relevant Chinook stocks listed in Table 5.

6.2 North of Cape Falcon

Abundance projections relevant to Chinook harvest management north of Cape Falcon are:

- *Columbia River hatchery tules*. Combined production of Lower River Hatchery (LRH) and Spring Creek Hatchery (SCH) stocks is predicted to be 259,600 which is a substantial increase over the 2009 preseason expectation of 148,100. The 2010 LRH forecast abundance is 90,600, up slightly from 88,800 in 2009. The 2010 SCH forecast abundance is 169,000, which is nearly three times lasts year's forecast of 59,300 and is the highest forecast in 26 years.

6.2.1 Objectives

The key Chinook salmon management objectives shaping the adopted management measures 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 Columbia Lower River wild (LRW) fall Chinook, LCR natural tule Chinook, SRW fall Chinook, and Puget Sound natural 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 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 exploitation rate of 37.5 percent associated with the adopted management measures meets the 38.0 percent maximum in the NMFS consultation standard. LCR tules are the constraining Chinook stock for fisheries north of Cape Falcon in 2010.

- *Puget Sound Chinook*. Council-area fisheries have a minor impact on ESA-listed Puget Sound Chinook and negligible impacts on most Chinook stocks subject to the 2008 PST Agreement. At this point there appears to be sufficient flexibility within Council and inside area fisheries as a whole to achieve compliance with NMFS consultation standards for the Puget Sound Chinook ESU.

- *SRW fall Chinook*. SRW Chinook will not constrain ocean fisheries north of Cape Falcon in 2010.

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 other relevant Chinook stocks listed in Table 5.

7.0 COHO SALMON MANAGEMENT

The 2010 abundance projections relevant to coho harvest management in Council area fisheries:

- *Oregon Production Index (OPI) Hatchery coho.* The 2010 forecast for hatchery coho from the Columbia River and the coast south of Cape Falcon of 408,000 is 62 percent lower than the 2009 forecast of 1,073,100. The Columbia River early coho forecast is 245,300 compared to the 2009 forecast of 672,700 and the Columbia River late coho forecast is 144,200 compared to the 2009 forecast of 369,700.

- *Oregon Coastal Natural (OCN) coho*. The OCN forecast of 148,000 is about 30 percent lower than the 2009 preseason forecast of 211,600.

- *Lower Columbia River Natural (LCN) coho*. The 2010 LCN forecast is 15,100 adults returning to the mouth of the Columbia River, compared to a forecast of 32,700 in 2009.

- *Puget Sound coho*. The Strait of Juan de Fuca coho stock ocean age-3 abundance forecast is 8,463, below the 11,679 threshold for Critical status category under the FMP (Low category in the 2002 PST Southern Coho Management Plan). Other Puget Sound natural stocks are in higher abundance categories and will be limited to higher exploitation rate ceilings.

- *Interior Fraser (Thompson River) coho*. This Canadian stock continues to be depressed, and will continue to constrain 2010 ocean coho fisheries north of Cape Falcon.

7.1 Objectives

Key coho salmon management objectives shaping the adopted management measures are:

- NMFS consultation standards and annual guidance for ESA listed stocks as provided in Section 4.0 above. 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 2010 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 15.0 percent for LCN coho; and a marine exploitation rate not to exceed 13.0 percent for Rogue/Klamath hatchery coho, used as a surrogate for the SONCC coho ESU.

- Salmon FMP conservation objectives and obligations under the 2002 PST Southern Coho Management Plan for stocks originating along the Washington coast, Puget Sound, and British Columbia as provided in Section 5.2 above. Key management stocks for the area north of Cape Falcon in 2010 include Strait of Juan de Fuca, Hood Canal, and Upper Fraser coho. Because of their abundance status, Strait of Juan de Fuca coho are subject to a total exploitation rate ceiling of 20 percent under the FMP and an exploitation rate ceiling of 10 percent in southern U.S. fisheries under the 2002 PST Southern Coho Management Plan.

- Minimum escapement of 50 percent of Upper Columbia coho above Bonneville Dam (*U.S. v. Oregon* annual management agreement).

- Providing sufficient escapement of Columbia River early and late coho to meet hatchery egg take goals and inriver harvest objectives.

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 15.0 percent maximum exploitation rate with a marine exploitation rate of 11.24 percent and a Columbia River mainstem exploitation rate of 3.76 percent.

- *Strait of Juan de Fuca coho.* Total exploitation rate associated with the adopted management measures is below 20 percent as required by the FMP and meets the PST Southern Coho Management Plan 10.0 percent maximum exploitation rate for Southern U.S. fisheries.

- *Hood Canal coho*. The total exploitation rate associated with the adopted management measures meet the 45 percent maximum required by the FMP and the PST Southern Coho Management Plan.

- *Interior Fraser coho.* The Southern U.S. exploitation rate in the adopted measures is 9.8, meeting the 10.0 percent maximum required by the PST Southern Coho Management Plan.

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

8.0 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 Tables 1 (non-Indian Commercial), 2 (recreational), and 3 (treaty Indian).

8.1 Commercial

In contrast to 2008 and 2009, commercial fishing opportunity exists in the adopted management measures for both Oregon and California. However, California commercial fishing opportunity is severely constrained compared to fisheries conducted prior to 2006, primarily due to the continued depressed status of SRFC. Two 4-day openings in July south of Horse Mountain represent the only opportunity for areas south to Point Arena. Much of the commercial opportunity in California will occur in the Fort Bragg area with quota fisheries in late July and August; any Chinook remaining after the July quota may be transferred to the August quota on a fishery impact equivalent basis. The July and August quota fisheries represent the first time Fort Bragg will be the only area open to commercial fishing in California. The California KMZ will not have a season in 2010.

Oregon fisheries are also conservative, although the Oregon KMZ will have both time/area and quota fisheries for Chinook salmon.

No fall commercial fisheries (September-December) were established south of Cape Falcon in 2010 due to concern over the status of SRFC and because KRFC remains in a rebuilding plan which requires restricting fall fisheries opportunity.

During the closed times and areas south of Cape Falcon between May 1 and September 30, an experimental genetic stock identification study will be conducted by a limited number of commercial salmon vessels with a NMFS permit allowing participation in the study. The genetic stock identification study sampling is non-retentive; all salmon must be released after collection of biological samples.

Fisheries north of Cape Falcon reflect the overall reverse in relative abundance from 2009 of high abundance of OPI hatchery coho and lower abundance of tule fall Chinook. In 2010, allowable catch of Chinook was substantially increased due to the strong abundance of tule Chinook from Spring Creek Hatchery. Non-Indian commercial fisheries included a Chinook directed fishery in May and June that is open seven days per week with no landing limit for the first time since 2004. Three-fourths of the overall non-Indian commercial Chinook quota north of Cape Falcon is allotted to the May-June time period to increase opportunity when Chinook are more available to the fishery. This differs from the typical allotment of two-thirds of the total troll quota to the May-June time period. Coho catch quotas in the summer all-salmon fisheries were reduced relative to 2009 due to reduced abundance of OPI hatchery coho and the lower exploitation rate ceiling of 15 percent for LCN coho.

8.2 Recreational

California recreational fisheries south of Horse Mountain opened on April 3. On May 29 (Memorial Day weekend), the fishery will open in the KMZ. Recreational fisheries in all California areas will continue through September 6 (Labor Day); however, fisheries south of Point Arena will be closed Tuesdays and Wednesdays beginning in May to help achieve the 2010 SRFC spawning objective of 180,000. The minimum size limit south of Point Arena increases from 20 inches to 24 inches total length on May 1 to meet the NMFS guidance on Sacramento winter Chinook. The minimum size limit between Point Arena and Horse Mountain was also increased to 24 inches to provide statewide consistency.

Oregon recreational fisheries south of Cape Falcon to the California border will also be open May 29 through September 6, and will allow retention of Chinook. A concurrent mark-selective coho fishery will open June 26 with a quota of 26,000 marked coho.

The fisheries north of Cape Falcon reflect the overall higher abundance of Columbia River hatchery tule fall Chinook, and lower abundance of Columbia River hatchery coho. The recreational fisheries include a June Chinook-directed fishery that will be the first mark-selective Chinook fishery in Council managed waters. No area 4B add-on fishery will occur in 2010 due to constraints on Strait of Juan de Fuca and Hood Canal coho.

8.3 Treaty Indian

The adopted management measures are generally similar in structure as in recent years, although Chinook quotas are generally higher and coho quotas lower reflecting both the increased abundance of Columbia River hatchery tule Chinook and lower abundance of OPI hatchery coho and the more restrictive standard for LCN coho specified in the NMFS guidance for 2010.

9.0 SOCIOECONOMIC IMPACTS OF THE ADOPTED MANAGEMENT MEASURES

The short-term economic effects of the adopted management measures for non-Indian fisheries are shown in Tables 9 and 10. Table 9 shows troll impacts expressed in terms of estimates of potential exvessel value. Table 10 shows recreational impacts in terms of trips generated and community personal income impacts associated with the recreational fishery under the adopted management measures. The exvessel values provided for the troll fisheries in Table 9 and income impact values provided for the recreational fisheries in Table 10 are not directly comparable. Long-term social and economic effects are dependent

on the impacts of this year's harvest on future production. In general the Council manages to meet escapement objectives for salmon that are expected to achieve optimum yields and rebuild depressed stocks.

Fishing effort estimates for the recreational salmon fisheries south of Cape Falcon are based on the effort estimates developed by the STT for modeling of biological impacts. STT estimates for this area use multi-year averages to predict effort for the coming year. If the multi-year average effort for a particular time period and area is higher than effort for the previous year in that time period and area then the result may be an estimate that forecasts an increase in effort for the coming year even though the fishery regulations may be more constrained than the previous year, or vice-versa. North of Cape Falcon, recreational fishery average catch per unit effort (CPUE) is applied to quotas to estimate total effort. For the summer mark-selective coho fishery, 2009 CPUE was applied to the available coho quotas. For the June Chinook fishery, CPUE for the 2002 fishery was used. The CPUE was adjusted for the increased effort required to reach a bag limit under mark-selective restrictions. The expected harvests used to estimate effects on the commercial fishery are taken from Table 6. Additionally, last year's prices were assumed to be the best estimator of prices expected in the coming season, except that for California the average price from Oregon was used (since there was no commercial salmon fishery in California in 2009). The 2009 commercial Chinook prices were at relatively high levels. To the degree that these prices were driven by the limited local supply and there is an increase in harvest this year, there may be a decline in price in 2010; therefore, the estimates provided may overstate expected salmon exvessel revenue. Where fisheries were open last year, last year's average weight per fish was used to estimate the weight of catch. For areas that were closed last year, the most recent three year average of years in which fishing occurred was used.

Figures 1 and 2 show projected community income impacts for the commercial troll and recreational fisheries, respectively, compared to historic estimates in real (inflation adjusted) dollars. In general, income impact estimates provide information on the amount of income associated with a particular activity. Reductions in income impacts may, but do not necessarily, reflect net losses to a community but likely correlate with losses to those businesses and individuals with income dependence on the activity. Additionally, in some cases, reductions in ocean harvest may result in either greater inside fishing opportunity or escapement, which may contribute to future production, depending on the carrying capacity of the system to which the stocks escape.

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010.
(Page 1 of 5)

A. SEASON DESCRIPTIONS

North of Cape Falcon

Supplemental Management Information

1. Overall non-Indian TAC: 117,000 (non-mark-selective equivalent of 110,000) Chinook and 80,000 coho marked with a healed adipose fin clip (marked).
2. Non-Indian commercial troll TAC: 56,000 Chinook and 12,800 marked coho (including 1,000 incidental contact mortalities).
3. No preseason trade with recreational fishery.

U.S./Canada Border to Cape Falcon

- May 1 through earlier of June 30 or 42,000 Chinook quota.

Seven days per week (C.1). All salmon except coho (C.7). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5). See gear restrictions and definitions (C.2, C.3).
An inseason conference call will occur when it is projected that 35,000 Chinook have been landed to consider modifying the open period and adding landing and possession limits to extend the fishery through the end of June.

U.S./Canada Border to Cape Falcon

- July 1 through earlier of September 14 or 14,000 Chinook preseason quota (C.8) or a landed catch quota of 11,800 marked coho (C.8.d).

Open July 1-6, then Friday through Tuesday through July 27, then Saturday through Tuesday thereafter. Landing and possession limit of 150 Chinook and 50 coho per vessel per open period north of Leadbetter Point or 150 Chinook and 50 coho south of Leadbetter Point (C.1). All Salmon except no chum retention north of Cape Alava, Washington in August and September (C.7). All coho must be marked (C.8.d). See gear restrictions and definitions (C.2, C.3). Cape Flattery, Mandatory Yelloweye Rockfish Conservation Area, and Columbia Control Zones closed (C.5).

Oregon State regulations require that fishers south of Cape Falcon, OR intending to fish within this area notify Oregon Department of Fish and Wildlife before transiting the Cape Falcon, OR line (45º46'00" N. lat.) at the following number: 541-867-0300 Ext. 271. 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 calling 541-867-0300 Ext. 271. 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).

TABLE 1. Commercial troll management measure**s** adopted by the Council for non-Indian ocean salmon fisheries, 2010 (Page 2 of 5)

A. SEASON DESCRIPTIONS

South of Cape Falcon

Supplemental Management Information

1. Sacramento River Basin recreational fishery catch assumption: quota of 8,200 adult Sacramento River fall Chinook (12.6% of the total allowable harvest).
2. Sacramento River fall Chinook spawning escapement of 180,000 adults.
3. Klamath River recreational fishery allocation: 12,000 adult Klamath River fall Chinook.
4. Klamath tribal allocation: 34,600 adult Klamath River fall Chinook.
5. Klamath River fall Chinook spawning escapement of 40,700 adults.

Cape Falcon to Humbug Mt.

- May 1-July 6, July 9-13, 16-20, 23-27, August 1-25 (C.9).

All salmon except coho (C.7). 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.

- September 1-30

Sufficient impacts to conduct an experimental genetic stock identification study. All salmon must be released after collection of biological samples.

In 2011, the season will open March 15 for all salmon except coho. This opening could be modified following Council review at its March 2011 meeting.

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

- May 1-31;
- July 1 through earlier of July 31, or a 1,500 Chinook quota;
- Aug. 1 through earlier of Aug. 31, or a 1,500 Chinook quota (C.9).

All salmon except coho (C.7). Chinook 28 inch total length minimum size limit (B). Prior to June 1, landing and possession limit of 100 Chinook per vessel per calendar week; all vessels fishing in the area must land their fish in the area or Port Orford. July 1 through August 31, landing and possession limit of 30 Chinook per vessel per day and 90 Chinook per vessel per calendar week; all vessels fishing in this area must land and deliver all fish within this area or Port Orford, within 24 hours of any closure in 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 Oregon Dept. of Fish and Wildlife (ODFW) within 1 hour of delivery or prior to transport away from the port of landing by calling (541) 867-0300 ext. 252. 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 gear restrictions and definitions (C.2, C.3).

- June 1-30; September 1-30

Sufficient impacts to conduct an experimental genetic stock identification study. All salmon must be released after collection of biological samples.

In 2011, 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 2011 meeting.

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

Closed except for sufficient impacts to conduct an experimental genetic stock identification study May 1 through September 30. All salmon must be released after collection of biological samples.

Humboldt South Jetty to Horse Mt.

Closed.

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010 (Page 3 of 5)

A. SEASON DESCRIPTIONS

South of Cape Falcon

Horse Mt. to Point Arena (Fort Bragg)

- July 1-4, 8-11,
- July 15 through the earlier of July 29 or an 18,000 Chinook quota.
- August 1 through the earlier of August 31 or a 9,375 Chinook preseason quota (C.8, C.9).

All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). All vessels fishing in the area must land their fish in the area when the fishery is managed under a quota; all fish must be offloaded within 24 hours of any closure of the fishery (C1). See gear restrictions and definitions (C.2, C.3).

- May 1 through June 30; September 1-30

Sufficient impacts to conduct an experimental genetic stock identification study. All salmon must be released after collection of biological samples.

Pt. Arena to U.S./Mexico Border

- July 1-4, 8-11 (C.9).

All salmon except coho (C.7). Chinook minimum size limit of 27 inches total length (B). See gear restrictions and definitions (C.2, C.3).

- May 1 through June 30; July 13 through September 30

Sufficient impacts to conduct an experimental genetic stock identification study. All salmon must be released after collection of biological samples.

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

	Chinook		Coho		
Area (when open)	Total Length	Head-off	Total Length	Head-off	Pink
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to Horse Mt.	28.0	21.5	-	-	None
Horse Mt. to U.S./Mexico Border	27.0	20.5	-	-	None

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. Salmon may be landed in an area that has been closed more than 96 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 be landed in an area that has been closed less than 96 hours only if they meet the minimum size, landing/possession limit, or other special requirements for the areas in which they were caught and landed.

States may require fish landing/receiving tickets be kept on board the vessel for 90 days 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.

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010 (Page 4 of 5)

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

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 (FMA) 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 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 90º angle.

C.4. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll or recreational gear in the water while transiting 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.

C.5. Control Zone Definitions:

a. *Cape Flattery Control Zone* - The area from Cape Flattery (48º23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48º10'00" N. lat.) and east of 125º05'00" 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. *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. *Bandon High Spot Control Zone* - The area west of a line between 43º07'00" N. lat.; 124º37'00" W. long. and 42º40'30" N. lat; 124º 52'0" W. long. extending to the western edge of the exclusive economic zone (EEZ).

e. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately six 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 six nautical miles south of the Klamath River mouth).

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, and the estimated time of arrival.

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. License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone: 206-634-1838). Applicants must apply prior to April 1 of each year. Incidental harvest is authorized only during May and June troll seasons and after June 30 if quota remains and if announced on the NMFS hotline (phone: 800-662-9825). ODFW and Washington Department of Fish and Wildlife (WDFW) will monitor landings. If the landings are projected to exceed the 25,035 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.

Beginning May 1, license holders may land no more than one Pacific halibut per each three Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Pacific halibut retained must be no less than 32 inches in total length (with head on).

TABLE 1. Commercial troll management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010 (Page 5 of 5)

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

A "C-shaped" yelloweye rockfish conservation area is an area to be voluntarily avoided for salmon trolling. NMFS and the Council request salmon trollers voluntarily avoid this area in order to protect yelloweye rockfish. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (Washington marine area 3), with the following coordinates in the order listed:

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:

a. Chinook remaining from the May through June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July through September harvest guideline on a fishery impact equivalent basis.
b. NMFS may transfer fish between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the areas' representatives on the Salmon Advisory Subpanel (SAS).
c. At the March 2011 meeting, the Council will consider inseason recommendations for special regulations for any experimental fisheries (proposals must meet Council protocol and be received in November 2010).
d. If retention of unmarked coho is permitted by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.
e. Landing limits may be modified inseason to sustain season length and keep harvest within overall quotas.
f. Chinook remaining from the Horse Mt. to Point Arena commercial troll quota in July may be transferred to the August preseason quota on a fishery impact equivalent basis.

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 Department of Fish and Game (CDFG) Code, Section 8232.5, the definition of the Klamath Management Zone (KMZ) for the ocean salmon season shall be that area from Humbug Mt., Oregon, to Horse Mt., California.

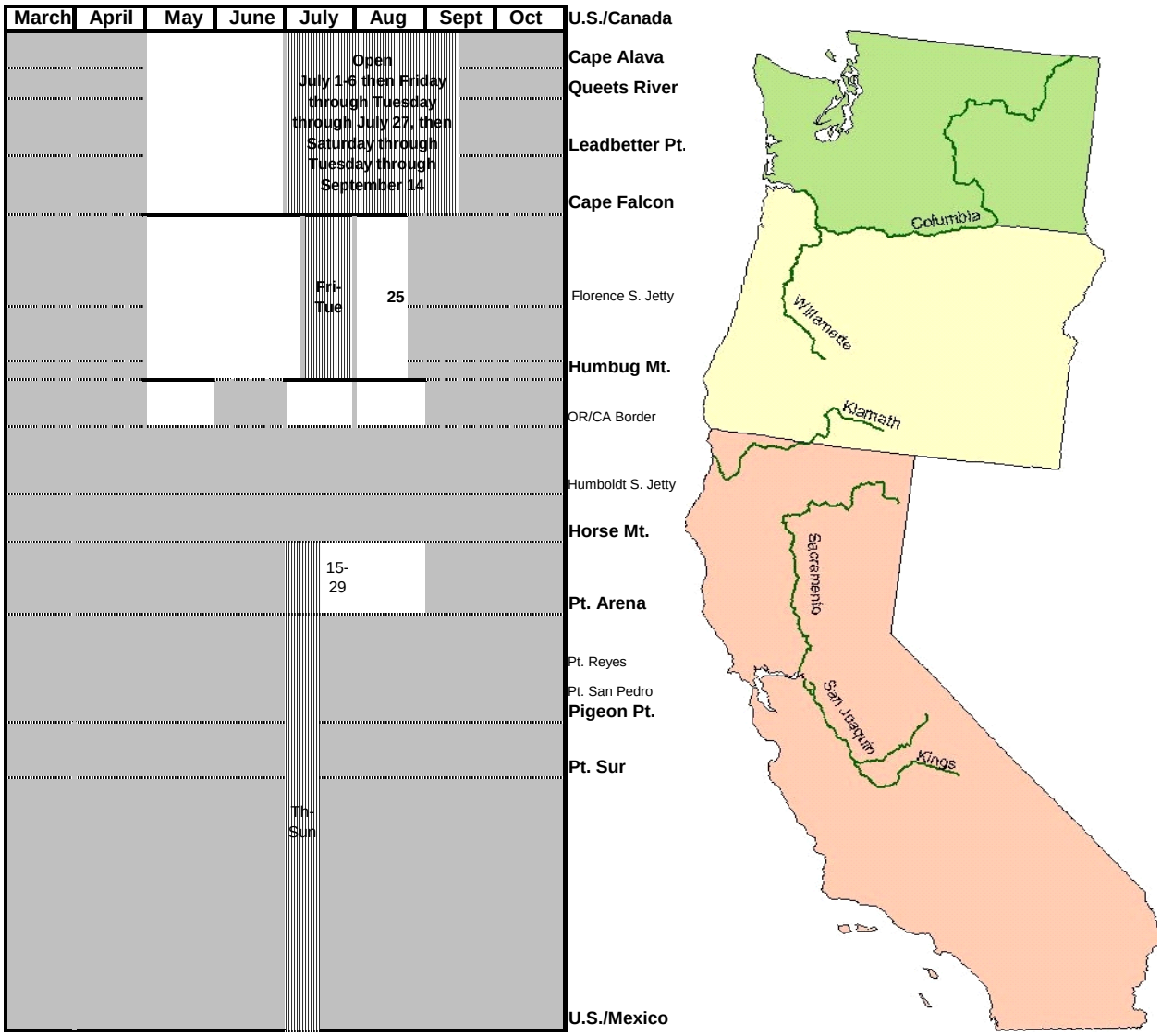


FIGURE 1. Council-adopted non-Indian commercial salmon seasons for 2010. Dates are the first or last days of the month unless otherwise specified.

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010. (Page 1 of 4)

A. SEASON DESCRIPTIONS

North of Cape Falcon

Supplemental Management Information

1. Overall non-Indian TAC: 117,000 (non-mark-selective equivalent of 110,000) Chinook and 80,000 coho marked with a healed adipose fin clip (marked).
2. Recreational TAC: 61,000 (non-mark selective equivalent of 54,000) Chinook and 67,200 marked coho; all retained coho must be marked.
3. No preseason trade with recreational fishery.
4. No Area 4B add-on fishery.
5. Buoy 10 fishery opens Aug. 1 with an expected landed catch of 12,000 marked coho.

U.S./Canada Border to Cape Falcon

- June 12 through earlier of June 30 or a **marked Chinook quota of 12,000** (C.5).

Seven days per week. Two fish per day, all salmon except coho, **all Chinook must be marked with a healed adipose fin clip (C.1)**. There will be a conference call no later than June 23 to consider changing bag limits. Chinook 24-inch total length minimum size limit (B). See gear restrictions (C.2). 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).

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

- July 1 through earlier of September 19 or 6,990 marked coho subarea quota with a subarea guideline of 5,400 Chinook (C.5).

Tuesday through Saturday. All salmon except no chum beginning August 1. Two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (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 recreational TAC for north of Cape Falcon (C.5).

Cape Alava to Queets River (La Push Subarea)

- July 1 through earlier of September 19 or 1,700 marked coho subarea quota with a subarea guideline of 2,450 Chinook (C.5).
- September 25 through earlier of October 10 or 50 marked coho quota or 50 Chinook quota (C.5) in the area north of 47°50'00 N. lat. and south of 48°00'00" N. lat.

Tuesday through Saturday through September 19, seven days per week beginning September 25. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (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 recreational TAC for north of Cape Falcon (C.5).

Queets River to Leadbetter Point (Westport Subarea)

- July 4 through earlier of September 19 or 24,860 marked coho subarea quota with a subarea guideline of 28,000 Chinook (C.5).

Sunday through Thursday. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Zone closed beginning August 1 (C.4.b). 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).

Leadbetter Point to Cape Falcon (Columbia River Subarea)

- July 1 through earlier of September 30 or 33,600 marked coho subarea quota with a subarea guideline of 13,100 Chinook (C.5).

Seven days per week. All salmon, two fish per day, only one of which can be a Chinook; there will be a conference call no later than July 14 to consider removing the one Chinook bag limit restriction. All retained coho must be marked (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 recreational TAC for north of Cape Falcon (C.5).

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010. (Page 2 of 4)

A. SEASON DESCRIPTIONS

South of Cape Falcon

Supplemental Management Information

Sacramento River Basin recreational fishery catch assumption: quota of 8,200 adult Sacramento River fall Chinook (12.6% of the total allowable harvest).
2. Sacramento River fall Chinook spawning escapement of 180,000 adults.
3. Klamath River recreational fishery allocation: 12,000 adult Klamath River fall Chinook.
4. Klamath tribal allocation: 34,600 adult Klamath River fall Chinook.
5. Klamath River fall Chinook spawning escapement of 40,700 adults.
6. Overall recreational TAC: 26,000 marked coho.

Cape Falcon to OR/CA Border

- Except as provided below during the all-salmon mark-selective coho fishery, the season will be May 29 through September 6 (C.6).

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).

- All-salmon mark-selective coho fishery: June 26 through earlier of Sept. 6 or a landed catch of 26,000 marked coho. The all salmon except coho season may reopen upon attainment of the coho quota.

Seven days per week, all salmon, two fish per day. All retained coho must be marked (C.1). Fishing in the Stonewall Bank groundfish 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). Open days may be adjusted inseason to utilize the available quota (C.5).

In 2011, the season between Cape Falcon and Humbug Mt. will open March 15 for all salmon except coho, two fish per day (B, C.1, C.2, C.3).

OR/CA Border to Horse Mt. (California KMZ)

- May 29 through September 6 (C.6).

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). Klamath Control Zone closed in August (C.4.e). See California State regulations for additional closures adjacent to the Smith, Eel, and Klamath rivers.

Horse Mt. to Point Arena (Fort Bragg)

- April 3-30

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).

- May 1 through September 6.

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).

Inseason action may be taken to open the fishery in April 2011 pending review at the March 2011 Council meeting of information on 2010 spawning escapements, 2011 abundance forecasts, annual management objectives, or other relevant issues.

Point Arena to U.S./Mexico Border

- April 3-30

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).

- May 1 through September 6.

Thursday through Monday. 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).

Inseason action may be taken to open the fishery in April 2011 pending review at the March 2011 Council meeting of information on 2010 spawning escapements, 2011 abundance forecasts, annual management objectives, or other relevant issues.

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010. (Page 3 of 4)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

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

Area (when open)		Chinook	Coho	Pink
North of Cape Falcon		24.0	16.0	None
Cape Falcon to OR/CA Border		24.0	16.0	None
OR/CA Border to Horse Mountain		24.0	-	24.0
Horse Mt. to U.S./Mexico Border:	Apr. 3-30	20.0	-	20.0
	May 1-Sep. 6	24.0	-	24.0

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.

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 salmon for all licensed and juvenile anglers aboard has 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 Point 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 Point Conception, California*: Single point, single shank, barbless circle hooks (see gear definitions below) are required when fishing with bait by any means other than trolling, and no more than two such hooks shall be used. When angling with two hooks, the distance between the hooks must not exceed five inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.

C.3. Gear Definitions:

a. *Recreational fishing gear defined*: Angling tackle consisting of a line with no more than one artificial lure or natural bait attached. Off Oregon and Washington, the line 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 Point 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.

TABLE 2. Recreational management measures adopted by the Council for non-Indian ocean salmon fisheries, 2010. (Page 4 of 4)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

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°28'00" N. lat., 124°45'00" W. long.), then in a straight line to Bonilla Point (48°35'30" N. lat., 124°43'00" 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° 36'00" 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 Groundfish 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 six 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 on an fishery impact equivalent basis 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.

c. Chinook and coho may be transferred between the recreational and commercial fisheries north of Cape Falcon on a fishery impact equivalent basis if there is agreement among the representatives of the Salmon Advisory Subpanel (SAS).

d. If retention of unmarked coho is permitted in the area from the U.S./Canada border to Cape Falcon, Oregon, by inseason action, the allowable coho quota will be adjusted to ensure preseason projected mortality of critical stocks is not exceeded.

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.

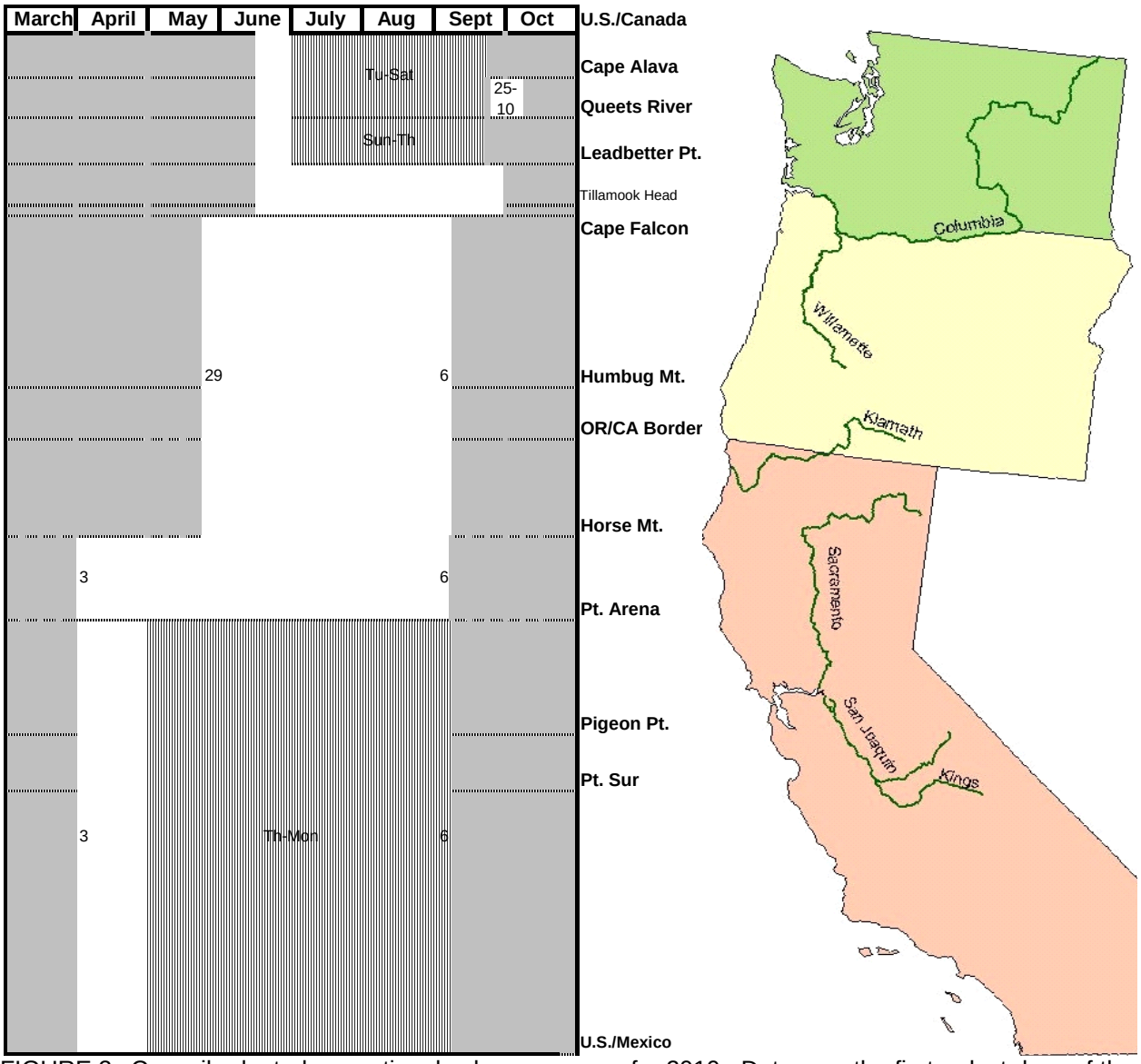


FIGURE 2. Council-adopted recreational salmon seasons for 2010. Dates are the first or last days of the month unless otherwise specified.

TABLE 3. Treaty Indian ocean troll management measures adopted by the Council for ocean salmon fisheries, 2010.
(Page 1 of 1)

A. SEASON DESCRIPTIONS

Supplemental Management Information

1. Overall Treaty-Indian TAC: 55,000 Chinook and 41,500 coho.

• May 1 through the earlier of June 30 or 27,500 Chinook quota.
All salmon except coho. If the Chinook quota for the May-June fishery is not fully utilized, the excess fish cannot be transferred into the later all-salmon season. If the Chinook quota is exceeded, the excess will be deducted from the later all-salmon season. See size limit (B) and other restrictions (C).

• July 1 through the earlier of September 15, or 27,500 preseason Chinook quota, or 41,500 coho quota.
All Salmon. See size limit (B) and other restrictions (C).

B. MINIMUM SIZE (Inches)

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

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. 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 2004-2009. Fish taken during this fishery are to be counted against treaty troll quotas established for the 2010 season (estimated harvest during the October ceremonial and subsistence fishery: 100 Chinook; 200 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.

TABLE 4. Chinook and coho harvest quotas and guidelines (*) for 2010 ocean salmon fishery management measures adopted by the Council.

Fishery or Quota Designation	Chinook	Coho
NORTH OF CAPE FALCON		
TREATY INDIAN OCEAN TROLL		
U.S./Canada Border to Cape Falcon (All Except Coho)	27,500	-
U.S./Canada Border to Cape Falcon (All Species)	27,500	41,500
Subtotal Treaty Indian Ocean Troll	55,000	41,500
NON-INDIAN COMMERCIAL TROLL [a/]		
U.S./Canada Border to Cape Falcon (All Except Coho)	42,000	-
U.S./Canada Border to Cape Falcon (All Species)	14,000	11,800
Subtotal Non-Indian Commercial Troll	56,000	11,800
RECREATIONAL[a/]		
U.S./Canada Border to Cape Falcon (All Except Coho)	12,000 [b/]	-
U.S./Canada Border to Cape Alava	5,400 *	6,990
Cape Alava to Queets River	2,500 *	1,750
Queets River to Leadbetter Pt.	28,000 *	24,860
Leadbetter Pt. to Cape Falcon[c/]	13,100 *	33,600
Subtotal Recreational	61,000	67,200
TOTAL NORTH OF CAPE FALCON	172,000	120,500
SOUTH OF CAPE FALCON		
COMMERCIAL TROLL		
Humbug Mt. to OR/CA Border	3,000	-
OR/CA Border to Humboldt South Jetty	-	-
Horse Mt. to Pt. Arena	27,375	-
Subtotal Troll	30,375	-
RECREATIONAL[a/]		
Cape Falcon to OR/CA Border	-	26,000
TOTAL SOUTH OF CAPE FALCON	30,375	26,000

a/ The coho quota is a landed catch of coho marked with a healed adipose fin clip (marked).
b/ The Chinook quota is a landed catch of Chinook marked with a healed adipose fin clip (marked) and is equivalent to a non-mark-selective quota of about 5,000.
c/ Does not include Buoy 10 fishery (12,000 marked coho).

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery management measures adopted by the Council.[a/] (Page 1 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted
	CHINOOK	
PUGET SOUND:		
Elwha Summer/Fall	4.0%	≤ 10.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
Dungeness Spring	4.2%	≤ 10.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
Mid-Hood Canal Summer/Fall	11.7%	≤ 12.0% Preterminal Southern U.S. CERC (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)
	24.6%	≤ 60.0% ISBM Index (PSC general obligation)
Skagit Summer/Fall	43.9%	≤ 50.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	34.2%	≤ 60.0% ISBM Index (PSC general obligation)
Skagit Spring	17.9%	≤ 18.0% Southern U.S. CERC (NMFS ESA consultation standard)
	24.6%	≤ 60.0% ISBM Index (PSC general obligation)
Stillaguamish Summer/Fall	15.8%	≤ 25.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	NA	≤ 60.0% ISBM Index (PSC general obligation)
Snohomish Summer/Fall	20.3%	≤ 21.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	23.5%	≤ 60.0% ISBM Index (PSC general obligation)
Lake Washington Summer/Fall	17.5%	≤ 20.0% Southern U.S. Rebuilding Exploitation Rate (NMFS ESA consultation standard)
	54.8%	≤ 60.0% ISBM Index (PSC general obligation)
Green River Summer/Fall	9.0%	≤ 15.0% Preterminal Southern U.S. Rebuilding Exploitation Rate and
	5.8	≥ 5.800 Natural spawning escapement (NMFS ESA consultation standard)
	54.9%	≤ 60.0% ISBM Index (PSC general obligation)
White River Spring	19.3%	≤ 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	64.4%	≤ 65.0% Total Rebuilding Exploitation Rate (NMFS ESA consultation standard)
WASHINGTON COAST:		
Hoko Fall	12.1%	≤ 60.0% ISBM Index (PSC general obligation)
Quillayute Fall	96.3%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
Hoh Fall	95.7%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
Queets Fall	28.4%	≤ 60.0% ISBM Index (PSC general obligation)
Grays Harbor Fall	38.1%	≤ 60.0% ISBM Index (PSC general obligation)

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery management measures adopted by the Council.a/ (Page 2 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted
		CHINOOK
COLUMBIA RIVER		
Columbia Upriver Brights	319.1	88.2 Minimum ocean escapement to attain 60.0 adults over McNary Dam, with normal distribution and no mainstem harvest.
	90.0%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
Deschutes Upriver Brights	99.6%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
Snake River Fall (threatened) SRFI	44.0%	≤ 70.0% Of 1988-1993 base period exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Mid-Columbia Brights	74.6	13.2 Minimum ocean escapement to attain 4.7 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	85.6	22.1 Minimum ocean escapement to attain 12.4 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules (threatened)	37.5%	≤ 38.0% ESA guidance met by a total adult equivalent fishery exploitation rate on Coweeman tules (NMFS ESA consultation standard).
Columbia Lower River Wild[c/] (threatened)	10.0	6.8 Minimum ocean escapement to attain MSY spawner goal of 5.7 for N. Lewis River fall Chinook (NMFS ESA consultation standard).
	51.8%	≤ 60.0% ISBM Index (PSC general obligation)
Spring Creek Hatchery Tules	162.9	8.8 Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Upriver Summer	113.3%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
OREGON COAST:		
Nehalem Fall	93.6%	≤ 60.0% ISBM Index (PSC general obligation)[d/]
Siletz Fall	70.5%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
Siuslaw Fall	206.9%	≤ 60.0% ISBM Index (PSC general obligation) not applicable for 2010 because escapement objective met
CALIFORNIA		
Klamath River Fall	40.7	40.7 Minimum number of adult spawners to natural spawning areas. 2008 Council adopted rebuilding objective and 2010 Council guidance.
Federally recognized tribal harvest	50.0%	50.0% Equals 34.6 (thousand) adult fish for Yurok and Hoopa tribal fisheries.
Spawner Reduction Rate	52.8%	≤ 66.7% Equals 45.5 (thousand) fewer natural adult spawners due to fishing.
Adult river mouth return	110.7	NA Natural and hatchery adults.
Age-4 ocean harvest rate	12.3%	≤ 16.0% NMFS ESA consultation standard for threatened California Coastal Chinook.
KMZ sport fishery share	15.2%	No Council guidance for 2010.
River recreational fishery share	34.6%	≥ 15% 2010 Council Guidance. Equals 12.0 (thousand) adult fish for recreational inriver fisheries.
Sacramento River Winter (endangered)	Met	Recreational seasons: Point Arena to Pigeon Point between the first Saturday in April and the second Sunday in November; Pigeon Point to the U.S./Mexico Border between the first Saturday in April and the first Sunday in October. Minimum size limit ≥ 20 inches total length. In addition, for 2010, fisheries south of Pt. Arena must have either a minimum size limit ≥ 24 inches total length May 1-Aug. 31, or be closed for 61 consecutive days between May 1 and August 31. Commercial seasons: Point Arena to the U.S./Mexico border between May 1 and September 30, except Point Reyes to Point San Pedro between October 1 and 15. Minimum size limit ≥ 26 inches total length. (NMFS ESA Guidance for 2010).
Sacramento River Fall	180.0	180 2010 Council and NMFS guidance for natural and hatchery adult spawners.
Ocean commercial impacts	29.4	Include fall (Sept-Dec) 2009 impacts; equals 0 SRFC.
Ocean recreational impacts	27.9	Include fall (Sept. -Dec.) 2009 impacts (76 SRFC).
River recreational impacts	8.2	8.2 2010 Council Guidance.
Hatchery spawner goal	≥ 22.0	22.0 Aggregate number of adults to meet egg take goals at Coleman, Feather River and Nimbus hatcheries.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for 2010 ocean fishery management measures adopted by the Council.a/ (Page 3 of 3)

Key Stock/Criteria	Projected Ocean Escapement[b/] or Other Criteria (Council Area Fisheries)		Spawner Objective or Other Comparative Standard as Noted
		COHO	
Interior Fraser (Thompson River)	9.8%(5.3%)	≤ 10.0%	2010 Southern U.S. exploitation rate ceiling; 2002 PSC coho agreement.
Skagit	37.4%(4.7%)	≤ 60.0%	2010 total exploitation rate ceiling; FMP matrix[e/]
	60.3	30.0	MSP level of adult spawners Identified in FMP.
Stillaguamish	37.4%(3.4%)	≤ 50.0%	2010 total exploitation rate ceiling; FMP matrix[e/]
	16.3	17.0	MSP level of adult spawners Identified in FMP.
Snohomish	32.4%(3.4%)	≤ 40.0%	2010 total exploitation rate ceiling; FMP matrix[e/]
	67.5	70.0	MSP level of adult spawners Identified in FMP.
Hood Canal	43.0%(5.0%)	≤ 45.0%	2010 total exploitation rate ceiling; FMP matrix[e/]
	19.0	21.5	MSP level of adult spawners Identified in FMP.
Strait of Juan de Fuca	11.2%(3.8%)	≤ 20.0%	2010 total exploitation rate ceiling; FMP matrix[e/]
	7.5	12.8	MSP level of adult spawners Identified in FMP.
	10.0%	≤ 10.0%	2010 Southern U.S. exploitation rate ceiling; 2002 PSC coho agreement.
Quillayute Fall	20.5	6.3-15.8	FMP objective MSY adult spawner range[e/]
Hoh	6.5	2.0-5.0	FMP objective MSY adult spawner range[e/]
Queets Wild	17.1	5.8-14.5	FMP objective MSY adult spawner range[e/]
Grays Harbor	61.9	35.4	FMP objective MSY adult spawner range[e/]
Lower Columbia River Natural (threatened)	15.0%	≤ 15.0%	Total marine and mainstem Columbia River fishery exploitation rate (NMFS ESA consultation standard). 11.24% in marine fisheries only.
Upper Columbia	80%	≥ 50%	Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	176.7	31.2	Minimum ocean escapement to attain hatchery egg-take goal of 14.1 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	96.7	9.3	Minimum ocean escapement to attain hatchery egg-take goal of 7.1 late adult coho, with average conversion and no mainstem or tributary fisheries.
Oregon Coastal Natural	11.2%	≤ 15.0%	Marine and freshwater fishery exploitation rate.
Northern California (threatened)	10.0%	≤ 13.0%	Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).

a/ Assumptions for Canadian and Southeast Alaska Chinook fisheries operating under aggregate abundance based management (AABM) regimes are based on allowable catch levels determined under the 2009 PST Chinook agreement and the 2010 calibration of the PSC Chinook Model. The allowable catch levels are for an Alaska all-gear catch of 221,800, a Northern BC troll and Queen Charolette Islands catch of 152,100, and a WCVI troll and outside sport catch of 143,700.

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 LCN coho include all marine impacts prior to the Buoy 10 fishery. Exploitation rates for OCN coho include impacts of freshwater fisheries.

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

d/ Projected ISBM indices for this stock exceed 60% and the PSC escapement goal for this stock is not expected to be met in 2010; however the Salmon FMP conservation objective for the Oregon Coast Chinook complex is expected to be met in 2010. There is currently no stock specifec objective for Nehalem Chinook in the FMP.

e/ 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.

TABLE 6. Preliminary projections of Chinook and coho harvest impacts for 2010 ocean salmon fishery management measures adopted by the Council.

Area and Fishery	Catch Projection	Bycatch Mortality[a/b/] Projection	Bycatch Projection[b/]	Observed in 2009 Catch	Observed in 2009 Bycatch Mortality
OCEAN FISHERIES[c/]:		**CHINOOK (thousands of fish)**			
NORTH OF CAPE FALCON					
Treaty Indian Ocean Troll	55.0	7.1	19.4	12.4	2.5
Non-Indian Commercial Troll	56.0	10.3	31.6	13.0	3.9
Recreational[d/]	61.0	7.2	32.5	13.3	1.6
CAPE FALCON TO HUMBUG MT.					
Commercial Troll	55.8	10.8	29.8	0.4	2.1
Recreational	6.4	0.7	1.4	0.4	0.9
HUMBUG MT. TO HORSE MT.					
Commercial Troll	3.8	2.1	6.5	0.0	0.0
Recreational	18.9	2.0	6.7	0.9	0.5 [e/]
SOUTH OF HORSE MT.					
Commercial	33.5	9.9	28.9	-	-
Recreational	29.1	3.1	9.6	-	-
TOTAL OCEAN FISHERIES					
Commercial Troll	204.1	40.1	116.1	25.8	8.5
Recreational	115.4	13.0	50.2	14.6	3.0
INSIDE FISHERIES:					
Area 4B	-	-	-	-	-
Buoy 10	10.7	NA	NA	5.9	NA
		COHO (thousands of fish)			
NORTH OF CAPE FALCON					
Treaty Indian Ocean Troll[e/]	41.5	3.1	6.1	60.1	3.7 [g/]
Non-Indian Commercial Troll[f/]	11.8	11.0	38.9	32.7	10.8 [g/]
Recreational[f/]	67.2	13.5	58.9	157.9	24.5 [g/]
SOUTH OF CAPE FALCON					
Commercial Troll[e/]	0.0	8.2	31.6	9.3	0.6 [g/]
Recreational[f/]	26.0	13.4	61.2	70.2	28.1 [g/]
TOTAL OCEAN FISHERIES					
Commercial Troll	53.3	22.4	76.6	102.1	15.0 [g/]
Recreational	93.2	26.9	120.0	228.1	52.6 [g/]
INSIDE FISHERIES:					
Area 4B[f/]	-	-	-	-	-
Buoy 10[f/]	12.0	2.1	7.6	48.1	8.2 [g/]

a/ The bycatch mortality reported in this table consists of drop-off mortality (includes predation on hooked fish) plus hook-and-release mortality of Chinook and coho salmon in Council-area fisheries. Drop-off mortality for both Chinook and coho is assumed to be equal to 5% of total encounters. The hook-and-release mortality (HRM) rates used for both Chinook and coho are:
Commercial: 26%.
Recreational, north of Pt. Arena: 14%.
Recreational, south of Pt. Arena: 16% (based on the expected proportion of fish that will be caught using mooching versus trolling gear, and the HRMs of 42.2% and 14% for these two respective gear types).

b/ Bycatch calculated as dropoff mortality plus fish released; commercial troll includes GSI non-retention bycatch and mortality.

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

d/ Includes one or more selective fishery options that allow only retention of Chinook marked with a healed adipose fin clip.

e/ Based on reported released Chinook.

f/ Includes one or more selective fishery options that allow only retention of coho marked with a healed adipose fin clip.

g/ Based on preliminary post-season model run incorporating final ocean catches and updated Columbia river run sizes.

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 2010 ocean fisheries management measures adopted by the Council.

	Exploitation Rate (Percent)			
Fishery	LCN Coho	OCN Coho	RK Coho	LCR Tule
SOUTHEAST ALASKA	0.0%	0.0%	0.0%	2.6%
BRITISH COLUMBIA	0.0%	0.1%	0.0%	11.5%
PUGET SOUND/STRAIT/WA COAST BAYS	0.3%	0.1%	0.0%	0.3%
NORTH OF CAPE FALCON				
Treaty Indian Ocean Troll	2.4%	0.6%	0.0%	4.5%
Recreational	4.0%	0.8%	0.0%	3.9%
Non-Indian Troll	1.6%	0.5%	0.0%	5.3%
SOUTH OF CAPE FALCON				
Recreational:				0.1%
Cape Falcon to Humbug Mt.	1.6%	2.4%	0.3%	
Humbug Mt. OR/CA border (KMZ)	0.1%	0.3%	0.7%	
OR/CA border to Horse Mt. (KMZ)	0.1%	0.9%	4.1%	
Fort Bragg	0.1%	0.6%	1.5%	
South of Pt. Arena	0.0%	0.4%	1.0%	
Troll:				1.4%
Cape Falcon to Humbug Mt.	0.9%	1.0%	0.1%	
Humbug Mt. OR/CA border (KMZ)	0.0%	0.0%	0.1%	
OR/CA border to Horse Mt. (KMZ)	0.0%	0.1%	0.3%	
Fort Bragg	0.0%	0.6%	1.5%	
South of Pt. Arena	0.0%	0.1%	0.1%	
BUOY 10	1.1%	0.1%	0.0%	8.1%
ESTUARY/FRESHWATER	2.7%	2.6%[b/]	0.2%	
TOTAL[a/]	15.0%	11.2%	10.0%	37.5%

a/ Totals do not include estuary/freshwater or Buoy 10 for RK coho.

b/ Includes 15 adult mortalities associated with PSC funded Chinook escapement monitoring studies in Oregon.

TABLE 8. Projected coho mark rates for 2010 fisheries under base period fishing patterns (percent marked).

Area	Fishery	June	July	August	September
Canada					
Johnstone Strait	Recreational	-	29%	27%	-
West Coast Vancouver Island	Recreational	43%	37%	35%	39%
North Georgia Strait	Recreational	39%	39%	39%	36%
South Georgia Strait	Recreational	38%	40%	31%	34%
Juan de Fuca Strait	Recreational	44%	45%	49%	44%
Johnstone Strait	Troll	49%	39%	30%	37%
NW Vancouver Island	Troll	45%	42%	42%	40%
SW Vancouver Island	Troll	51%	48%	49%	48%
Georgia Strait	Troll	48%	49%	52%	46%
Puget Sound					
Strait of Juan de Fuca (Area 5)	Recreational	54%	51%	49%	49%
Strait of Juan de Fuca (Area 6)	Recreational	53%	47%	48%	45%
San Juan Island (Area 7)	Recreational	32%	41%	43%	35%
North Puget Sound (Areas 6 & 7A)	Net	-	45%	38%	44%
Council Area					
Neah Bay (Area 4/4B)	Recreational	37%	53%	51%	56%
LaPush (Area 3)	Recreational	53%	55%	57%	47%
Westport (Area 2)	Recreational	63%	63%	61%	55%
Columbia River (Area 1)	Recreational	72%	70%	68%	69%
Tillamook	Recreational	64%	60%	54%	39%
Newport	Recreational	60%	56%	53%	38%
Coos Bay	Recreational	49%	46%	34%	20%
Brookings	Recreational	42%	30%	26%	11%
Neah Bay (Area 4/4B)	Troll	52%	50%	52%	51%
LaPush (Area 3)	Troll	55%	57%	52%	51%
Westport (Area 2)	Troll	50%	54%	59%	58%
Columbia River (Area 1)	Troll	65%	64%	63%	64%
Tillamook	Troll	62%	59%	58%	55%
Newport	Troll	58%	57%	53%	50%
Coos Bay	Troll	49%	46%	40%	27%
Brookings	Troll	36%	37%	40%	54%
Columbia River					
Buoy 10	Recreational	-	-	-	71%

TABLE 9. Preliminary projected exvessel value under Council-adopted 2010 non-Indian commercial troll management measures compared to 2009 and two five year averages (2003-2007 and 2005-2009) (inflation adjusted).

	Exvessel Value (thousands of dollars)[a/]						
					Percent Change		
Management Area	2010 Projected[b/]	2009 Actual	2003-2007 Average[c/]	2005-2009 Average[c/d/]	From 2009	From 2003-2007	From 2005-2009
North of Cape Falcon	4,248	1,369	1,734	1,565	210%	145%	171%
Cape Falcon to Humbug Mt.	3,169	145	6,459	2,625	2085%	-51%	21%
Humbug Mt. to Horse Mt.	241	0	443	275	-	-46%	-13%
Horse Mt. to Pt. Arena	2,257	0	3,049	831	-	-26%	172%
South of Pt. Arena	216	0	8,978	4,580	-	-98%	-95%
Total South of Cape Falcon	5,882	145	18,928	8,311	3955%	-69%	-29%
West Coast Total	10,130	1,514	20,663	9,875	569%	-51%	3%

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 area, 2009 exvessel prices and 2009 average weight per fish in the north and 3 year average weights per fish from the KMZ south. Average Oregon prices from 2009 were used for the California fisheries, which were closed in 2009.

c/ Values adjusted to 2009 dollars.

d/ The 2005-2009 average includes two years in which there were no commercial fisheries in California (2008 and 2009) and no (2008) or minimal (2009) commercial fisheries in Oregon south of Cape Falcon.

TABLE 10. Preliminary projected angler trips and state level personal income impacts generated under Council-adopted 2010 recreational ocean salmon fishery management measures compared to 2009 and two five year averages (2003-2007 and 2005-2009) (inflation adjusted).

Management Area	Angler Trips (thousands)				Income Impacts (thousands of dollars)[a/]				Percent Change in Income Impacts		
	2010 Projected	2009 Actual	2003-2007 Avg.	2005-2009 Avg.[b/]	2010 Projected	2009 Actual	2003-2007 Avg.	2005-2009 Avg.	Compared to 2009 Actual	Compared to 2003-2007 Avg.	Compared to 2005-2009 Avg.
North of Cape Falcon	62	111	106	82	5,586	10,027	10,429	8,074	-44%	-46%	-31%
Cape Falcon to Humbug Mt.	73	66	76	49	4,597	4,156	4,799	2,998	11%	-4%	53%
Humbug Mt. to Horse Mt.	58	11	33	21	3,032	595	1,648	1,049	410%	84%	189%
Horse Mt. to Pt. Arena	25	0	23	13	1,972	0	1,831	980	-	8%	101%
South of Pt. Arena	94	0	109	58	8,014	0	9,853	4,932	-	-19%	63%
Total South of Cape Falcon	250	78	241	140	17,615	4,751	18,131	9,959	271%	-3%	77%
West Coast Total	312	189	346	223	23,201	14,778	28,560	18,033	57%	-19%	29%

a/ Income impacts are sums of the impacts for individual communities within each management area. Income impacts are not comparable to the exvessel values shown in Table 9. All dollar values are adjusted to 2009 real values.

b/ The 2005-2009 average includes two years in which there were minimal recreational fisheries in California (2008 and 2009) and substantially reduce fisheries in Oregon (2008).

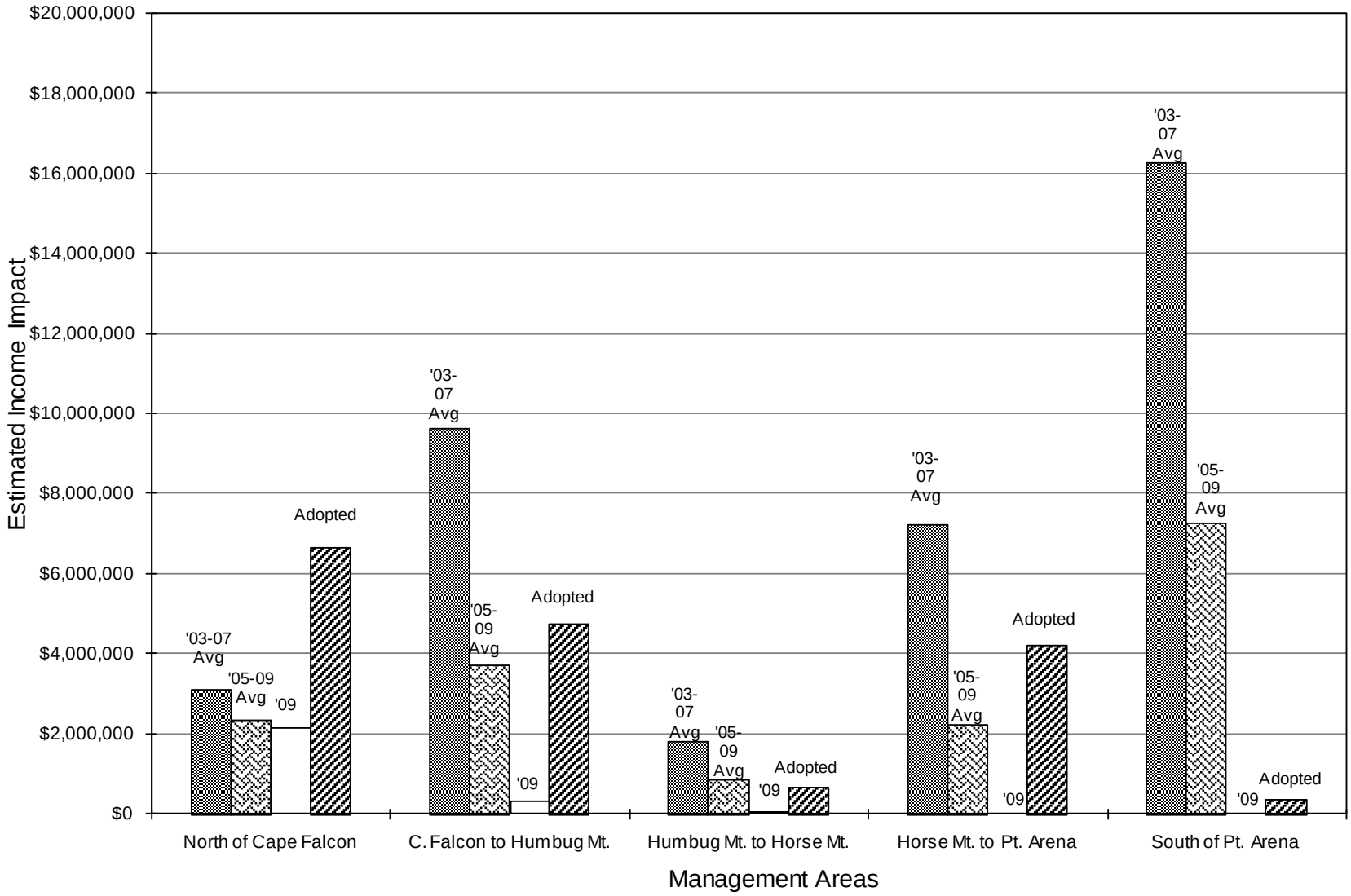


FIGURE 3. Projected coastal community personal income impacts associated with the 2010 commercial troll fishery under Council-adopted management measures compared to 2009 and the 2003-2007 and 2005-2009 averages in real (inflation adjusted) dollars.

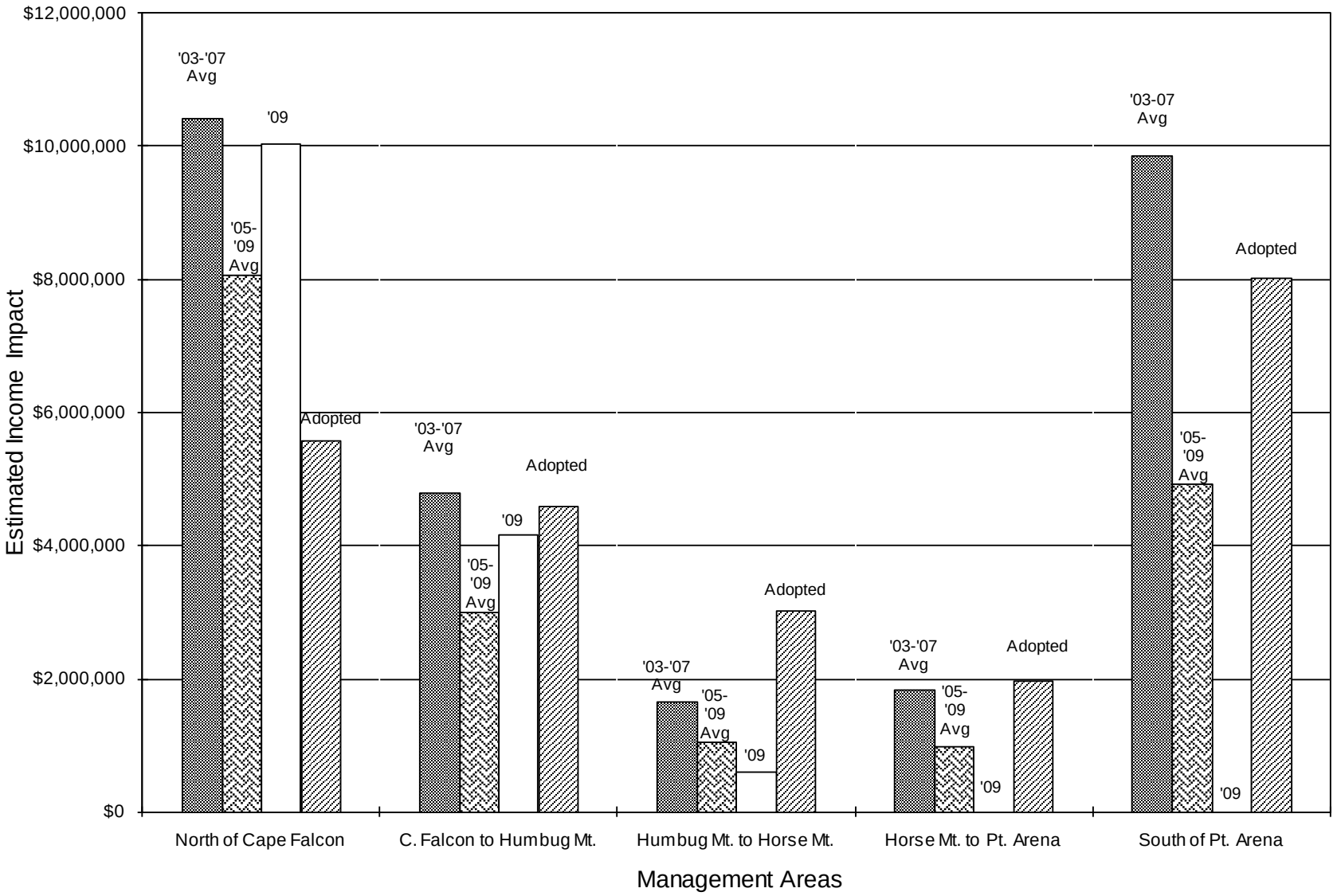


FIGURE 4. Projected coastal community personal income impacts associated with the 2010 recreational fishery under Council-adopted management measures compared to 2009 and the 2003-2007 and 2005-2009 averages in real (inflation adjusted) dollars.

TABLE A-1. **Sacramento River fall Chinook** ocean impacts, including non-retention impacts where applicable, by fishery and option. Sacramento River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishin

Commercial

Total Impacts

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	1,072	2,140	8,534	8,533
CO				980	1,101	679	817	3,577	3,577
KO				35	47	380	223	685	684
KC				39	28	80	31	178	178
FB				116	93	7,843	3,738	11,790	11,790
SF				386	363	1,995	403	3,147	3,146
MO				211	211	855	219	1,496	1,495
Total				4,819	4,110	12,904	7,570	29,403	29,404

Harvest Impacts

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				3,054	2,268	1,072	2,140	8,533	8,533
CO				980	1,101	679	817	3,577	3,577
KO				35		380	223	638	638
KC									
FB						7,843	3,738	11,581	11,581
SF						1,812		1,812	1,812
MO						755		755	755
Total				4,068	3,369	12,541	6,918	26,897	26,897

GSI Impacts

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO									
CO									
KO					47			47	47
KC				39	28	80	31	178	178
FB				116	93			209	209
SF				386	363	183	403	1,335	1,335
MO				211	211	100	219	741	741
Total				752	742	363	653	2,510	2,510

Recreational

Total Impacts

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO								22	210	172	404	405
CO							1	83	380	193	657	657
KO							16	238	348	187	789	789
KC	76						71	826	912	433	2,242	2,319
FB						85	381	1,038	1,383	508	3,395	3,394
SF						1,944	1,662	2,293	5,150	2,142	13,191	13,191
MO						3,166	898	1,132	1,686	239	7,121	7,121
Total	76					5,195	3,029	5,632	10,071	3,873	27,800	27,876

Harvest Impacts

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO								22	210	172	405	405
CO							1	83	380	193	657	657
KO					NA	NA	16	238	348	187	789	789
KC	76				NA	NA	71	826	912	433	2,243	2,319
FB						85	381	1,038	1,383	508	3,394	3,394
SF						1,944	1,662	2,293	5,150	2,142	13,191	13,191
MO						3,166	898	1,132	1,686	239	7,121	7,121
Total	76					5,195	3,029	5,632	10,071	3,873	27,800	27,876

GSI Impacts

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO												
CO												
KO												
KC												
FB												
SF												
MO												
Total												

TABLE A-2. **Klamath River fall Chinook** ocean impacts, including non-retention impacts where applicable, by fishery and option. Klamath River fall Chinook impacts were estimated for the fall of 2009 and projected for each of the proposed 2010 fishing season options. The impacts are displayed for each option by fishery, port area, and month.

Commercial

Total Impacts

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sept	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				462	204	314	978	1,958	1,958
CO				510	545	1,441	2,639	5,135	5,134
KO				75	64	512	498	1,149	1,148
KC				177	125	118	123	543	543
FB				71	99	8,818	1,351	10,339	10,339
SF				59	84	1,038	34	1,215	1,214
MO				8	11	210	1	230	230
Total				1,362	1,132	12,451	5,624	20,569	20,566

Harvest Impacts

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO				462	204	314	978	1,958	1,958
CO				510	545	1,441	2,639	5,135	5,135
KO				75		512	498	1,085	1,085
KC									
FB						8,818	1,351	10,169	10,169
SF						1,000		1,000	1,000
MO						199		199	199
Total				1,047	749	12,284	5,466	19,546	19,546

GSI impacts

Port	Fall 2009		Summer 2010					Summer	Year
Area	Sep	Oct-Dec	Jan-Apr	May	Jun	Jul	Aug	Total	Total
NO									
CO									
KO					64			64	64
KC				177	125	118	123	543	543
FB				71	99			170	170
SF				59	84	38	34	215	215
MO				8	11	11	1	31	31
Total				315	383	167	158	1,023	1,023

Recreational

Total Impacts

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO									42	44	86	86
CO							1	30	120	76	227	226
KO	30						2	156	443	584	1,185	1,215
KC	52						42	725	911	672	2,350	2,402
FB						11	93	283	370	76	833	832
SF						116	40	141	182	7	486	486
MO						75	12	22	53	6	168	169
Total	82					202	190	1,357	2,120	1,465	5,334	5,416

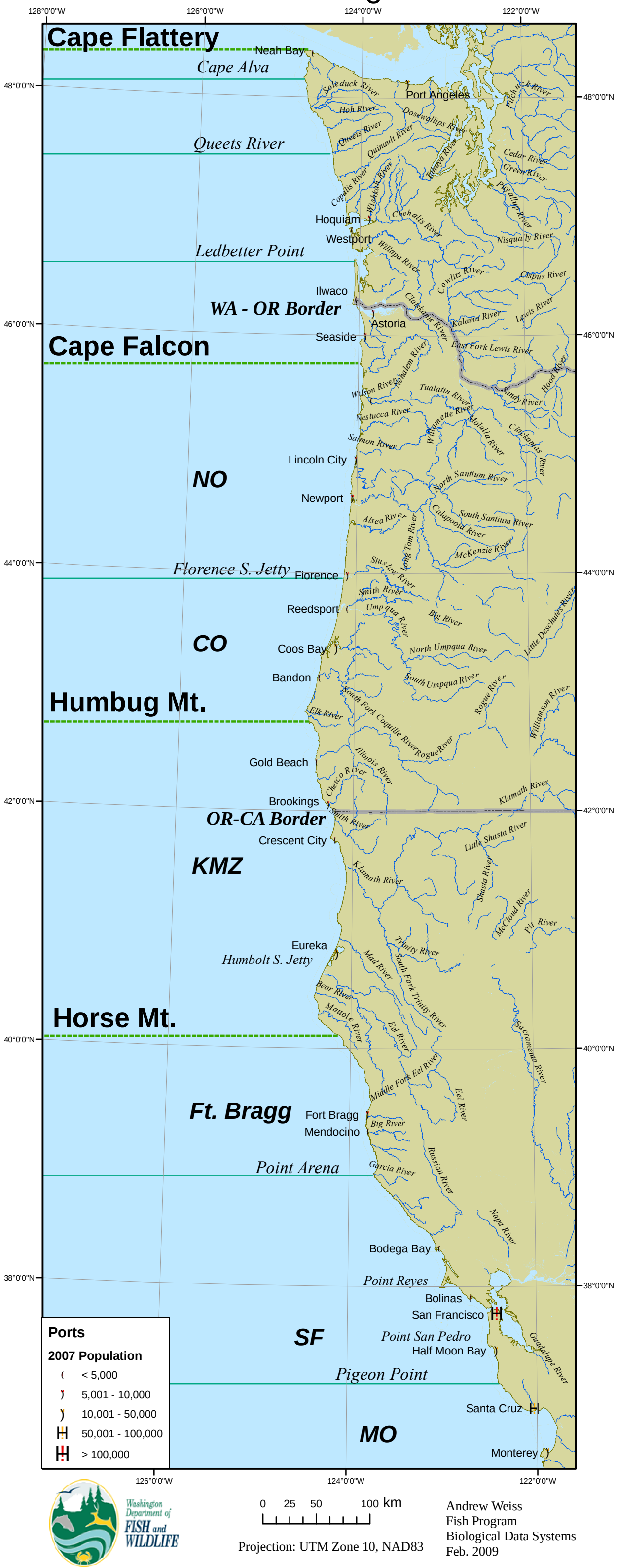
Harvest Impacts

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO									42	44	86	86
CO							1	30	120	76	227	226
KO	30						2	156	443	584	1,185	1,215
KC	52						42	725	911	672	2,350	2,402
FB						11	93	283	370	76	833	832
SF						116	40	141	182	7	486	486
MO						75	12	22	53	6	168	169
Total	82					202	190	1,357	2,120	1,465	5,334	5,416

GSI impacts

Port	Fall 2009			Summer 2010							Summer	Year
Area	Sep	Oct	Nov-Dec	Jan-Feb	Mar	Apr	May	Jun	Jul	Aug	Total	Total
NO												
CO												
KO												
KC												
FB												
SF												
MO												
Total												

Marine Fisheries Management Zones



Andrew Weiss
Fish Program
Biological Data Systems
Feb. 2009